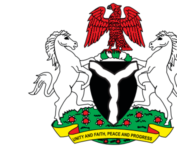
The Revised Ward Health System Strategy: A Harmonised Framework

JANUARY 2023



NATIONAL PRIMARY HEALTH CARE DEVELOPMENT AGENCY

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The Revised Ward health System Strategy: A Harmonised Framework
ISBN: 978-978.792-407-5

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Foreword

Introduced in 2001, the Ward Health System Strategy (WHSS) represents the current national strategic model for delivery of quality primary health care (PHC) services in Nigeria. The model uses the political ward as the operational unit for planning and implementation of PHC in the country. A key strategy that Nigeria deploys to achieve universal health coverage is the strengthening of community-based and facility-based services, which comprise the operational pillars of WHSS.

Since the introduction of WHSS, the National Primary Health Care Development Agency (NPHCDA) has developed various documents including the Ward Minimum Health Care Package (WMHCP), National Guidelines for PHC Implementation in Nigeria, and Minimum Standards for PHC, to guide states in developing strategies for strengthening PHC at the ward level. However, the implementation has been faced with several challenges, ranging from: i) lack of guidance for operationalising the requirements, ii) absence of a harmonized documentation of integrated package of services to be provided, to iii) insufficient delineation of health system support to ensure a continuum of care.

Section 13 of the National Health Act 2014 (NHA 2014) specifies that no facility should operate without **certification.** However, the absence of a clear definition of standards for the different categories of PHC facilities weakens implementation of this requirement**.** In addition, non-integration of current programmes and initiatives into implementation efforts are limitations of the ward health system. Together, these challenges adversely affect the implementation of PHC programmes and limit coverage of services and contribute to poor health outcomes.

In consideration of the aforementioned challenges, the **Revised Ward Health System Strategy (RWHSS)** document is developed to address the identified gaps and to provide guidance on i) *Essential Package of Health Services* to be provided at each PHC level (from the home/community level to the Primary Health Care Centre), ii) categories of health workers at the different levels, iii) governance structures and resource requirements, etc. Additionally, RWHSS gives direction on how to develop integrated, comprehensive, and quality health care along a continuum of care and assures a coherent approach to implementation. RWHSS is comprehensive in content with the vision of an integrated service delivery model for the Ward Health System, expanding

access to health care services and linking individuals in households to revitalized PHC Centres in the wards for utilisation of quality services.

I enjoin all States, Local Government Areas (LGAs), and our partners to support the implementation of PHC services using the RWHSS document as a guide to achieve the certification of PHC facilities in fulfilment of *Section 13* of the *National Health Act* of 2014.

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Acronyms

AFP	Acute Flaccid Paralysis
AIDS	Acquired Immuno-Deficiency Syndrome
ANC	Antenatal care
BCG	Bacille Calmette Guerin
BEmONC	Basic Emergency Obstetrics and New-born Care
BHCPF	Basic Health Care Provision Fund
BMGF	Bill and Melinda Gates Foundation
BMI	Body Mass Index
BSE	Breast Self-Examination
CBHMIS	Community-based Health Management Information System
CBME	Community-based Medical Education
CBO	Community-based Organization
CEFP	Community Engagement Focal Person
CHEW	Community Health Extension Worker
CHIPS	Community Health Influencers, Promoters and Services
CHO	Community Health Officer
CMAM	Community Management of Acute Malnutrition
CORPs	Community Oriented Resource Persons
CRISP	Community-Based Health Research, Innovative Training and Services Programme
CRRF	Combined Report and Requisition Forms
CSOs	Civil Society Organizations
CVD	Cardio-vascular disease
DFF	Direct Facility Financing
DHIS	District Health Information System
DRF	Drug Revolving Fund
ELSS	Enhanced Live Saving Skills
ENCC	Emergency New-born Care Course
ETS	Emergency Transport Service
FBO	Faith-based Organization
FGC/M	Female Genital Cutting/Mutilation
FMC	Facility Management Committee
GBV	Gender-based violence
GMER	Governance Mechanism for Epidemic Response
GV	Gentian Violet

HBB	Helping Babies Breathe
HBFI	Hospital Baby Friendly Initiative
HbV	Hepatitis B Vaccine
HF	Health Facility
HIS	Health Information Systems
HIV	Human Immunodeficiency Virus
iCCM	Integrated Community Case Management
ICT	Information, Communication and Technology
IEC	Information Education and Communication
IM	Intramuscular
IMCI	Integrated Management of Childhood Illness
IPV	Inactivated Polio Vaccine
IUCD	Intrauterine Contraceptive Device
IV	Intravenous
JCHEW	Junior Community Health Extension Worker
LARC	Long-Acting Reversible Contraceptives
LGA	Local Government Area
LGHA	Local Government Health Authority
LLIN	Long Lasting Insecticide Treated Net
LQAS	Lot Quality Assurance Sampling
LSS	Life Saving Skills
M&E	Monitoring and Evaluation
MLSS	Modified Life Saving Skills
MMP	Multiple Micronutrient Powder
MoH	Ministry of Health
MOH	Medical Officer of Health
MoU	Memorandum of Understanding
MUAC	Mid Upper Arm Circumference
NCD	Non-Communicable Disease
NGO	Non-Governmental Organization
NHIS	National Health Insurance Scheme
NHMIS	National Health Management Information System
NPHCDA	National Primary Health Care Development Agency
NSHDP	National Strategic Health Development Plan
NSHIP	Nigerian State Health Investment Plan
NTDs	Neglected Tropical Diseases
NURTW	National Union of Road Transport Workers
OIC	Officer In-Charge
OOPE	Out of Pocket Expenditure

OPV	Oral Polio Vaccine
ORS	Oral Rehydration Solution
PAPA	Programme Assessment for Performance Management and Action
PBF	Performance-based Financing
PCR	Polymerase Chain Reaction
PHC	Primary Health Care
PHCSD	Primary Health Care System Development
PHERRT	Public Health Emergency Rapid Response Teams
PHEMC	Public Health Emergency Management Committee
PLA	Participatory Learning and Action
PMTCT	Prevention of Mother to Child Transmission
PNC	Postnatal Care
PPMV	Patent and Proprietary Medicine Vendors
PPP	Public-Private Partnership
PSA	Prostate Specific Antigen
RDT	Rapid Diagnostic Test
RMNCAH+N	Reproductive, Maternal, Newborn, Child, and Adolescent Health plus Nutrition
RMNCAEH+N	Reproductive, Maternal, Newborn, Child, Adolescent, and Elderly Health plus Nutrition
RUTF	Ready to Use Therapeutic Food
SAM	Severe Acute Malnutrition
SBA	Skilled Birth Attendant
SCD	Sickle Cell Disease
SHIS	State Health Insurance Scheme
SIV	Store Inventory Voucher
SMS	Short Message Service
SP	Sulfadoxine Pyrimethamine
SRV	Store Receiving Voucher
STI	Sexually Transmitted Infections
TB	Tuberculosis
TBA	Traditional Birth Attendant
TD	Tetanus Diphtheria
VCM	Volunteer Community Mobilizer
VDC	Village Development Committee
VHW	Village Health Worker
WASH	Water, Sanitation and Hygiene
WDC	Ward Development Committee

WHO	World Health Organization
WHS	Ward Health System
WHSS	Ward Health System Strategy
WMHCP	Ward Minimum Health Care Package

Executive Summary

In 2001, Nigeria adopted the political ward as the operational unit for planning and implementation of Primary Health Care (PHC). Strengthening the Ward Health System (WHS) is seen as a key strategy for achieving Universal Health Coverage (UHC). Implementation of the strategy has been guided by several documents developed by the National Primary Health Care Development Agency over time that address various dimensions of the WHS and the existing vertical and fragmented interventions and programmes.

The Revised Ward Health System Strategy (RWHSS) document was borne out of a need to harmonize and integrate all existing fragmented documents that address WHS in a coherent and comprehensive manner, and in line with current realities. It also aims to strengthen and provide guidance for sub-national levels to develop, establish and operationalise a functional, efficient, and effective WHS. Additionally, RWHSS provides standards for the classification and certification of PHC facilities in the country, in line with Section 13 of the National Health Act, which stipulates that no primary health care facility shall operate without certification.

The steps involved in the development of this RWHSS included: i) a desk review of all relevant and existing documents, ii) identification of health services to be provided at each level of the WHS, and iii) definition of health system support needs, including human resources for health, infrastructure, equipment, essential medicines, commodities, and laboratory services required for service provision. Additionally, the RWHSS document delineates the roles and responsibilities of the various health workforce and other stakeholders, governance, accountability, and monitoring and evaluation frameworks.

The RWHSS document redefines the service package, classifies Primary Health Care facilities based on the service package being offered and human resources availability for service provision at each level. The following are the revised classifications of the services and human resource requirements for each level of PHC:

- Household and community services comprise the "Household Package of Services", which focuses on behaviour change communication, demand generation and management of childhood illness. These services are provided by Community Health Influencers, Promoters and Services (CHIPS) Agents and Junior Community Health Extension Workers (JCHEWs).

- Health outreach posts: JCHEWs are responsible for service provision at this level and the package of service package 'Outreach Package' is made up of basic curative care, screening, and antenatal care. JCHEWs do not provide delivery services.
- Primary Health Care Centres: these are subdivided into three:
    - Primary Health Care Centre Level 1: Provides the Minimum Package of Services" comprising basic treatment and screening for communicable and non-communicable diseases (NCD). Services are provided by Community Health Extension Workers (CHEWs)
    - Primary Health Care Centre Level 2: Provides the 'Intermediate Pack' of services. In addition to the services provided in the 'Minimum Package', Level 2 Primary Health Care Centres also provide delivery and basic emergency obstetrics as well as new-born care services. CHEWs and at least two (2) midwives are responsible for service provision at this level.
    - Primary Health Care Centre Level 3: The "Optimum Package of Services" are provided at this level. This includes all services provided in the "Intermediate Package" treatment of NCDs and communicable diseases (TB, Malaria, HIV/AIDS etc). In addition to CHEWs, level 3 Primary Health Care Centres should have at least two midwives.

Based on the classification, health outreach posts and Level 1 PHC Centres are considered active, but not functional while Levels 2 and 3 PHC Centres are considered functional. Only facilities classified as functional are beneficiaries of Basic Health Care Provision Fund.

Recognising that States will be at different levels of development of their WHSS, a phased implementation strategy with transition timelines were recommended for scale up of PHC service delivery from the existing levels to the optimum levels by the year 2030.

To aid operationalisation by implementing states, financing mechanisms for the RWHSS were identified and guidelines for costing RWHSS were provided.

This document serves as a guide to States and LGHAs for the successful operationalisation of a Ward Health System that aligns with the national goal of attaining universal health coverage.

CHAPTER 1. INTRODUCTION

1.1 Background

Nigeria, the most populous nation in Africa, has an estimated population of 203 million people, with 774 Local Government Areas (LGAs), 36 states, and the Federal Capital Territory (FCT). The states are grouped into six geo-political zones: Northeast, North Central, Northwest, Southeast, South-South, and Southwest zones.

Nigeria has a high disease burden, with maternal and child mortality ranking among the highest in the world. The country is also going through an epidemiological transition, with rising prevalence of communicable and non-communicable diseases. Health outcomes are generally poor, mainly because of poor social determinants of health, limited coverage of high-impact life-saving interventions, and a weak health system. Wide disparities exist in health, development, gender, and social determinants of health across population groups. Individuals and families with low educational status, rural dwellers, populations in northern states, marginalized groups, and those with limited access to resources are mostly impacted.

In 1975, Nigeria introduced the Basic Health Services Scheme (BHSS), which prioritized health promotion and disease prevention, aligning interventions to health care needs, and expanding access to health services to underserved rural populations. It invested in the construction of a network of Primary Health Care facilities – Comprehensive Health Centres, Primary Health Care Centres, Health Clinics and Mobile Clinics. New cadres of community health practitioners, viz: Community Health Officers and Community Health Supervisors (now Community Health Extension Workers) and Community Health Aides (now Junior Community Health Extension Workers) were introduced to staff these facilities, providing community, and facility-based services. Additionally, Community Health Worker (CHWs) – Village Health Worker (VHWs), and Traditional Birth Attendant (TBA) training programmes were introduced to support the provision of community-based services.

Following the global adoption of the PHC approach as the key to the attainment of the goal of Health for All in 1978, Nigeria in 1985, reaffirmed her commitment to the ideals of PHC. In 1986, the country began to reorient her health services towards PHC, with the LGAs serving as the administrative units for planning and implementation. To lend credence to the national commitment to PHC, a maiden

National Health Policy was launched in 1988, with PHC as its cornerstone. This policy has been revised twice. The latest revision, the 2016 National Health Policy, which articulates policy direction for achieving the Sustainable Development Goal (SDG)[1] # 3 has the attainment of Universal Health Coverage as its goal.

In a bid to accelerate progress towards the attainment of Health for All, under the direction of the World Health Organization (WHO), the WHO African Region in 1994, adopted the Minimum District Health Package.[2] Shortly, Nigeria adapted the package, defined her Minimum Health Care Package that comprised of 13 interventions, and commenced implementation.[3] In 1996, each state developed 13 action plans for implementation of the Minimum Health Care Package in selected LGAs. These interventions were later pruned from 13 to 5 with a focus on Maternal and Child Health (IMCI, Immunization, Nutrition, ANC, delivery, PNC) and communicable diseases prevention/control (HIV/AIDS, TB, and Malaria). However, implementation remained poor with minimal impact.

1.2 Why RWHSS is important?

Recognising the centrality of primary health care in health system strengthening and in improving health outcomes, the federal government in 2000, mandated the NPHCDA to revitalise PHCs in the country. This led to the introduction of WHS in 2001, with the political ward (an average of 10 per LGA and a population of between 10,000–30,000) now serving as the operational unit for planning and implementation of PHC in the country. The Ward Minimum Health Care Package (WMHCP) was also adopted.

Since 2001, efforts have been made by the NPHCDA to develop various documents to provide guidance for states to better manage, coordinate and deliver high-quality PHC services. These include:

- The Ward Health System Strategy
- The Ward Minimum Health Care Package.

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[1] United Nations. Sustainable Development Goals: 17 Goals to transform our world. New York: United Nations. 2015. Available at https://www.un.org/sustainabledevelopment/sustainable-development-goals/. Accessed 17 October 2021).

[2] Monekosso G L. District health management: planning, implementing, and monitoring a minimum health for all package: from mediocrity to excellence in health care. World Health Organization. Regional Office for Africa. Maseru, Lesotho: WHO Regional Office for Africa. 1994.

[3] National Primary health Care Development Agency (NPHCDA). Minimum standards for Primary Health Care in Nigeria. Abuja: Nigeria. NPHCDA. Federal Ministry of Health. 1995. Available at: https://hfr.health.gov.ng/resources/download/Minimum%20Standards%20for%20Primary%20Health%20Care%20in%20Nigeria.pdf. Accessed: 17 October, 2021.

- Minimum Standards for PHC in Nigeria
- National Guidelines for Development of Primary Health Care System in Nigeria

However, there have been gaps in these efforts. These include:

- Lack of guidance for operationalising the requirements stated in the documents developed.
- Lack of harmonisation of the documents to provide a holistic integrated package of services to be provided and the health support system needed along a continuum of care.
- Lack of integration of current programmes and initiatives into these efforts; and
- Lack of clear definition of standards for the different categories of health facilities to guide implementation of *Section 13* of the 2014 *National Health Act,* which specifies that no facility should operate without certification.

The RWHSS document seeks to address the aforementioned gaps by providing guidance to i) facilitate an integrated service delivery model for the ward health system, ii) expand access to healthcare services, and iii) link individuals in households to revitalized PHC facilities/programs in their wards.

1.3 Development of RWHSS

To facilitate the development of RWHSS, The Executive Director, constituted a team, comprised of representatives from the Departments of Primary Health Care Systems Development (PHCSD), Community Health Services (CHS), Technical Advisors of the Agency, and several interest groups at national and state levels. The draft produced by the team was then shared with relevant stakeholders for input before finalisation.

A summary of steps involved in the development of the RWHSS document is presented in Figure 1, and include the following:

1) Review of relevant documents

The documents reviewed included:

- The Ward Health System (2018)
- The Draft Ward Minimum Health Care Package (WMHCP, 2019)
- The Second National Strategic Health Development Plan (NSHDP II) (2018)
- Guidelines for Development of Primary Health Care System in Nigeria (2012)

- Minimum Standards for PHC in Nigeria
- Draft Standards, Guidelines and Regulatory Framework for PHC in Nigeria (February 2021)
- The Basic Health Care Provision Fund Operational Manual (November 2018)
- National Essential Medicine List (2020)
- National Essential Equipment List
- Nigeria Standard Treatment Guidelines (2008)
- Standing Order for CHEWS and JCHEWS (2020)
- Task-shifting and Task Sharing Policy (August 2014)
- Documents from different programmes in the Agency.

The purpose of the review was to determine the essential service package to be delivered at each PHC level, the categories of health workers needed to provide services at each level, the governance structures, and resource requirements among others.

2) ***Determination of the essential service package and services to be delivered at each level of the PHC system***

   A list of essential service packages and services to be delivered at each level of the PHC system was compiled from provisions of NSHDP II and reviewed. NSHDP II stipulated essential health care services to be provided at community and PHC levels, the services to be covered under the Basic Health Care Provision Fund (BHCPF), the NHIS Gateway, and the WMHCP (2019).

3) ***Determination of roles and responsibilities of health workers, and community accountability structures in the ward health system***

   The roles and responsibilities of each cadre of health workers were determined from a review of their job descriptions as specified in their various training curricula, while those of the Facility Management Committee (FMC) and Ward Development Committee (WDC) were determined from relevant NPHCDA documents.

4) ***Review and determination of health systems support needed for service provision***

   Health system support needs were identified from a review of relevant documents.

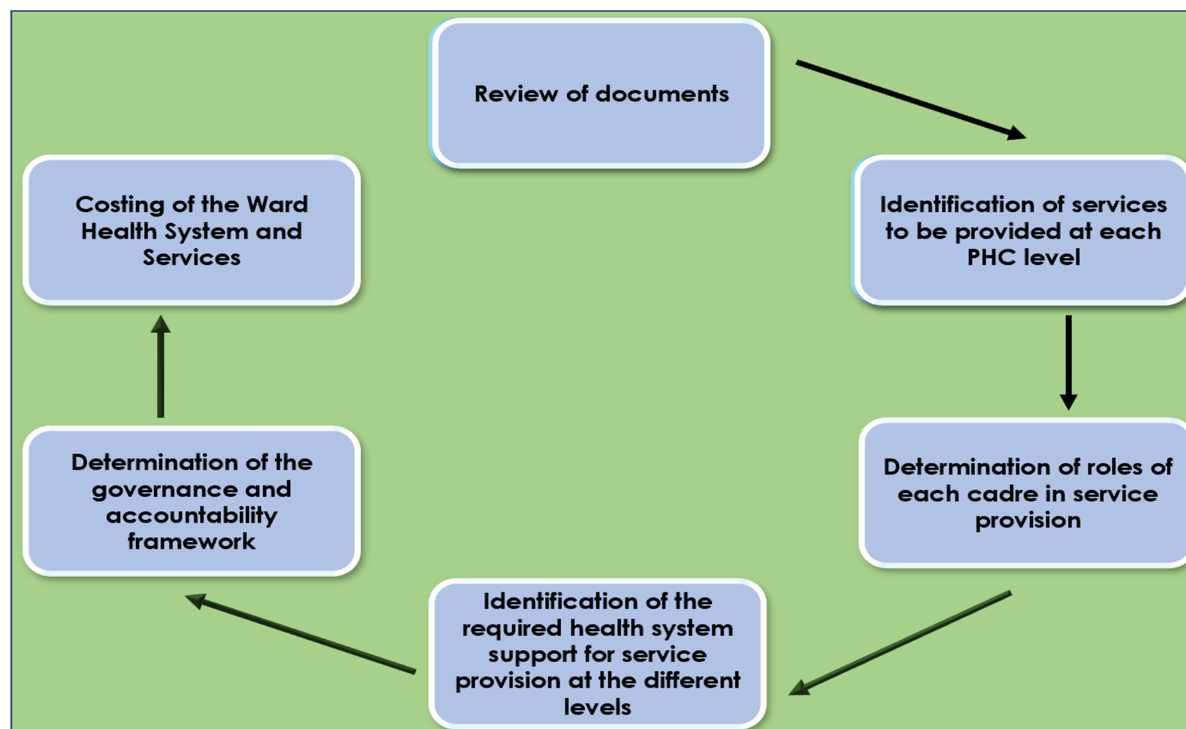
5) ***Review of enabling leadership and governance, accountability, partnerships, and participation framework***

The framework was developed from a review of relevant documents

6) ***Costing of the Ward Health System***

The Ward Health System costing was expanded from the minimum service package (MSP), which costed HRH, service delivery, infrastructure, and equipment to include three (3) additional categories, governance, community engagement, supervision, monitoring, and evaluation.

Figure 1: Steps in developing the Revised Ward Health System Strategy

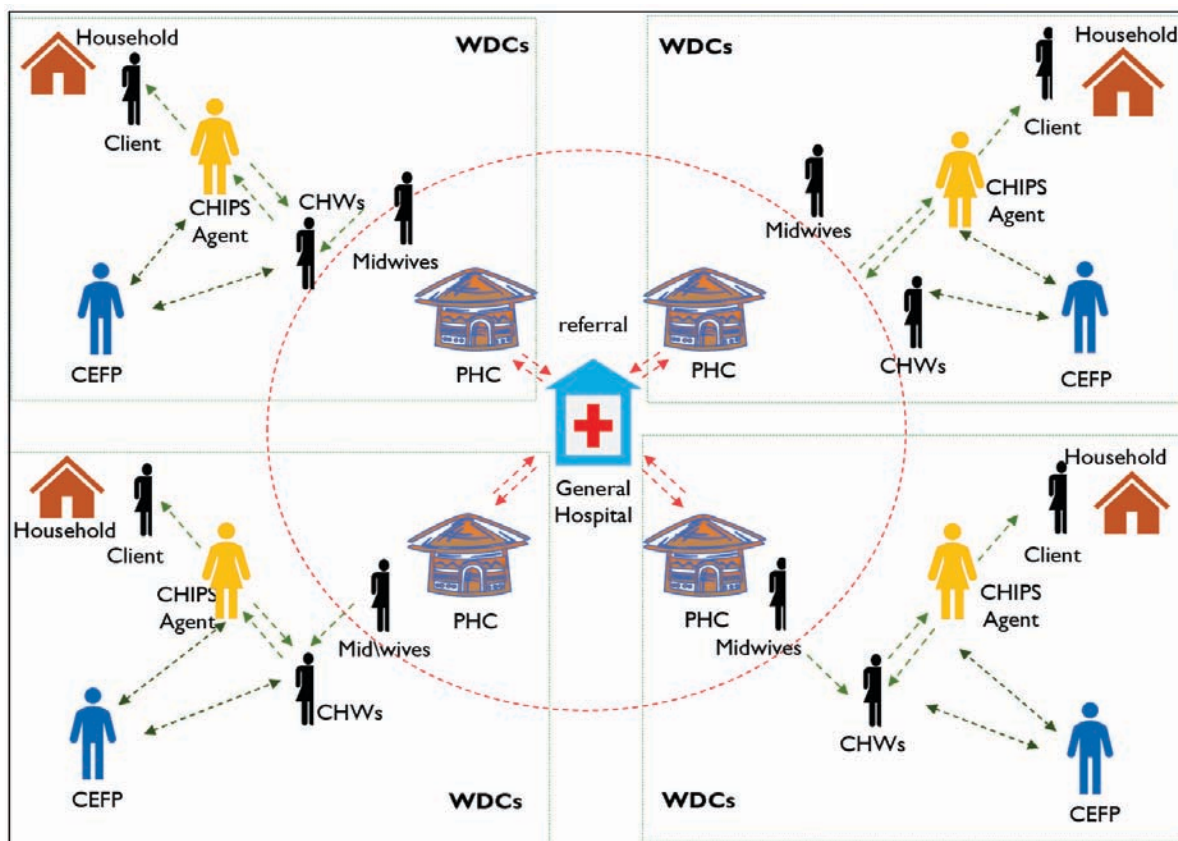


CHAPTER 2: OVERVIEW OF THE WARD HEALTH SYSTEM STRATEGY

2.1. Organization

The Revised Ward Health System Strategy (Figure 2) is a model designed to serve a population of 10,000-30,000 (the population estimate per ward), providing them comprehensive, integrated, appropriate quality, accessible and affordable PHC services along a continuum of care. This should occur from the household to the focal ward PHC centre, using various categories of multipurpose and appropriately trained health care personnel suitable for each level of service delivery.

Figure 2: The Revised Ward Health System Strategy



The model is intended to redress inequity, increase access to needs-based healthcare, promote behaviour change, increase demand for services, link families and communities to primary health care facilities, strengthen referral systems and enhance community participation and accountability. The system

will also reduce the various delays that adversely affect health outcomes, especially maternal and child morbidity and mortality. These delays are[4]:

- Delay in recognising the existence of a problem and in taking the decision to seek care.
- Delay in reaching health facilities for care.
- Delay in receiving quality care in health facilities.
- Delay in accessing advanced care.

The service delivery points along the continuum of care are:

2.1.1 Household and Community Level

At the community level, all informal community-based health workers (CHWs) are harmonised and transitioned into CHIPS Agents. CHWs to be harmonised into CHIPS Agents are Volunteer Community Mobilisers (VCMs) of the Polio Eradication Initiative, Community Oriented Resource Persons (CORPs) of the Integrated Community Case Management (iCCM), and Village Health Workers (VHWs). The CHIPS Agents and Community Health Extension Workers (CHEWs) will be primarily responsible for the provision of health care at the household level. Based on their training, CHEWs are expected to spend a significant proportion of their working time, 80% by Junior CHEWs (JCHEWs) and 60% by CHEWs) in the community. Currently, CHEWs hardly carry out any work at the community level as stipulated in their training. It is hoped that with time, JCHEWs will be moved from health facilities to the community to gradually replace CHIPS Agents. CHEWs will mentor and supervise CHIPS Agents in addition to providing care to the community.

The work of CHIPS Agents will focus on advocacy, demand generation, social, and behaviour change communication, social mobilisation, and community engagement, thus linking people to health services and providing basic preventive and curative care. These categories of health workers will identify, list, reconcile, report, and refer pregnant women, and children in need of ANC and immunization respectively to health facilities. They will identify and refer severely ill children, including those with severe malnutrition and pregnant women, in addition to providing case management of childhood illnesses (cough, diarrhoea, and malaria). They will conduct disease surveillance and document vital events such as maternal and under-five mortality at household level and

[4] Thaddeus S, Maine D. Too far to walk: maternal mortality in context. Soc Sci Med. 1994 Apr; 38(8):1091-110.

report appropriately. CHEWs will provide more services in addition to what CHIPS Agents are doing.

At the community level, the Community Engagement Focal Persons (CEFPs), who are mainly male, will work towards fostering male participation, addressing barriers to service uptake, and assisting CHIPS Agents in collecting, verifying, and transmitting data. They will also work with the leadership of the communities in data reconciliation and defaulter tracking.

In special situations, where there are significant challenges to the availability, access and use of maternal health services, domiciliary midwifery services could be provided by midwives or CHEWs that have received training in Life Saving Skills (LSS). This, however, is a stopgap measure that should not be institutionalised.

With the proposed model, parallel programming, disease-specific programming, and creation of other categories of community health workers should be transitioned, and all national, sub-national and donor-driven programmes should align with this model.

2.1.2 Primary Health Care Facility Level

There are two categories of health facilities that provide services:

1. *Health Outreach Post:* JCHEWs provide services at this level. Health Outreach Posts open over one shift and provide treatment of minor ailments, antenatal, and immunization services. They could serve as a site for outreach, and it is hoped that as the RWHSS develops, these facilities would decrease in number and distribution across the ward. It is expected that there should be one health post in every community that does not have a health centre.
2. *Primary Health Care Centres:* There are three levels of Primary Health Care Centres:
    - Primary Health Care Centre Level 1
    - Primary Health Care Centre Level 2
    - Primary Health Care Centre Level 3

While these facilities may have the same physical infrastructure, the main distinguishing features are the **human resource availability** and the **services** they provide.

Primary Health Care Centre Level 1

These facilities are staffed with CHEWs and provide the "**Minimum PHC pack**" comprising of basic maternal, new-born, and Child Health services (including ANC, family planning, IMCI, immunization and nutrition) and screening for a few NCDs and such communicable diseases as TB, HIV, and hepatitis. The facilities do not provide 24-hour services. It is expected that states will provide the health system support outlined in this document to quickly upgrade these centres to a minimum of level 2 Primary Healthcare Centres.

Primary Health Care Centre Level 2

These facilities have CHEWs and at least one midwife and are open for 24 hours. They provide the "**Intermediate PHC Pack**" of services. The main difference between this facility and a Level 1 facility is that in addition to provision of the minimum health care pack, they provide **delivery and basic emergency obstetric and new-born care services.**

Primary Health Care Centre Level 3

These facilities should have CHEWs and at least 2 midwives and are open for 24 hours. They provide the "**Optimal PHC Pack**" that comprises services provided by level 2 PHC facilities and treatment of some communicable and non-communicable diseases screened at the lower levels. **They will be adequately resourced to carry out all the essential PHC services, including Basic Emergency Obstetrics and New-born Care (BEmONC) services and additional services as outlined in the pack.** Each PHC centre is expected to organise outreach services for hard-to-reach communities. The health outreach post and the PHC centre Level 1 are categorised as active but not functional and are therefore not eligible to receive funding from the Basic Health Care Provision (BHCPF).

The ideal is for each ward to have at least one PHC centre of Level 3 classification, termed the Ward Focal PHC Centre. This focal PHC centre serves as the hub for all PHC service points in the ward, in other words, the ***apex referral facility***. In turn, these focal PHC centres will refer patients to the General hospitals for services they cannot render at that level. Referral will be two ways, from lower to higher levels and vice versa, while Integrated Supportive Supervision (ISS) is from higher to lower levels.

Supervision, monitoring, and evaluation will be carried out within a defined structure, with health workers from higher level health facilities supervising the immediate lower level. Community-Based Organizations (CBOs) provide another

layer of monitoring and serve as watchdogs for tracking program and budget implementation. To further foster community participation and accountability, Ward Development Committees, (WDCs) comprising community members who represent the different stakeholders in the community, provide oversight for the planning and monitoring of ward health plan implementation. At the facility level, especially the ward PHC facility, the Facility Management Committee (FMC) is put in place to oversee the planning and use of funds provided to the health facility, either through the BHCPF or other direct financing or Performance-Based Financing (PBF), in addition to monitoring the quality of services and patient satisfaction. Table 1 outlines the key distinguishing features for classification of each level of care.

Table 1: Summary of services provided by the different cadres of health workers required along the continuum of care

Level	Household & Community	Health Outreach Post	Primary Health Care Centre (Level 1)	Primary Health Care Centre (Level 2)	Primary Health Care Centre (Level 3)
Human Resources	CHIPS Agents CHEWs (midwives in few places)	JCHEWs	CHEWs	Midwives CHEWs	Midwives CHEWs
Hours of Opening	-	8 hours	8 hours	24 hours	24 hours
Classification		Active	Active	Functional	Functional
Service Pack	Home based care Pack	Outreach Pack	Minimum Pack	Intermediate Pack	Optimum Pack
Key Services Provided					
ANC and PNC	Available	Available	Available	Available	Available
Delivery Services	Not available	Not available	Not available*	Available	Available
Basic Emergency Obstetrics and New-born Care	Not available	Not available	Not available	Available	Available
Immunizations	Available	Available	Available	Available	Available
Infant and young children feeding	Available	Available	Available	Available	Available
Case Management of Childhood illness	Available	Available	Available	Available	Available
Screening for Communicable (e.g. TB and HIV)	Available	Available	Available	Available	Available
Screening for Non - Communicable disease (e.g. goitre, diabetes and hypertension)	Available	Available	Available	Available	Available
Treatment of CDs and NCDs	Not available	Not available	Not available	Not available	Available
**May be available if there is a delivery room*					
Referral	⟷				
Supervision	⟵				

The subsequent sections of this document amplify the RWHSS model, providing more detailed information on the services that should be delivered at the different levels and the health systems support (drugs, infrastructure, equipment, human resources, and funding) needed to ensure the provision of these services. It also specifies the governance, partnerships and participation, research, monitoring, and evaluation frameworks needed to enable the attainment of programme goals and objectives.

2.2. Ward Health Services

2.2.1. Essential Package of Services

The goal of the RWHSS, as indeed any health system, is to improve the health status of the population resident in the ward. This will require achieving high level of coverage with cost-effective, high-impact interventions, using various delivery modes that seek to bring health care as close as possible to where people live.

The essential health care services, which includes all the services (home-based, Minimum, Intermediate and Optimal PHC packs) to be provided within the RWHSS from the household to PHC level 3 are listed below:

1. **Reproductive, Maternal, New-born, Child, Adolescent, and Elderly Health plus Nutrition**

A. Maternal Health Services

- Antenatal Care
- Normal Delivery Services
- Basic Emergency Obstetrics and New-born Care
- Postnatal care (maternal care)

B. New-born and Child Health Services

- ***New-born care***
  - Essential new-born care
  - Emergency new-born care
  - Management of HIV exposed new-born
- ***Child Health Care***
  - Child Nutrition (Infant and Young Children Feeding, detection and management of severe acute malnutrition)
  - Prevention and treatment of common childhood illnesses (detection and treatment of diarrhoea, malaria, and pneumonia) (IMCI plus others)
  - Immunization

C. School Health Services

- School feeding
- Deworming
- Tetanus Diphtheria (TD) and Human Papilloma Virus (HPV) vaccines to adolescent girls.
- Monitoring growth and development of school children
- Screening for disabilities
- Treatment of minor ailments

D. Adolescent Health

- Comprehensive sexual and reproductive health education
- Prevention of unwanted pregnancy and other family planning services
- Prevention and treatment of anaemia
- Prevention, and control of Sexually Transmitted Infections (STI's including HIV)
- Menstrual hygiene promotion
- Prevention and management of substance abuse and other mental health conditions.
- Prevention and management of rape.
- Immunizations (TD and HPV)
- Nutrition supplementation

E. Sexual and Reproductive health

- Family planning
- Post Abortion Care

2. Prevention and Control of Communicable diseases

- Prevention, diagnosis and treatment of malaria, tuberculosis, HIV/AIDS, hepatitis, and Neglected Tropical Diseases (NTDs)
- Integrated vector control
- Periodic mass/targeted Preventive chemotherapy
- Case management of NTDs
- Treatment of snake bites with polyvalent anti-snake venom
- Rabies post-exposure vaccination

3. **Prevention and Control of Non-Communicable Diseases**
   - Prevention, screening and management of cardiovascular diseases, goitre, diabetes, hypertension, cancers, Chronic respiratory tract diseases, sickle cell disease (SCD)
   - Eye Health
   - Oral Health
   - Mental Health
   - Care of the Elderly

4. **Emergency Medical Services**
   - Prevention of accident, injury, and violence
   - Treatment of minor ailments, accidents, and injuries (First aid)
   - Triage, basic/pre-referral treatment, and referral of emergencies

5. **Public Health Emergencies, including outbreaks**
   - Mitigation/ Resilience measures including Infection Prevention Control (IPC)
   - Emergency planning
   - Emergency response
   - Outbreak response

6. **Health Promotion**
   - Promotion of healthy living behaviour and harm reduction
   - Development, production, and dissemination of Information Education and Communication (IEC) materials on various relevant health issues
   - Provision of segmented behavioural change communication
   - Provision of well women and men clinical services
   - Promotion of physical activity
   - Promotion of nutrition/healthy diet

7. **Social determinants of health**
   - Food safety and hygiene services
   - Water and sanitation services
   - Physical environment, chemical products, and medical waste management

Tables 2-12 provide details of services to be provided at each level of care within the PHC system.

Legend (Tables 2-12)

Programmes
Priority services
Activities/Tasks

Table 2: Maternal health services available at each level of care

Intervention	Household	Community	Health Outreach Post	Primary Health Centre (Level 1)	Primary Health Centre (level 2)	Primary Health Centre (level 3)	Referral
Pregnancy							
Antenatal Care							
Identification, documentation, and referral of pregnant women	x	x					
Counselling and health education (including nutrition in pregnancy)	x	x	x	x	x	x	
Detection and management of complications in pregnancy							
• Screening and treatment for syphilis				x	x	x	
• Screening and treatment of anaemia	x		x	x	x	x	
• Screening for diabetes	x		x	x	x	x	
• Screening for pre-eclampsia	x		x	x	x	x	
• Screening for HIV	x		x	x	x	x	
• Treatment HIV-positive pregnant women (PMTCT)					x	x	
• Detection of other health problems and treatment/referral (e.g. diabetes, TB, hypertensive diseases)			x	x	x	x	
Iron and folic acid supplementation	x		x	x	x	x	
Malaria prevention (administration of SP and provision of LLIN	x		x	x	x	x	
Diagnosis and treatment of uncomplicated malaria in pregnancy	x		x	x	x	x	
Tetanus toxoid for NTT Prevention		x	x	x	x	x	
Detection and treatment/referral of pregnancy – related complications (e.g., Pre-eclampsia/eclampsia, Antepartum			x	x	x	x	

Intervention	Household	Community	Health Outreach Post	Primary Health Centre (Level 1)	Primary Health Centre (level 2)	Primary Health Centre (level 3)	Referral
haemorrhage, pre-mature rupture of membrane, etc)							
Distribution of misoprostol to pregnant women	x		x				
Support development of birth preparedness and complication readiness plan	x	x	x	x	x	x	
Link pregnant women with Emergency Transport Service	x	x	x	x	x	x	
Distribution of Mama kits (delivery kits)	x				x	x	
Conduct of two abdominal ultrasound scans during pregnancy (first one before 24 weeks of gestation)					x	x	x
Promotion of male involvement	x	x	x	x	x	x	
Labour and Delivery							
Normal Labour and Delivery Services							
Monitoring of labour using Partograph					x	x	x
Active management of third stage of labour (administration of uterotonic (e.g., oxytocin, misoprostol), controlled cord traction and cord clamping)					x	x	x
Induction of labour for prolonged pregnancy					x	x	x
Basic Emergency Obstetrics Care							
Induction of labour to manage prelabour rupture of membranes at term					x	x	x
Management of Eclampsia by parenteral administration of Magnesium Sulphate/other anticonvulsants					x	x	x
Management of puerperal Sepsis by parenteral administration of antibiotics					x	x	x
Assisted vaginal delivery					x	x	x
Management off retained placenta through manual removal					x	x	x
Removal of retained products through Manual Vacuum Aspiration					x	x	x

Intervention	Household	Community	Health Outreach Post	Primary Health Centre (Level 1)	Primary Health Centre (level 2)	Primary Health Centre (level 3)	Referral
Administration of rectal misoprostol for PPH and referral	x				x	x	x
Management of PPH by administration of Parenteral oxytocic's				x	x	x	x
Pneumatic anti-shock garments for haemorrhage					x	x	
Pre-referral management of labour complications					x	x	x
C-section and management of other labour complications							x
Blood Transfusion							x
Corticosteroids to prevent respiratory distress in new-borns in pre-term delivery							x
Postpartum Care (Mothers)							
Postnatal preventive and curative care (including 6 visits)	x		x	x	x	x	x
Health education - breast and nipple care	x		x	x	x	x	x
Prevent and treat anaemia				x	x	x	x
Detect and treat /refer health problems (mastitis, sepsis etc)	x		x	x	x		
Maternal and Perinatal Death Surveillance and Response		x	x	x	x	x	x

Table 3: Child health services available at each level of care

Intervention	Household	Community	Health Outreach Post	Primary Health Centre (Level 1)	Primary Health Centre (level 2)	Primary Health Centre (level 3)	Referral
New-born Care							
Essential Newborn Care							
Basic resuscitation					x	x	
Clean delivery and cord care, including administration of chlorhexidine for cord care	x			x	x	x	
Ensure early initiation of breastfeeding	x				x	x	
Thermal protection (prompt drying, delayed bathing and keeping babies clean, dry and warm)	x			x	x	x	
Kangaroo mother care for low birth weight	x	x	x	x	x	x	x
Care of preterm	x			x	x	x	x
Erythromycin ointment for prophylactic eye care					x	x	x
Detection and management of bacterial infection in new-born					x	x	x
Emergency new-born care							
Comprehensive management of New-born sepsis (parental antibiotic and supportive care)							x
Management of neonatal sepsis with antibiotics (oral) where referral is not possible	x		x	x	x	x	
Early detection and treatment of jaundice	x			x	x	x	x
Prophylactic administration of Vitamin K1 administration to prevent haemolytic diseases of the new-born					x	x	x
Identification and referral of neonatal complications	x		x	x	x	x	x
Management of HIV exposed new-born							
Nevirapine prophylaxis for HIV exposed new-born					x	x	x
PCR at 6weeks							x
Cotrimoxazole prophylaxis for HIV positive child					x	x	x
Birth registration		x			x	x	
Nutrition							

Intervention	Household	Community	Health Outreach Post	Primary Health Centre (Level 1)	Primary Health Centre (level 2)	Primary Health Centre (level 3)	Referral
Promote Infant and Young Children Feeding (IYCF)							
Ensure Early initiation of breast feeding	x	x	x	x	x	x	
Promote exclusive breastfeeding in first 6months	x	x	x	x	x	x	
Promote adequate complimentary feeding from 6 months, ensuring diversification	x	x	x	x	x	x	
Promote continued breastfeeding up to 24 months	x	x	x	x	x	x	
Vitamin A supplementation	x		x	x	x	x	
Multiple Micronutrients Powder (MMP) supplementation	x		x	x	x	x	
Growth monitoring	x		x	x	x	x	
Nutrition education and Food demonstration	x	x	x	x	x	x	
Deworming	x		x	x	x	x	
Detection and management of Severe Acute Malnutrition							
Screening for malnutrition	x	x	x	x	x	x	
Detection of acute severe malnutrition	x		x	x	x	x	
Community management of acute malnutrition (including distribution of Ready to Use Therapeutic Food (RUTF)					x	x	
Prevention and Treatment of common childhood Illness							
Prevention, diagnosis, and treatment of malaria							
Distribution Long-lasting insecticide net (LLIN) for use by under-fives	x	x	x	x	x	x	
Diagnosis and treatment of uncomplicated malaria	x		x	x	x	x	
Management of complicated malaria						x	x
Amodiaquine plus sulfadoxine-pyrimethamine (AQ+SP) chemoprevention for malaria	x		x	x	x	x	
Detection and management of diarrhoea							
Treatment of diarrhoea with ORS and Zinc	x		x	x	x	x	
Treatment of severe diarrhoea with IV fluids					x	x	x
Detection and treatment of pneumonia							

Intervention	Household	Community	Health Outreach Post	Primary Health Centre (Level 1)	Primary Health Centre (level 2)	Primary Health Centre (level 3)	Referral
Detection of pneumonia and treatment with dispersible amoxicillin	x		x	x	x	x	x
Management of severe pneumonia						x	x
Detection and treatment of other childhood illnesses							
Detection and management of other respiratory tract conditions (asthma)				x	x	x	x
Antibiotics for dysentery				x	x	x	
Detection and treatment of topical infections		x	x	x	x	x	
Treatment of severe measles					x	x	x
Screening for sickle cell disease					x	x	x
Identification and reporting of Acute Flaccid Paralysis (AFP)	x	x	x	x	x	x	x
Immunization							
Provision of childhood immunizations	x	x	x	x	x	x	x
Identification, listing and referral of children in need of immunization	x	x	x				
Health education and counselling on RI	x	x	x	x	x	x	
Routine immunization (BCG, OPV, IPV, Penta, MCV 1and 2, YF, PCV, Men A, Hep B)			x	x	x	x	x
Monitoring, management, and referral of adverse events after immunisation	x		x	x	x	x	x
Vaccine uptake reconciliation		x	x	x	x	x	
Defaulter tracking	x	x	x	x	x	x	x

Table 4: School health services available at each level of care

Intervention	Household	Community	Health Outreach Post	Primary Health Centre (Level 1)	Primary Health Centre (level 2)	Primary Health Centre (level 3)	Referral
School health services							
School feeding		x					
Deworming		x					
TT and HPV vaccines to adolescent girls		x					
Monitoring growth and development		x					
Screening for disabilities		x					
Treatment of minor aliments		x					

Table 5: Adolescent health services available at each level of care

Intervention	Household	Community	Health Outreach Post	Primary Health Centre (Level 1)	Primary Health Centre (level 2)	Primary Health Centre (level 3)	Referral
Comprehensive sexual and reproductive health services							
Prevention of unwanted pregnancies							
Health education and counselling	x	x	x	x	x	x	
Provision of contraceptive services, including emergency contraception to sexually active adolescents)	x	x	x	x	x	x	x
Prevention and treatment of anaemia in adolescents							
Health education and counselling	x	x	x	x	x	x	
Albendazole, Iron and Folic Acid supplementation	x	x	x	x	x	x	
Prevention and management of Sexually transmitted infections							
Health education and counselling (including motivational counselling)	x	x	x	x	x	x	
Immunizations (HPV, TD, Hep B)					x	x	
Screening and treatment of Sexually transmitted infections					x	x	
Menstrual hygiene promotion							-
Health education and counselling	x	x	x	x	x	x	
Prevention and management of substance abuse and other mental health conditions							
Health education and counselling	x	x	x	x	x	x	
Screening for alcohol, drug use and internet addiction	x	x	x	x	x	x	
Screening for mental health issues (e.g., depression, self-harm, anxiety, anorexia, etc)	x	x	x	x	x	x	

Intervention	Household	Community	Health Outreach Post	Primary Health Centre (Level 1)	Primary Health Centre (level 2)	Primary Health Centre (level 3)	Referral
Prevention and management of rape and other gender-based violence (GBV)							
Health education and counselling	X	X	X	X	X	X	
Screening for STIs and Provision of Post-Exposure Prophylaxis (PEP)	X	X	X	X	X	X	

Table 6: Sexual and reproductive health services available at each level of care

Intervention	Household	Community	Health Outreach Post	Primary Health Centre (Level 1)	Primary Health Centre (level 2)	Primary Health Centre (level 3)	Referral
Provision of sexual and Reproductive health services							
Family planning							
Health education and counselling	x	x	x	x	x	x	x
Provision of contraceptives	x	x	x	x	x	x	x
Management of side effects of contraceptives					x	x	x
Post abortion Care							
Health education and counselling	x	x	x	x	x	x	x
Manual vacuum aspiration (MVA)					x	x	
Prophylactic antibiotic following MVA					x	x	x
Pre-referral treatment for post abortal sepsis					x	x	
Management of post abortal sepsis						x	x
Education, detection, and management of gender-based violence	x	X	x	x	x	x	

Table 7:Communicable diseases and NTD health services available at each level of care

Intervention	Household	Community	Health Outreach Post	Primary Health Centre (Level 1)	Primary Health Centre (level 2)	Primary Health Centre (level 3)	Referral
Malaria							
Prevention and treatment of malaria							
Health education and counselling including the use of protective clothing, repellents etc.	x	x	x	x	x	x	
Long lasting Insecticide treated nets, especially for pregnant women and children aged less than 5 years	x	x	x	x	x	x	
Indoor Residual Spraying	x						
Intermittent Preventive Therapy for pregnant women	x	x	x	x	x	x	
Seasonal chemoprevention with SP for under-fives in 9 Sahel States	x	x	x	x	x	x	
Parasitological diagnosis of malaria (RDT)	x	x	x	x	x	x	
Parasitological diagnosis of malaria (microscopy)					x	x	
Treatment of uncomplicated malaria with ACT	x	X	x	x	x	x	
Pre-referral treatment of complicated or severe malaria	x	x	x	x	x	x	x
Treatment of complicated malaria							x
Hepatitis							
Prevention and management of hepatitis							
Health education and counselling	x	x	x	x	x	x	
Immunization				x	x	x	
Screening of high-risk groups (referral of Hepatitis-positive persons)			x	x	x	x	x
Immunization of high-risk groups (health workers)					x	x	x
Screening and diagnosis of chronic Hepatitis infection					x	x	x
Treatment of chronic Hepatitis infection (with interferon or lamivudine (3TC)/tenofovir (TDF)/emtricitabine (FTC)							X

Intervention	Household	Community	Health Outreach Post	Primary Health Centre (Level 1)	Primary Health Centre (level 2)	Primary Health Centre (level 3)	Referral
Tuberculosis/Leprosy							
Prevention and management of Tuberculosis							
Health education and counselling	x	x	x	x	x	x	x
Tuberculosis case detection	x	x	x	x	x	x	x
Microscopic diagnosis of TB					x	x	x
Treatment of TB					x	x	x
Contact tracing for TB	x	x	x	x	x	x	x
Diagnosis (with GeneXpert) and treatment of MDR-TB					x	x	x
Prevention and management of leprosy							
Health education and counselling	x	x	x	x	x	x	x
Leprosy case detection	x	x	x	x	x	x	x
Diagnosis of leprosy							x
Treatment of leprosy with MDT							x
Management of Leprosy complications and rehabilitation							x
HIV/AIDS							
Prevention and control of HIV/AIDS							
Health education	x	x	x	x	x	x	x
HIV testing and counselling	x	x	x	x	x	x	x
Treatment of all HIV positive people with HAART					x	x	x
Condom distribution	x	x	x	x	x	x	
Prevention of mother-to-child transmission services					x	x	x
Early infant diagnosis							x
Chemoprophylaxis for HIV positive persons (cotrimoxazole)					x	x	x
Monitoring treatment (CD4)							x
Screening of HIV-positive people for TB and referral of positive cases					x	x	x
Treatment of opportunistic infection					x	x	x
Home-based care	x						

Intervention	Household	Community	Health Outreach Post	Primary Health Centre (Level 1)	Primary Health Centre (level 2)	Primary Health Centre (level 3)	Referral
Neglected Tropical Diseases							
Diseases: Schistosomiasis, soil-transmitted helminthic infections (STH), lymphathic filariasis, onchocerciasis, leishmaniasis, yaws, Buruli ulcer, scabies, trachoma, etc							
Integrated vector control							
Health education including the use of protective clothing, repellents etc.	x	x	x				
Indoor residual spraying	x						
LLIN	x	x	x	x	x	x	
Outdoor spraying	x	x					
Larviciding	x	x					
Environmental control measures	x	x					
Periodic mass/targeted Preventive chemotherapy	x	x					
Case management of NTDs							
Albendazole for soil transmitted helminths	x	x	x	x	x	x	
Detect and treat schistosomiasis					x	x	
Detect and treat lymphatic filariasis with Ivermectin or diethylcarbamazine for					x	x	
Detect and treat onchocerciasis with ivermectin					x	x	
Prevent, diagnose and treat trachoma	x	x	x	x	x	x	
Water and Sanitation (WASH) interventions	x	x	x				
Treatment of snake bites with polyvalent anti-snake venom					x	x	x
Rabies post-exposure vaccination					x	x	x

Table 8: Non-communicable disease services available at each level of care

Intervention	Household	Community	Health Outreach Post	Primary Health Centre (Level 1)	Primary Health Centre (level 2)	Primary Health Centre (level 3)	Referral
Cardiovascular diseases (coronary heart disease, cerebrovascular disease, peripheral artery disease, rheumatic heart disease, congenital heart disease, deep vein thrombosis and pulmonary embolism							
Prevention and management of cardiovascular diseases							
Health promotion on lifestyle modification for cardiovascular diseases	x	x	x	x	x	x	x
Screening for risk factors of cardiovascular disease and referral	x	x	x	x	x	x	x
Assessment of Body Mass Index (BMI) for overweight and obesity, counselling, and support services	x	x	x	x	x	x	x
Detection and referral of CVD				x	x	x	x
Rehabilitation and long-term care	x			x	x	x	x
Hypertension							
Health promotion on lifestyle modification for hypertension	x	x	x	x	x	x	
Screening for hypertension	x	x	x	x	x	x	x
Treatment of hypertension						x	x
Monitoring of adherence to treatment	x		x	x	x	x	x
Detection and referral of complications	x		x	x	x	x	
Diabetes							
Health promotion on lifestyle modification for diabetes	x	x	x	x	x	x	
Screening for diabetes and risk factors	x	x	x	x	x	x	
Assessment of BMI for overweight and obesity, counselling, and support services	x	x	x	x	x	x	
Diagnosis and management of diabetes						x	x
Detection and management of diabetic complications and rehabilitation						x	x
Monitoring of adherence to treatment	x		x	x	x	x	x

Intervention	Household	Community	Health Outreach Post	Primary Health Centre (Level 1)	Primary Health Centre (level 2)	Primary Health Centre (level 3)	Referral
Chronic Respiratory diseases							
Health education and promotion	x	x	x	x	x	x	
Diagnosis and management of Asthma and COPD					x	x	x
Management of complications of Asthma and COPD							x
Rehabilitation	x		x	x	x	x	
Screening for Endocrine diseases							
Screening for goitre			x	x	x	x	x
Cancers							
Prevention and control of Cancers							
Health education and lifestyle modification for all cancers	x	x	x	x	x	x	x
Radiotherapeutic, chemotherapeutic and surgical cancer services for all cancers							x
Prevention and management of Cancer of the Cervix							
Human Papilloma Vaccine for cervical cancer					x	x	x
Visual inspection of cervix with acetic acid					x	x	x
PAP smears for cervical cancer screening							x
Diagnosis and treatment services							x
Management of Cancer of the breast							
Breast self-examination	x	x	x	x	x	x	x
Mammography to screen for breast cancer							x
Diagnosis and Treatment of breast cancer							x
Prevention and management of Cancer of the liver							
HbV vaccination			x	x	x	x	
Diagnosis and treatment services							x
Management of Cancer of the prostrate							
Screening using PSA							x

Intervention	Household	Community	Health Outreach Post	Primary Health Centre (Level 1)	Primary Health Centre (level 2)	Primary Health Centre (level 3)	Referral
Diagnosis and treatment of cancer of the prostrate							x
Prevention and management of Sickle Cell Disease (SCD)							
Health education and counselling	x	x	x	x	x	x	
Genetic counselling for general population	x	x	x	x	x	x	
Genotype profiling					x	x	
Provision of analgesics	x		x	x	x	x	
Folic acid supplements and malaria prophylaxis			x	x	x	x	
Diagnosis and management of SCD complications						x	x
Promotion and management of Oral Health							
Oral health education and promotion (proper dental hygiene, nutrition and diet education, alcohol, and tobacco reduction etc)	x	x	x	x	x	x	
Regular dental check-up					x	x	
Preventive dental services (e.g., scaling and polishing of teeth, preventive restorations and use of pit and fissure sealants for dental caries)							x
Restorative and orthodontic treatment							x
Diagnosis and treatment of dental diseases					x	x	x
Management of Mental Health Issues (Including substance abuse)							
Health Education and promotion on mental health	x	x	x	x	x	x	x
Promote mental health literacy (in collaboration with other sectors)		x					
Provide community-based youth mental health care services that combines mental health, alcohol and other substances	x	x					

Intervention	Household	Community	Health Outreach Post	Primary Health Centre (Level 1)	Primary Health Centre (level 2)	Primary Health Centre (level 3)	Referral
Community-based mental health care services by lay workers	x	x					
Provision of primary mental health care services							
• Identify mental illness (e.g., Depression and dementia)			x	x	x	x	
• Provision of basic medication and psychosocial interventions			x	x	x	x	
• referrals to specialist mental health services						x	x
Provision of Eye Health Services							
Health education on eye health promotion and disease prevention	x	x	x	x	x	x	x
Diagnosis and provision of basic eye treatment services & referrals				x	x	x	x
Medical and surgical management of eye problems in general and specialist centres							x
Care of the Elderly							
Health promotion activities for elderly	x	x	x	x	x	x	x
Home-based care and support services	x	x					
• Annual medical check-ups for elderly • Screen for nutritional problems, chronic diseases of elderly, CA prostrate, CA colon • Biannual BP checks • Appropriate referrals						x	x
Nutrient supplementation (e.g., calcium, Vit B, Vit C)				x	x	x	
In patient treatment services					x	x	x
Management of chronic degenerative diseases (e.g., arthritis)			x	x	x	x	
Referral for Long term care (Old people's home)						x	x

Table 9: Emergency Medical services available at each level of care

Intervention	Household	Community	Health Outreach Post	Primary Health Centre (Level 1)	Primary Health Centre (level 2)	Primary Health Centre (level 3)	Referral
Management of medical emergencies							
Health promotion and education on accident and injury and violence prevention	x	x	x	x	x	x	x
Pre-hospital care (first aid) and management of minor ailments, accidents, and injuries	x		x	x	x	x	
Evacuation (Emergency transportation and first aid by first responders)		x	x	x	x	x	x
OPD Emergency hospital care services (triage, Initial Evaluation, Diagnosis & Resuscitation, and In-Hospital Care)					x	x	x
Emergency Unit management: Initial Assessment & Resuscitation, Monitoring and Revaluation, Detailed Assessment, Diagnostic Studies, Additional Therapeutics					x	x	x
In -patient care - treatment, surgery, and critical care							x
Rehabilitation e.g., physiotherapy	x	x			x	x	x

Table 10: Public health emergency services available at each level of care

Intervention	Household	Community	Health Outreach Post	Primary Health Centre (Level 1)	Primary Health Centre (level 2)	Primary Health Centre (level 3)	Referral
Management of Public Health Emergencies							
Mitigation							
Information, education, risk communication and disaster preparedness	x	x	x	x	x	x	
Emergency planning							

Intervention	Household	Community	Health Outreach Post	Primary Health Centre (Level 1)	Primary Health Centre (level 2)	Primary Health Centre (level 3)	Referral
Stockpile and preposition health supplies					x	x	x
Strengthen surveillance and monitoring of potential hazards to health, including public health laboratory		x		x	x	x	x
Emergency response							
Provide triage, immediate emergency first aid and evacuation services including ambulance services with first responders				x	x	x	x
Triage- emergency medical and surgical services					x	x	x
Pre-hospital care (first aid) and management of minor accidents	x	x	x				
Provide appropriate patient management (surgical and medical) services							x
Provide primary care services		x	x	x	x	x	
Food and nutrition support services		x			x	x	
Immunizations		x		x	x	x	
Environmental sanitation services (water, sanitation, and disposal of the dead)	x	x					
Reproductive and sexual health services		x			x	x	
Psychosocial support services		x			x	x	x
Infection prevention and control					x	x	x
Outbreak response							
Detection of outbreaks (cholera, CSM, Lassa, Yellow Fever, Viral Haemorrhagic fever, etc)	x	x	x	x	x	x	
Confirmation of diagnosis					x	x	x
Confirmation of outbreaks					x	x	x
Communication of outbreaks					x	x	x
Investigation of outbreaks					x	x	x
Management of cases	x	x	x	x	x	x	x

Intervention	Household	Community	Health Outreach Post	Primary Health Centre (Level 1)	Primary Health Centre (level 2)	Primary Health Centre (level 3)	Referral
Interrupt transmission (health education, vector management, etc)	x	x	x	x	x	x	x
Institute primary prevention (chemoprophylaxis, personal protection)	x	x	x	x	x	x	x
Strengthen surveillance	x	x	x	x	x	x	x

Table 11:Health promotion services available at each level of care

Intervention	Household	Community	Health Outreach Post	Primary Health Centre (Level 1)	Primary Health Centre (level 2)	Primary Health Centre (level 3)	Referral
Health Promotion Services							
Provision of Health Promotion Services							
Promotion of healthy living behaviour and harm reduction (exercise, diet, tobacco use, alcohol, rest, social activities etc.)	x	x	x	x	x	x	x
Development, production, and dissemination of IEC on various relevant health issues	x	x	x	x	x	x	x
Provision of segmented behavioural change communication	x	x	x	x	x	x	x
Provision of well women and men clinical services and other services screening for obesity, hypertension, cancer of the cervix, cancer of the prostrate, diabetes, etc.)	x	x	x	x	x	x	x
Promotion of physical activity; exercises, yoga, massage	x	x	x	x	x	x	x
Creation of demand for uptake of health promotive and preventive services	x	x	x	x	x	x	
Promotion of age-appropriate healthy eating habits	x	x	x	x	x	x	x

Table 12: WASH services available at each level of care

Intervention	Household	Community	Health Outreach Post	Primary Health Centre (Level 1)	Primary Health Centre (level 2)	Primary Health Centre (level 3)	Referral
Food Safety and Hygiene Services							
Promotion and monitoring of food safety and hygiene							
Provision of public education and enlightenment on variety of safe foods to meet dietary needs, correct methods of food handling, preparation, consumption, importance of food security and proper nutrition.	x	x	x	x	x	x	x
Training and monitoring of the activities of food vendors and handlers		x			x	x	x
Bi-annual medical examination of food handlers, including screening for typhoid and hepatitis) and issue medical certificate of fitness		x			x	x	x
Inspection, control and regulation of food markets and abattoirs, restaurants, and other places of sales of foods to the public, including surveillance		x					
Mobilization of community structures, including Ward development Committees for safe and hygienic nutrition-related activities, from production to consumption		x					
Establishment of early warning system that has the capacity to detect, trace and prevent outbreak of food borne illnesses before they spread		x					
Water and Sanitation Services							
Public education on sanitation	x	x	x	x	x	x	
Promotion of proper hand washing techniques	x	x	x	x	x	x	

Intervention	Household	Community	Health Outreach Post	Primary Health Centre (Level 1)	Primary Health Centre (level 2)	Primary Health Centre (level 3)	Referral
Community sensitization on safe water and health risks of unwholesome water	x	x	x	x	x	x	
Provision of tippy tap points	x	x					
Environment, chemical products, and medical waste Services							
Promotion of public health education on health impacts of climate change	x	x	x	x	x	x	
Safe disposal of medical waste according to National guidelines	x		x	x	x	x	
Promotion of public education on poisoning	x	x	x	x	x	x	
Poisons' surveillance and reporting	x	x	x	x	x	x	
Management of acute and chronic poisoning conditions					x	x	x
Promotion of chemical hazards education	x	x	x	x	x	x	
Promotion of occupational health education and safety	x	x	x	x	x	x	

It is recognized that states are at differently levels of development of the Ward Health System. It is imperative that states take cognisance of where they are and plan their expansion of service packages in response to this reality. For example, for states that hardly have basic package of services at their focal PHCs, they could start with the provision of the basic minimum package of services that focus primarily on maternal, new-born and child health and gradually add other services until the optimal PHC package is provided. The proposed phased implementation approach is detailed under the section, **"Phased Approach to Implementation".**

2.2.2. Referral System

Referral is the process by which a health worker transfers the responsibility of care temporarily or permanently to another health professional. The 2-way referral system (Figure 3) implies that a client is referred to a higher level of health care for appropriate treatment and care and referred back to the lower level of

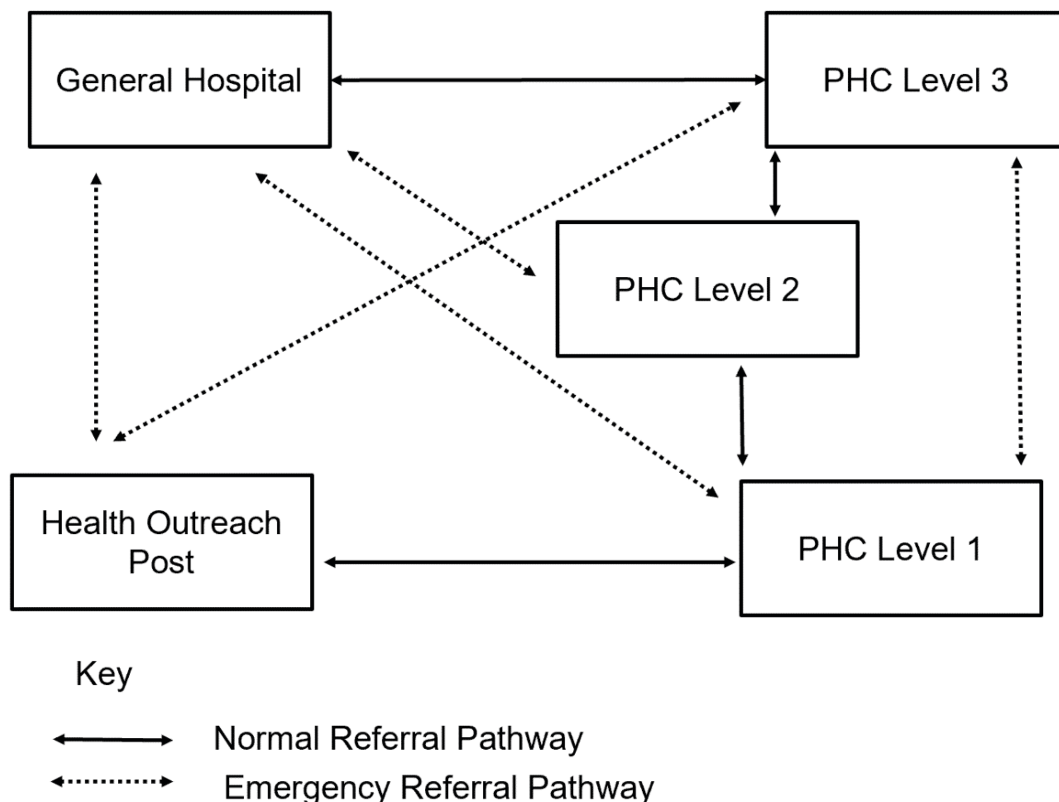
healthcare for continuity of care and follow up. This system is an integral part of an effective PHC system.

Criteria for referral include the following conditions:

- Condition is beyond the competence of the health worker.
- Condition is not covered by standing orders and job aides.
- Condition rapidly getting worse.
- Emergencies and maternal conditions and

There are inadequate resources/equipment' for effective patient management.

Figure 3: Two-way referral system showing normal and emergency referral pathways



Every PHC worker at the health centre and community level should be familiar with the value and effective use of ***Standing Orders*** and ***Job Aides***.
For the 2-way referral system to be effective and sustained, the following must be done:

- Identification, mapping, and selection of referral centres within the

LGA.

- Training of all PHC workers on the referral system; and
- Identification and provision of emergency transport system.

If a client is critically ill, health worker should omit the normal paths of referral and refer the client immediately to the appropriate level. Two-way referral forms should be made available at the facility and given to community-based health workers. Information to be included in the referral form are patient name, gender, address, vital signs, diagnosis, and treatment received. Feedback for the referring centre should include patients' findings, diagnosis, treatment, and further instructions. See Figure 4 for a sample two-way referral form.

2.2.3. Supportive Supervision & Mentoring in the Ward Health System

2.2.3.1 Supportive supervision

Supportive supervision is the process of helping staff to improve their own work performance continuously. It is carried out in a respectful and non-authoritarian way with a focus on using supervisory visits as an opportunity to guide, monitor, coach and improve knowledge and skills of health workers.

The process promotes sustainable management and efficient use of resources by encouraging effective communication, as well as planning and monitoring results. Integrated Supportive Supervision (ISS) is aimed at quality improvement in PHC services provision, promoting and enhancing accountability, strengthening relationships, provision of technical support, on-the-job capacity building, and quality control. ISS emphasises joint problem identification and solving. As shown in Figure 5, supportive supervisory visits are conducted using the integrated supportive supervisory checklist, from the National level to the household level at different timelines.

Figure 4: Sample two-way referral form

TWO-WAY REFERRAL FORM

To.. Date.................................
From... Phone No..................................
Client's Name..
Address..
Age... Sex...
This Patient had been receiving treatment for...
From.. To..
Reasons for referral...
History...
....
Temperature............................... Pulse........................... Resp.......................................
B/P................................. Height...................................... Weight..................................
Findings..
Other Problems: i.e., Allergies..
....
Treatment Given...
Time.. Dose..

....
Signature

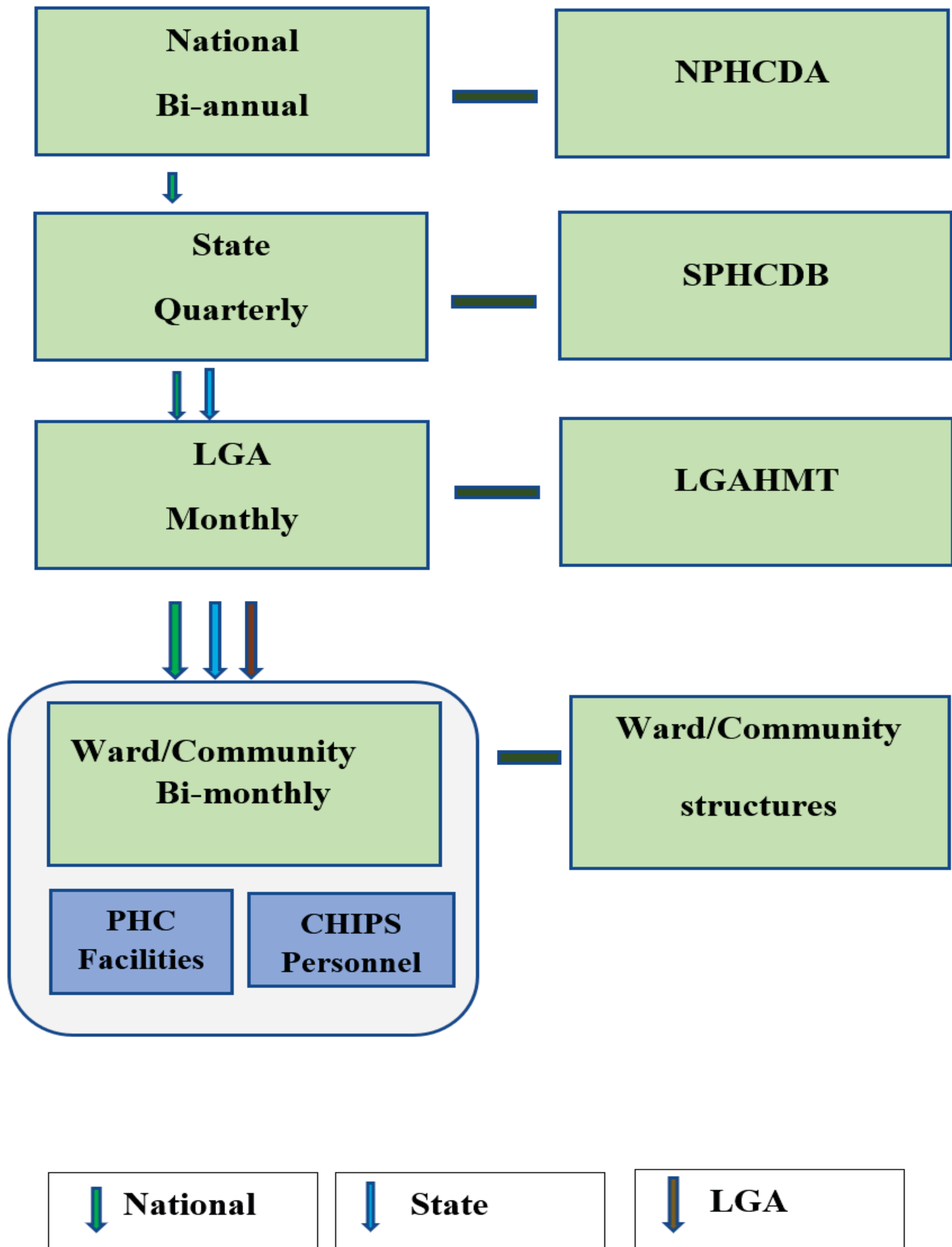
Please tear off and return to the referring facility

✂---

Phone No... PHC...
Patient's Name...
Findings..
Diagnosis..
Treatment Given...
Further Instructions..

Name...
Designation..
Signature...
Date...

Figure 5: Supportive Supervisory Structure



Before the conduct of a supervisory visit, the supervisor should plan and prepare for the visit, including who to visit, the purpose of the visit, and what to assess during the visit. Supervisory tools should be made available. The supervisor should foster a supportive environment for communication, information gathering and sharing of findings with the supervisee. The visit should provide an opportunity for coaching and mentoring. Plans on how to respond to gaps identified should be clearly indicated in the supervisory checklist, implemented and a follow-up visit organised to document effects of intervention.

2.2.3.2 Mentoring at the Ward Health System

Mentoring is a professional relationship where an experienced person (the mentor) supports a subordinate (the mentee) to develop specific skills and knowledge that will enhance their professional and personal growth. Mentoring involves helping mentees to develop their career, skills, and expertise, often drawing upon the experiences of both mentor and mentee in the process of impacting knowledge. Mentors provide technical guidance and support to their mentees and have no agenda other than assisting the mentees to reach their expected goal. Thus, mentoring enhances performance, engagement and encourages multidisciplinary collaboration. It is also a crucial tool in the health sector, because proficiency develops with practice over time.

At the facility and community level, the mentoring model will improve the overall development of health personnel and community-based workers. Emphasis will be on identifying capacity gaps across all the cadres, and specifically within the scope of their job descriptions to provide tailored job capacity building. Strategies for mentoring may include:

Senior mentoring: at the facility level, CHOs or CHEWs will mentor JCHEWs who will in turn mentor community health workers at the community level

Peer to peer mentoring: peers encourage each other to do better and be a sounding board for one another.

Reverse mentoring: a younger colleague mentors a senior colleague on some interventions or innovations. In most situations, the younger colleague has just concluded training and is obliged to communicate and share new insights/ideas from such training.

2.2.4. Demand Generation for RWHSS Packages

Demand generation is an approach that increases awareness of, and demand for, health products or services among target groups or audiences. Demand generation aims at promoting the adoption of positive health behaviour,

encourage timely and appropriate healthcare-seeking behaviour, and use of healthcare services.

Creating demand for health services is necessary to:

- Ensure parents, caregivers, communities and other key stakeholders' value and trust health services.
- Provide necessary information, access, and motivation to access and utilize health services provided at their level.
- Improve household health practices and behaviours through continuous engagement with key stakeholders.
- Encourage the community to seek timely healthcare services for illnesses and complications, especially for maternal and child health.
- Enable positive social norms and practices that support health care-seeking behaviour.
- Address barriers to health service uptake to reduce missed opportunities to vaccinate and increase the proportion of children that complete a full course of immunization.

Key considerations to ensure sustained demand for ward health services include:

- Adequate funding and Investment in demand creation activities at ward and community level.
- Building the evidence base on barriers and facilitators to health service uptake for informed demand creation activities.
- Ensuring adequate technical support for human centred approaches to demand creation.
- Developing relevant guidelines and resources for community health workers.
- Supporting innovative approaches and partnerships.

Table 13 provides examples of strategies for creating demand for ward health services.

Enhancing transfer of patients

One of the limiting factors to client use of health facilities, especially during an emergency is inability to get transportation to a health facility. Communities could work with the National Union of Road Transport Workers (NURTW) to set up a

system for conveying health emergencies to health facilities.[5,6] Also, alternative arrangements could be made with vehicle owners in the community.

Table 13: Strategies for demand generation

Advocacy	Community Mobilization and behaviour Change Communication	Enhancing Transfer of Patients	Financial Incentives
Advocacy to community leaders, gatekeepers, and other stakeholders	Community-based health interventions Practicing participatory learning and action with various groups, including WDC Interpersonal Communication	Emergency transport services or other community -based transport arrangements	Conditional cash transfer, Vouchers, Community-based health insurance or financing scheme

Provision of financial and other incentives

Lack of money to pay for services is one of the major deterrents to timely and effective utilization of health services. There are several possible schemes to remove financial barriers to access. One of them is the Basic Health Care Provision Fund (BHCPF). Through this scheme, government purchases a package of health services for the population, which are then provided free to the people. Others include conditional cash transfer and provision of vouchers for procurement of services. Additionally, other performance-based financing schemes have been shown to stimulate demand for services. Examples include the National State Health Investment Programme (NSHIP) implemented in Nasarawa, Osun, and all the states in the Northeast. In some communities, community members come together to set up a fund to support members when they have health emergencies.

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[5] Alaofe H, Lott B, Kimaru L, Okusanya B, Okechukwu A, Chebet J, Meremikwu M, Ehiri J. Emergency Transportation Interventions for Reducing Adverse Pregnancy Outcomes in Low- and Middle-Income Countries: A Systematic Review. Ann Glob Health. 2020 Nov 18;86(1):147. doi: 10.5334/aogh.2934.

[6] Essien E, Ifenne D, Sabitu K, Musa A, Alti-Mu'azu M, Adidu V. Community loan funds and transport services for obstetric emergencies in Northern Nigeria. Int J Gynaecol Obstet. 1997; 59: 237–44. DOI: https://doi.org/10.1016/S0020-7292(97)00171-9

Non-monetary incentives are also being used to stimulate uptake of specific maternal, new-born and child health (MNCH) services. For example, in some local governments, wives of local government chairmen donate wrappers for women that deliver in hospitals. Other programmes distribute mama kits for delivery to only women that deliver in hospitals or give mosquito nets to mothers whose children complete their immunizations, etc. However, when these non-financial incentives are withdrawn, utilization of the services declines.

Other strategies that can be used for promoting demand generation efforts include:

Advocacy

This is a process of enlisting the support of leaders at various levels to create an enabling environment for service provision and uptake. Advocacy to policy makers may result in increased resource allocation to health facilities in the ward, formulation of relevant supportive policies etc. Advocacy can be done at National, State, LGA, Ward and Community levels. Ward and community level advocacy will be prioritized to stakeholders (ward/community leaders and gatekeepers, traditional and religious leaders, and leaders of community-based organizations) to help them understand the benefits of PHC services, secure their buy-in for health programs and interventions and to facilitate the empowerment of communities to demand for health services from health facilities. At the community level, advocacy to traditional, religious, and other community leaders could garner support and mobilize community members to avail themselves of services; they also help in tracking defaulters and monitoring service uptake.

2.2.5. Community Mobilization and Engagement

Community mobilisation and engagement is a process through which community members work collaboratively with health service providers and other stakeholders to strengthen and take ownership of PHC programmes and interventions. Community mobilisation for increasing demand for services and for promoting positive health behaviour is not just about awareness creation regarding an issue and persuading the community to participate in activities planned by others. It is rather, a comprehensive, goal-driven approach that seeks to deepen mutual understanding of health issues among health service providers and the communities they serve. Community mobilisation provides an opportunity to explore ways of working with relevant stakeholders to identify the problems and resources, determine priorities, work with the health workers to identify solutions to

the problem. Effective community mobilisation also ensures that communities are participating in program implementation, monitoring, and evaluation. Using various interpersonal communication approaches, positive behaviour change, and demand for services could be promoted.

Approaches to community mobilization and engagement and behaviour change communication at ward level include:

- Provision of services, counselling and behaviour change communication through home visits by CHIPS Agents and other community mobilisers
- Promotion of active male involvement through a variety of interpersonal communication strategies – community sensitization workshops, discussions, etc.
- Compound meetings with heads of households, women etc.
- Engagement in edutainment activities - Rallies and road shows etc.
- Community dialogue, which is a process that encourages communities to plan and implement their solutions to health issues
- Use of multiple channels to compliment community efforts (social and traditional media, production and distribution of information, education, and communication (IEC) materials etc.)

2.2.6. Social mobilization

Social mobilization is a process of gaining and sustaining the involvement of all stakeholders to raise awareness of, and demand for, health care, while acting to attain a common goal. It includes conducting mass awareness and mobilization campaigns to promote utilization of healthcare services through, regular announcements by town announcers, production of pilot-tested and clear messages in print materials prepared in local languages and capacity building of frontline health workers and influencers on interpersonal communication and mobilization. Targets for social mobilization include community-based and faith-based organizations, traditional institutions, civil society organizations and other key partners.

2.2.7 Community Engagement Strategy (CES) for strengthening routine immunization (RI)

The CES is primarily focused on addressing supply and demand-side factors that contribute to low immunization coverage rates to strengthen immunization program performance.

The goal of CES is to ensure that all children are fully immunized by strengthening community linkage with the health system via the health facilities/health workers. The specific objectives of CES are to:

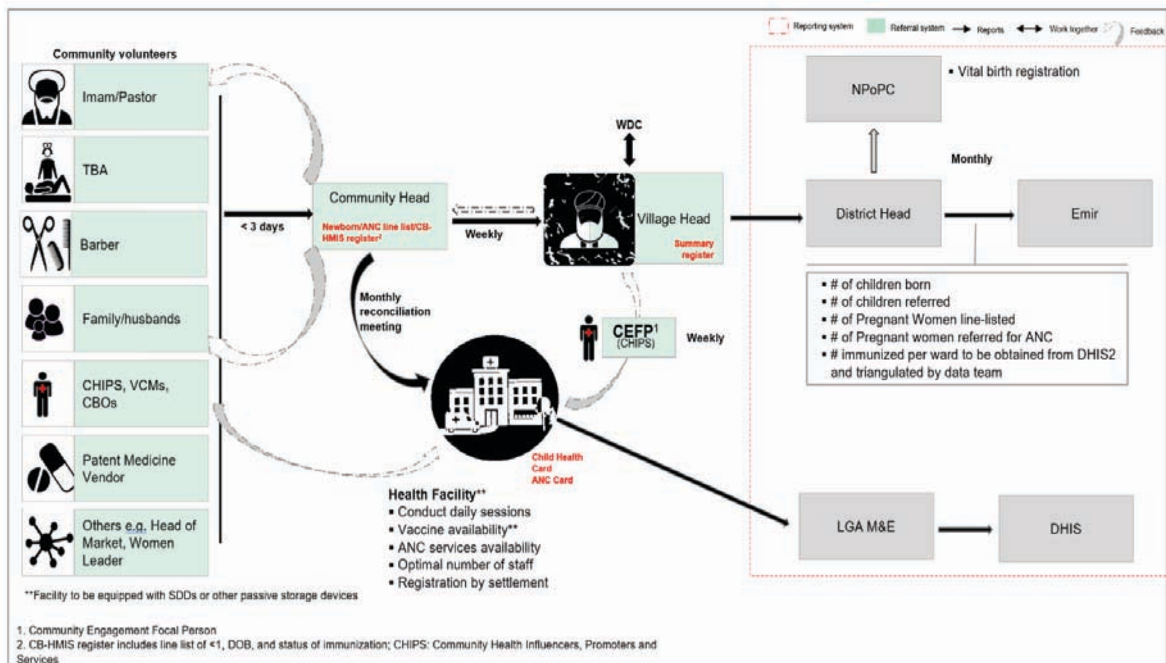
- empower communities to feel responsible for and in control of access to routine immunization services.
- support communities to seek, identify and react timely and positively to RI activities and gaps.
- involve community stakeholders in identifying gaps, developing, and implementing strategies to address barriers to RI and other PHC services.
- identify and utilize community resources in resolving immunization gaps.

There are three main components of the Community Engagement Strategy for immunization activities – Line-listing, Reconciliation, and Defaulter Tracking. These components have been identified as key activities which, if carried out properly will ensure every eligible child in the community is immunized appropriately.

2.2.8 Community Engagement (CE) framework

The community engagement (CE) framework emphasizes clear linkage between traditional leaders, community volunteers, health workers and other stakeholders for immunization within the community. The framework is to be replicated in all states to fit the specific context of the state. The Figure 6 depicts the CE framework.

Figure 6: Framework for identification, registration, tracking, and linkages of new-borns, defaulters, and left outs to health facilities



2.2.9 Inter-sectoral Collaboration to address Social Determinants of Health

Inter-sectoral Collaboration (ISC) frequently refers to collective actions involving more than one specialised agency, performing different roles for a common purpose. This is relevant to health because the complex social, economic, environmental, and political determinants that influence health and inequalities in health, lie mostly beyond the exclusive jurisdiction of the health sector. This requires the health sector to act in collaboration with other sectors of government and society to improve outcomes. The coordination of efforts of sectors as an essential requirement for ISC is highlighted in the 1978 Declaration of Alma Ata, Article VII (4).[7]

> *"(PHC) involves, in addition to the health sector, all related sectors and aspects of national and community development, in particular agriculture, animal husbandry, food, industry,*

[7] World Health Organization (WHO). Declaration of Alma Ata : International Conference on Primary Health Care, Alma Ata, USSR, 6-12 September 1978. Geneva: World Health Organization/ the United Nations Children's Fund. Available at: https://cdn.who.int/media/docs/default-source/documents/almaata-declaration-en.pdf?sfvrsn=7b3c2167_2 (Accessed: October 10, 2021).

education, housing, public works, communications and other sectors; and demands the coordinated efforts of all those sectors."

2.2.10 Stakeholders in Inter-sectoral Collaboration

Multiple departments within the government are involved in ISC. The complexity and fragmentation of government processes hinder ISC and the development of effective strategies. To address this, a multi-sectoral committee should be created at the LGA level comprising of representatives of key Ministries, Departments and Agencies (MDAs) e.g., Education, Information, Communication, Agriculture, Works and Housing, Water Resources, Sanitation, Women Affairs, Transportation, etc.

2.2.11 Inter-sectoral Collaboration in PHC

1. Local Government Health Authority (LGHA) and WDCs to mobilize and sensitize the political class and principal officers of relevant sectors through education and advocacy
    a. Advocacy visits to LGA Chairman and Ward Councillors on the need for inter-sectoral collaboration, solicit buy-in and support to bring all stakeholders to the table.

2. Examples of areas where LGHA and WDCs can work with partners in other sectors on policies and initiatives in addressing social determinants of health are provided in Table 14.

Table 14: Inter-sectoral collaboration for PHC

Sector	Interventions	Recommended Strategies
Education	Health Promotion and Education	Include health promotion and education modules such as healthy lifestyle behaviours, use of LLINs, importance of immunization, etc. in school curriculum
	WASH	Include WASH activities (e.g., proper handwashing technique, sanitation) in school curriculum Ensure provision of proper facilities e.g., toilets, clean water source for practical demonstration of WASH practices
	Food Safety & Hygiene	Include food safety and hygiene modules (e.g., safe food handling, preparation, and consumption) in school curriculum.

Sector	Interventions	Recommended Strategies
		Promote food hygienic practices in the school premises Ensure proper screening of food vendors and handlers for Hepatitis, HIV, etc.
	Nutrition	Include importance of food security and proper nutrition in school curriculum. Promote school gardening Teach students food diversification and how to properly prepare meals to maintain nutrients
	Medical Emergencies and Public Health Preparedness	Train teachers to recognise danger signs of malaria, diarrhoea, cough, measles, etc. Provide risk reduction and emergency preparedness modules to improve knowledge and skills of community in responding to emergencies Build resilience of the community by providing training on risk assessment, risk reduction and individual and community emergency preparedness and planning
	Female Empowerment and Male Engagement	Promote and counsel on importance of girl child education. Provide age-appropriate counselling on strategies to address harmful traditional norms and gender bias Provide civic education and responsible citizenship modules to promote gender sensitive behaviours and attitudes Support provision of adult literacy classes Include entrepreneurship, skills acquisition, and business skills in school curriculum Include education on health-damaging effects of GBV, FGC/M and harmful traditional practices in curriculum

Sector	Interventions	Recommended Strategies
	Environment, Chemical Products and Waste Disposal	Include harmful environmental practices (e.g., indoor use of kerosene stoves) in school curriculum Include effects of climate change on health and non-health sectors in curriculum Include deforestation, soil erosion, etc and link to food security, natural disasters, and health in curriculum
Information	Health Promotion and Education	Mass information sharing on promotion of uptake of promotive and preventative health services Information sharing and mobilisation efforts for mass immunisation activities
	WASH	Mass information sharing on safe water practices e.g., including proper collection and storage of water, water hygiene, etc. Information sharing and mobilisation efforts in the organisation of community sanitation activities Mass information sharing on proper handwashing with soap and water, washing hands before and after eating, etc.
	Food Safety & Hygiene	Public education on safe food handling, preparation and consumption in the household, food markets and abattoirs, restaurants, etc.
	Nutrition	Public education on child nutrition and benefits of breastfeeding Public education on age-appropriate healthy eating habits, variety of safe foods to meet dietary needs
	Medical Emergencies and Public Health Preparedness	Public education on basic danger signs of Malaria, cholera, dysentery, AFP, measles, TB, leprosy, meningitis, Ebola, monkey pox, etc. Public education and risk communication to build culture of health, safety and resilience of households and communities Mass information sharing and public notification of outbreaks Public education on poisoning

Sector	Interventions	Recommended Strategies
	Female Empowerment and Male Engagement	Public education on importance of girl child education Public notification of planned/ongoing adult literacy programmes and trainings on skills acquisition and income generation Public education on health-damaging effects of Gender Based Violence, Female Genital Mutilation, and harmful traditional practices Public education on dangers of high-risk behaviour, suicide, self-harm, etc
	Environment, Chemical Products and Waste Disposal	Public education on harmful environmental practices e.g., indoor use of kerosene stoves Public education on effects of climate change
Communication	Health Promotion and Education	Facilitate the broadcasting of health promotion and education messages (including WASH, nutrition, food safety, etc) via SMS
	Medical Emergencies and Public Health Preparedness	Enable good, dependable mobile network service nationwide to enable fast notification of accidents, medical emergencies, outbreaks, natural disasters, etc
Agriculture	Food Safety & Hygiene	Promote the availability and consumption of safe foods Set and enforce food safety standards for food production, processing, handling and storage Training and monitoring activities of food vendors and handlers for safety and hygiene Conduct inspection, control and regulation of food markets and abattoirs, restaurants and other places of sales of foods to the public, including surveillance
	Nutrition	Promote the availability, access to, and consumption of, wholesome and nutritious foods Develop standards for biofortification and dissemination of crops rich in micronutrients

Sector	Interventions	Recommended Strategies
		Support innovations and initiatives in agriculture to enable rural farmers increase yield and income, and thereby ability to afford improved diets Invest in and provide appropriate post-harvest management processes to reduce food wastage
	Female Empowerment	Develop initiatives that support and facilitate rural women's (and youth) involvement in agriculture and animal husbandry Collaborate on policies and initiatives that improve women's access to land ownership
	Environment, Chemical Products and Waste Disposal	Set standards to limit environmental degradation (e.g., deforestation, soil erosion, greenhouse gas emission, etc) as a result of agricultural activities Develop and enforce standards for appropriate disposal of agricultural waste
Water resources and Sanitation	WASH	Ensure provision of safe water sources e.g., pipe-borne water, boreholes, community water source, construction of tippy taps, etc. Ensure provision of appropriate sanitation facilities e.g., public toilets, latrines, conduits, etc. Ensure provision of appropriate household and industrial waste disposal and collection
Works and Housing	Nutrition	Ensure provision of motorable roads to facilitate transportation of and access to safe, wholesome, and nutritious foods to farms, markets, and households
	Medical Emergencies and Public Health Preparedness Environment, Chemical Products and Waste Disposal	Ensure provision of safe, motorable roads to reduce accidents Ensure building in line with health-promoting guidelines e.g., properly spaced, non-toxic building materials, appropriate sanitation facilities, etc Ensure buildings and infrastructure comply with safety guidelines
Transportation	Medical Emergencies and	Ensure safety standards of vehicles, drivers and licencing are enforced

Sector	Interventions	Recommended Strategies
	Public Health Preparedness	Facilitate establishment of emergency transport service e.g., liaise with road transport workers, community volunteers, etc.
Women Affairs	Health Promotion and Education WASH Nutrition Medical Emergencies and Public Health Preparedness Female Empowerment and Male Engagement	Campaign and educate on the importance of utilising MCH services e.g., ANC, PNC, SBA, RI, etc. Educate on proper menstrual hygiene Promote proper child nutrition, especially benefits of exclusive breastfeeding Build resilience and disaster preparedness of women and girls by providing training in life skills e.g., self-defence, swimming, etc. Promotion of women and girl child education Provision of female empowerment interventions e.g., literacy classes, skills acquisition, etc Campaign against gender-based violence, human trafficking, Female Genital Mutilation/Cutting, girl child marriage and other harmful traditional practices Education on gender-related and cultural barriers to access and utilization of health services Promote the creation of male and female peer support groups to discuss gender and cultural issues in utilisation of health and non-health services

CHAPTER 3. HEALTH SYSTEM SUPPORT FOR SERVICE DELIVERY

3.1. Medicines, Vaccines and Health Commodities

Given that one of the key factors that influence health care service utilisation is availability of medicines, the availability of essential drugs at the ward level is a critical indicator of successful PHC implementation. Essential medicines occupy a unique position in health care delivery, treatment of diseases, relief of symptoms, and alleviation of suffering. At all times, there should be drugs and commodities available in adequate quantities, appropriate conditions, and dosage forms at an affordable price. Unfortunately, drug being out-of-stock is rampant at the PHC level (PHC centres, health outreach posts) and community level, and these are the levels that are closest to most of the population.

3.1.1. Essential Medicines for Primary Health Care

The essential medicines for each of the health problems defined in the essential health care package for use at the different levels of care are presented in Table 15.

Table 15: Essential Medicines for different health conditions managed at different levels of care

Intervention	Drugs	Household	Community	Outreach Post	P H C Centre (Level 1)	P H C Centre (Level 2)	P H C Centre (Level 3)	Comments
Pre-pregnancy								
Family planning	Condoms (Male/Female) with or without spermicide	X	X	X	X	X	X	
	IUCDs: Copper, Lippe's loop				X	X	X	
	Implants: Levonorgestrel, Levonorgestrel releasing				X	X	X	
	Injectables: Levonorgestrel, Medroxyprogesterone acetate, Norethisterone enanthate			X	X	X	X	
	Emergency contraception	X	X	X	X	X	X	
	oral pills: Ethinylestradiol + Levonorgestrel(3000mg)			X	X	X	X	
	Inj. Ceftriaxone 1g				X	X	X	

Intervention	Drugs	Household	Community	Outreach Post	P H C Centre (Level 1)	P H C Centre (Level 2)	P H C Centre (Level 3)	Comments
Prevent and manage sexually transmitted infections	Inj. Benzyl penicillin Injection powder 600mg (1 million unit)				X	X	X	
	Inj. Benzathine Penicillin 720mg (1.2units/vial)				X	X	X	
	Cap. Doxycycline 100mg or Tab. Azithromycin 500mg		X	X	X	X	X	
	Tab. Metronidazole 400mg, Caps. Ampiclox 500mg		X	X	X	X	X	
Cervical cancer screening (visual inspection)	Acetic acid				X	X	X	
Appropriate antenatal care package including ARVs								
Antiretrovirals for HIV-positive pregnant women			-		X	X	X	PMTCT NASCP
Cotrimoxazole preventive therapy	Cotrimoxazole 960mg				X	X	X	
Iron and folic acid supplementation	Iron 200mg (tablets, liquid) Folic acid 5mg (tablets)	X	X	X	X	X	X	
Administration of SP for malaria prevention	Pyrimethamine + sulfadoxine 25mg + 500mg (tablet, oral liquid)	X	X	X	X	X	X	
Diagnosis and treatment of uncomplicated malaria in pregnancy	Tab Paracetamol 125mg,500 mg Oral liquid 125mg/5ml	X	X	X	X	X	X	
	*Artemether + lumefantrine 20mg + 120mg (oral liquid, tablets), *Artesunate Amodiaquine 25 mg + 67.5 mg, 50 mg+ 135 mg, 100 mg + 270 mg(tablets), *Artesunate suppositories	X	X	X	X	X	X	

Intervention	Drugs	Household	Community	Outreach Post	P H C Centre (Level 1)	P H C Centre (Level 2)	P H C Centre (Level 3)	Comments
	*IM Artemisinin Injection 150mg, *IM Quinine**300 mg/mL in 2-mL ampoule				X	X	X	
Administration of magnesium sulphate for pre-eclampsia and Eclampsia	Mg Sulphate (MgSO4)				X	X	X	CHEWs trained on MLSS
Hypertensive disease case management	Amlodipine/Amiloride 5mg, 10mg, Hydrochlorothiazide 12.5mg, 25mg, 50mg tablets scored, aldomet 250mg, 500mg					X	X	
Labour and labour complications								
Antibiotics for preterm prelabour rupture of membranes	Metronidazole 400mg (IV/Tabs), Ampiclox 500mg (IV/Caps),					X	X	
Distribution of misoprostol	Misoprostol tablets 200ug	*X*	X	X				
Active management of third stage of labour (administration of uterotonic, controlled cord traction and cord clamping)	Oxytocin Injection and Misoprostol vaginal tablets				X	X	X	
Induction of labour to manage prelabour rupture of membranes at term	Oxytocin Injection 5 units, 10 units; Tab Misoprostol 200ug; Tab Ergometrine200-500 ug; Inj. Ergometrine 0.5mg/ml		-			X	X	
Magnesium Sulphate for eclampsia	*Mg Sulphate (MgO4) 4g*		-			X	X	
Pre-referral management of labour complications	IV fluids		-		X	X	X	

Intervention	Drugs	Household	Community	Outreach Post	P H C Centre (Level 1)	P H C Centre (Level 2)	P H C Centre (Level 3)	Comments
Postpartum (Mothers)								
Prevent and treat anaemia	Iron 200mg (tablets, liquid) Folic acid 5mg (tablets)		-		X	X	X	
Uterotonics to treat postpartum haemorrhage (misoprostol)	Misoprostol tablets 200ug	X	X	X	X	X	X	
	Oxytocin Injection 5 units, 10 units				X	X	X	
Child Health								
Prevention of haemolytic disease of the new-born	Vitamin K				X	X	X	
Corticosteroids to prevent respiratory distress in new-born babies	IV/Susp. Dexamethasone and Betamethasone						X	
Chlorhexidine gel for cord care	4% Chlorhexidine gel	X	X	X	X	X	X	
Prophylactic eye care	Erythromycin ointment	X	X	X	X	X	X	
Administration of antibiotics for new-born sepsis	Inj. Gentamicin 40mg/ml, IV Ampicillin 40mg/kg, IV Cefpodoxime 40mg/5ml						X	
Nevirapine prophylaxis	Syr. Nevirapine 100mg, 200mg, 400mg				X	X	X	
Cotrimoxazole prophylaxis	Syr. Cotrimoxazole				X	X	X	
Treatment of mild to moderate diarrhoea with ORS and Zinc	ORS and Zinc	X	X	X	X	X	X	
Treatment of uncomplicated malaria with ACT	Artemether + lumefantrine 20mg + 120mg (oral liquid, tablets), *Artesunate Amodiaquine 25 mg + 67.5 mg, 50 mg+ 135 mg, 100 mg + 270 mg (tablets), *Artesunate suppositories	X	X	X	X	X	X	
Pre-referral Treatment of complicated malaria	Rectal Artesunate 50mg, 100mg	X	X	X	X	X	X	

Intervention	Drugs	Household	Community	Outreach Post	P H C Centre (Level 1)	P H C Centre (Level 2)	P H C Centre (Level 3)	Comments
Antibiotics for dysentery	Susp. Ciprofloxacin			X	X	X	X	
Amoxicillin DS for treatment of pneumonia	Dispersible amoxicillin	X	X	X	X	X	X	
Bronchodilator for wheezing	Tab/Syr/Inhaler Salbutamol 4mg, Tab/Inhaler Beclomethasone				X	X	X	
Routine immunization	OPV, IPV, Penta, measles vaccine, yellow fever vaccine, pneumococcal conjugate vaccine, CSM vaccine, Hepatitis B vaccine, BCG, Tetanus toxoid			X	X	X	X	
Treatment of severe measles	IV fluids, paracetamol, calamine lotion, Vitamin A				X	X	X	
Prevention of Malnutrition using	MNP supplementation (micronutrient powder)	X	X	X	X	X	X	
community management of acute malnutrition (including distribution of RUTF)	Ready to Use Therapeutic Food (RUTF)	X	X	X	X	X	X	
Vitamin A supplementation	Vitamin A capsules 100000iu, 200000iu	X	X	X	X	X	X	
treatment of local infections (mouth, ear, eye and skin infections)	Gentian violet, tetracycline, nystatin drops, quinolone ear drops, penicillin ointment	X			X	X	X	
Deworming	Albendazole 200mg	X	X	X	X	X	X	
Folic Acid D Anaemia	Folic acid 5mg				X	X	X	
Adolescent health								
Family planning	Condoms (Male/Female) with or without spermicide	X	X	X	X	X	X	
	IUCDs: Copper, Lippe's loop				X	X	X	
	Implants: Levonorgestrel, Levonorgestrel releasing				X	X	X	
	Injectables: Levonorgestrel, Medroxyprogesterone			X	X	X	X	

Intervention	Drugs	Household	Community	Outreach Post	P H C Centre (Level 1)	P H C Centre (Level 2)	P H C Centre (Level 3)	Comments
	acetate, Norethisterone enanthate							
	Emergency contraception	X	X	X	X	X	X	
	oral pills: Ethinylestradiol + Levonorgestrel(3000mg)			X	X	X	X	
Prevent and manage sexually transmitted infections	Inj. Ceftriaxone 1g				X	X	X	
	Inj. Benzyl penicillin Injection powder 600mg (1 million unit)				X	X	X	
	Inj. Benzathine Penicillin 720mg (1.2units/vial)				X	X	X	
	Cap. Doxycycline 100mg or Tab. Azithromycin 500mg		X	X	X	X	X	
	Tab. Metronidazole 400mg, Cap. Ampiclox 500mg		X	X	X	X	X	
HPV immunization	HPV vaccine				X	X	X	
Prevention of Anaemia in Female Adolescents	Haematinics Folic acid supplementation	X	X	X	X	X	X	
Priority Diseases								
HIV/AIDS								
Antiretrovirals	Tenofovir+lamivudine+Dolutegravir (TDF/3TC/DTG)300/300/50mg					X	X	
Malaria								
Seasonal chemo preventive therapy for under-fives	Amodiaquine plus sulphadoxine-pyrimethamine	X	X	X	X	X	X	For the 9 Sahel States
Treatment of uncomplicated malaria with ACT	Artemether + lumefantrine 20mg + 120mg (oral liquid, tablets), *Artesunate Amodiaquine 25 mg + 67.5 mg, 50 mg+ 135 mg, 100 mg + 270 mg (tablets), *Artesunate suppositories	X	X	X	X	X	X	
Pre-referral treatment of severe malaria	IM Artemisinin Injection 150mg *IM Quinine**300 mg/mL in 2-mL ampoule				X	X	X	

Intervention	Drugs	Household	Community	Outreach Post	P H C Centre (Level 1)	P H C Centre (Level 2)	P H C Centre (Level 3)	Comments
Treatment of Complicated malaria	IM Artemisinin Injection 150mg *IM Quinine**300 mg/ml in 2-mL ampoule				X	X		
Tuberculosis								
Treatment of TB	Rifampicin 150mg, 300mg, Rifabutin 150mg Isoniazid 100 -300mg, Ethambutol 100 -500 mg, Pyrazinamide 400mg,				X	X	X	
Leprosy	Rifampicin 150mg, 300mg, Clofazimine 50mg, dapsone 100mg, ofloxacin, minocycline					X	X	
Neglected Tropical Diseases								
Schistosomiasis	Tab Praziquantel 600mg					X	X	
Lymphatic filariasis	Tab Ivermectin 3mg, 6mg or Tab diethylcarbamazine 50mg					X	X	
Onchocerciasis	Tab Ivermectin 3mg, 6mg					X	X	
Trachoma	Topical tetracycline 15, 3%		X	X	X	X	X	
Yaws	Penicillin ointment		X	X	X	X	X	
Leishmaniasis	Inj. Amphotericin B 50mg/vial					X	X	
Scabies	Benzyl benzoate 25% emulsion Calamine lotion	X	X	X	X	X	X	
Oral thrush	Tabs/oral Nystatin		X	X	X	X	X	
Skin infections	Gentamicin ointment Neomycin + Bacitracin Methyl salicylate ointment Nystatin cream	X	X	X	X	X	X	
Ring worms	Tab. Griseofulvin 500mg, Cap. Itraconazole 200mg Benzoic acid + salicylic acid ointment	X	X	X	X	X	X	
Snake bite	Multivalent anti snake venom					X	X	
Non-Communicable Diseases								
Treatment of hypertension	Tab Amlodipine 5mg, 10mg Tab Amiloride 5mg, 10mg Tab Hydrochlorothiazide 5mg					X	X	

Intervention	Drugs	Household	Community	Outreach Post	P H C Centre (Level 1)	P H C Centre (Level 2)	P H C Centre (Level 3)	Comments
Diagnosis and management of diabetes	Tab. Metformin 250 mg, 500 mg, Tab. Glimepiride 1,2,3,4mg Tab Gliclazide 30,60,80mg Tab Glibenclamide 5mg					X	X	
Care of the Elderly								
Nutrient supplements for prevention of osteoporosis	Tab Calcium 300mg					X	X	
	Tab Vit C 100 mg					X	X	
	Vit B Complex (oral) 10/4/40 mg					X	X	
Emergency Medical and Hospital Services								
Pre-hospital care (first aid) and management of minor accidents	Povidone Iodine, GV, hydrogen peroxide, methylated spirit	X	X	X	X	X	X	
Antidote for poisonings	Inj. Atropine 1mg/1ml Activated charcoal 5mg powder sachet					X	X	
Emergency Unit management: Initial Assessment & Resuscitation, Monitoring and Revaluation, Detailed Assessment, Diagnostic Studies, Additional Therapeutics	IV fluids (Ringers Lactate, Normal Saline, Dextrose Saline, Paediatrics Saline) IV Adrenaline inj. (I mg/ml) Inj. aminophylline (25 mg/ml) and oral Aminophylline 100 mg Inj. hydrocortisone vials (100 mg powder for inj.; Inj. diazepam 5mg/ml in 2ml ampoule, rectal suppositories					X	X	
Mental Health								
Treatment of mental disorder	Inj. Chlorpromazine 25mg/ml Oral Chlorpromazine 50/100 mg						X	
Primary Eye care								
Treatment of eye infections	Chloramphenicol 0.5% eye drops		X	X	X	X	X	

Intervention	Drugs	Household	Community	Outreach Post	P H C Centre (Level 1)	P H C Centre (Level 2)	P H C Centre (Level 3)	Comments
	Chloramphenicol 1% ointment		X	X	X	X	X	
	Chlortetracycline eye ointment		X	X	X	X	X	
Miscellaneous								
Abdominal Cramps	Tab Hyoscine N-butyl bromide 20mg				X	X	X	
Gastritis	Tab Magnesium trisilicate				X	X	X	
Heartburn	Mixture magnesium trisilicate 250mg/5ml				X	X	X	

3.1.2. Essential Medicines Supply Chain at the Ward Level

To ensure essential health commodities are regularly available at all PHC Centres and the community, ***a strong harmonized PHC supply chain strategy has been developed to manage the minimum package of PHC commodities as well as the other different PHC packages.***[8] The purpose of this strategy is to align and integrate the various supply chain systems serving PHC Centres and the community.

Criteria for selection of medicines to procure:

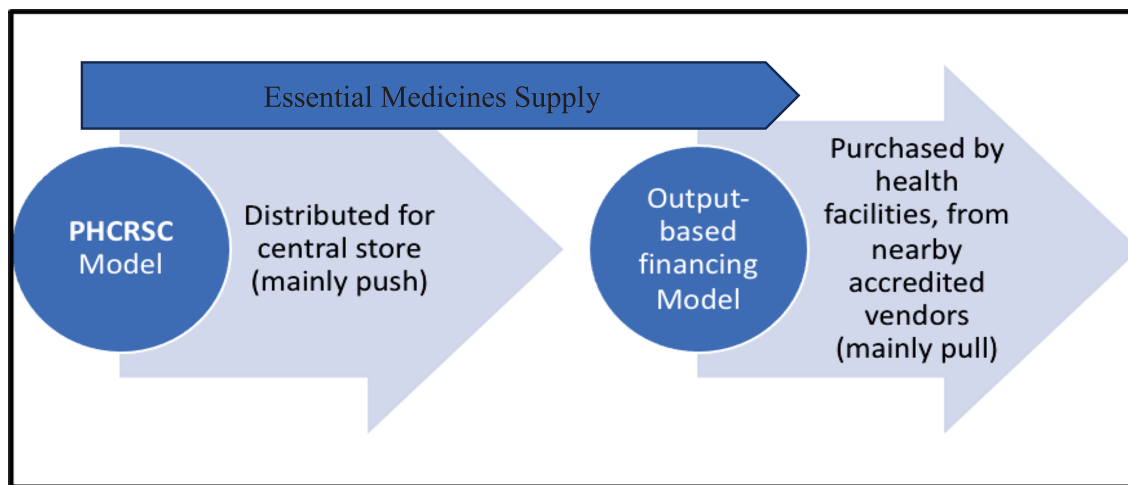
- Must be on the Nigeria Essential Medicines List developed for PHC.
- Be Generic and not in Brand names.
- Must be able to address the disease burden in the community.

The goal of the PHC Supply Chain Strategy is to improve the availability of essential PHC medicines and commodities by aligning their supply chains, strengthening the overall supply chain system, and enhancing strategic collaboration.

Currently, at the ward level, two (2) models of essential medicines supply chain are operational: *Primary Health Care Revitalization Supply Chain (PHCRSC) Model* and *the Output-based Financing Model* (Figure 7).

[8] Supply Chain Strategy to Support Primary Health Care Revitalization in Nigeria: National Primary Health Care Development Agency, 2017

Figure 7: Paradigm shift in medicines supply



A. The Primary Health Care Revitalization Supply Chain (PHCRSC) Model:

This model ensures essential medicines are available at all levels of primary health care (Figure 8). With this model, a *State Logistics Management Coordinating Unit (SLMCU)*[9] exists at the State level and is responsible for coordinating the supply chain (SC) of essential medicines and other health commodities. A *State Logistics Working Group (SLWG)* is responsible for the supply and distribution of vaccines, medicines, and commodities from the State medical store/state cold store to LGAs.

However, there is an *LGA Logistics Management Coordinating Unit (LLMCU)* which manages data from all HFs in the ward for essential medicines. The State LMCU and LLMCU are not directly involved in the distribution of essential medicines and other health commodities to the last mile.

B. Output Based Financing Model

This is mainly a pull system used by different projects in Nigeria including BHCPF and NSHIP health facilities. It provides managerial autonomy to health facilities resulting in the procurement of supplies in a competitive and well-regulated market through certified pharmaceutical outlets following approval by the Facility Management Committee.

[9] In some states, for example Kaduna, there is an established drug management agency which is separate from the cold store.

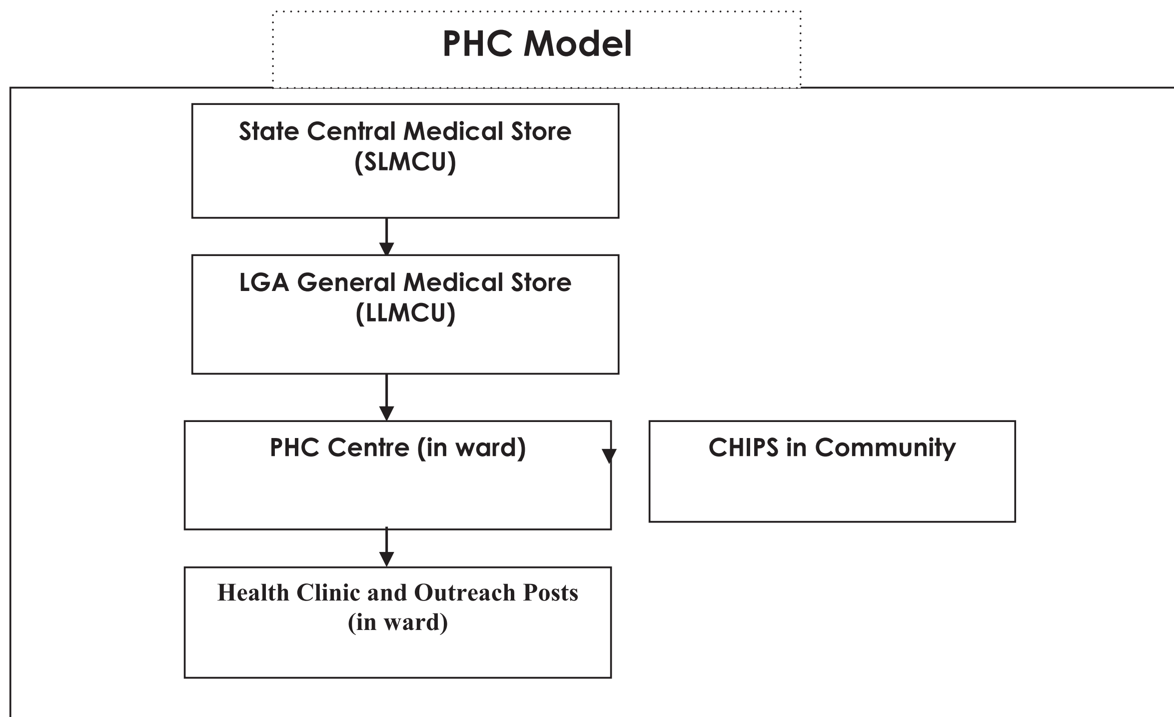
With this model, selected health facilities are given funds directly to purchase medicines and other health commodities, using the Pull System. With this system, SPHCBs with support from the NPHCDA and in collaboration with NAFDAC identify, accredit, and negotiate prices from outlets/drug vendors including local manufacturers, distributors, and the central drug store from which PHCs may procure medicines directly. The Facility Management Committee determines and approves medicines to be purchased based on needs and stock balances. Procurement of medicines is only from the accredited outlets.

3.1.3 Supply Chain for Vaccines and Essential Medicines

The state adopts a Push and Pull system in distributing vaccines as follows:
Push System: In a push system, Vaccines are distributed from the National Strategic Cold Store through the zonal cold stores to the State cold Store and subsequently to health facilities. However, buffer stock is kept at the LGA cold store. For States using the Push system, NPHCDA bears the cost of delivering vaccines to health facilities for one year, with the states taking over thereafter.
Pull System: For states using the Pull system, health facilities collect their vaccines from the LGA cold store or near-by health facilities with cold chain equipment. The LGA collects vaccines from the State cold store.
Medicines and other health commodities

- Drug Revolving Fund (DRF) health facilities collect medicines and other health commodities from the LGA cold store on payment into designated bank account provided by the LGA.
- Non-DRF health facilities collect medicines and other health commodities from the LGA cold store and make payment after-sales at a given period.

Figure 8: Supply chain model used by primary health care system strengthening initiative



Source: Guidelines for PHC Implementation Manual

3.2. Health Infrastructure

A health facility's service delivery environment is heavily influenced by the availability of healthcare infrastructure. The safety and availability of specific health services is directly affected by the functionality of equipment and commodities needed to provide those services.

Health infrastructures include:

- The physical structure and space (waiting area, consulting rooms, patients' rooms, other service areas etc.)
- Essential equipment and complex medical technologies needed to make a diagnosis
- Furniture
- Energy/power
- Sanitary facilities
- Information, Communication and Technology (ICT)
- Cold chain and refrigeration system

- Transportation facilities, etc.

The recommended infrastructure for each level of service delivery for the RWHSS is presented in Table 16 below.

3.2.1. Standards for PHC Buildings, Transportation and ICT

For the four categories of services to be provided in buildings, the physical infrastructural, transportation and ICT requirements for each level is described in Table 16.

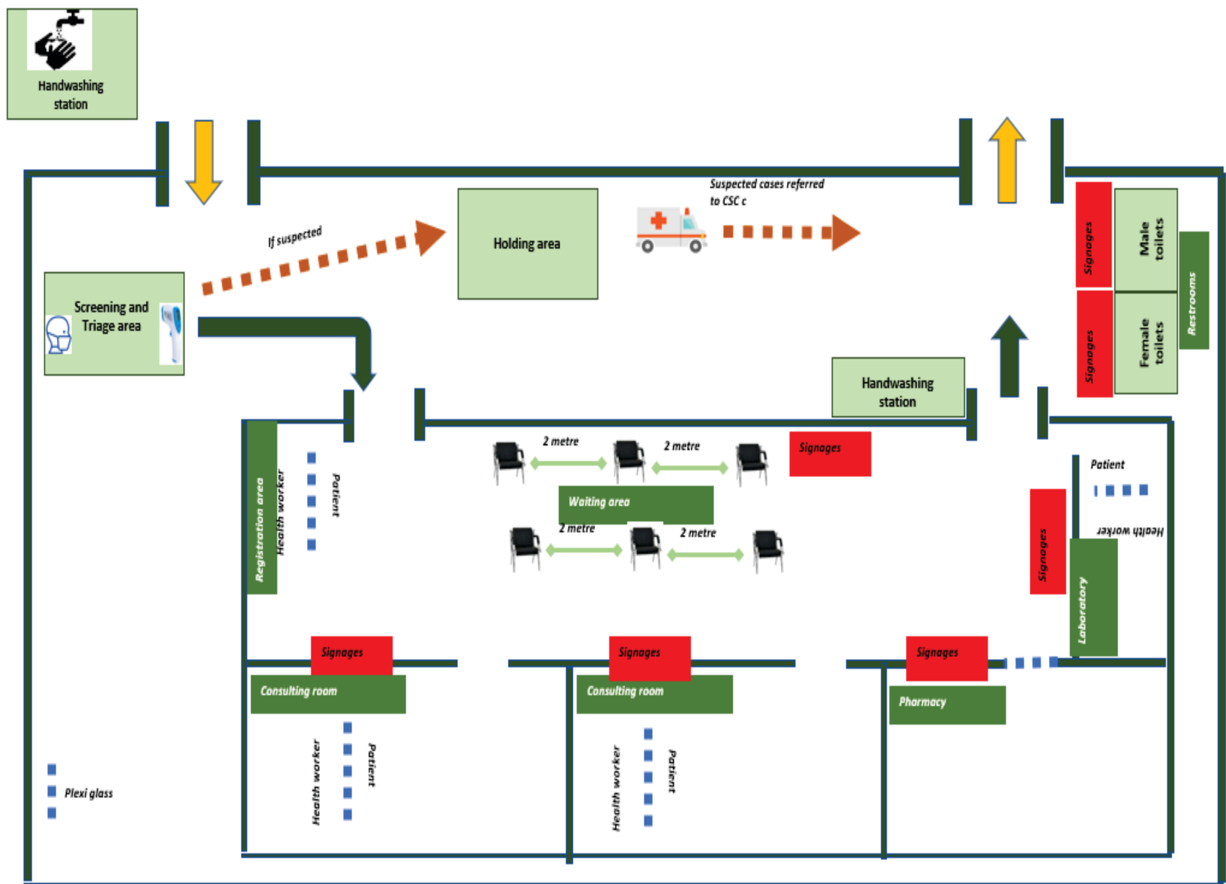
Table 16: Infrastructure standard for PHC

	Outreach Post	Primary Health Centre Level 1	Primary Health Centre Level 2	Primary Health Centre Level 3
Catchment Area	Settlement or village level	Group of settlements/neighbourhoods, villages (village areas) or Communities	Political ward	Political ward
Estimated Coverage Population	500 to 2,000	5,000 to 10,000	10,000 to 30,000	10,000 to 30,000
Opening Hours	8am to 4pm (8 hours)	8am to 4pm (8 hours)	24 hours	24 hours
Minimum Infrastructure - Building and Premises				
Rooms	2	The facility should have: Waiting area 1. Consulting rooms 2.Observation area 3.Pharmacy 4.Medical records area 5.Store 6.Injection, dressing and minor procedure room	The facility should have: Waiting area 1.Consulting rooms 2.Delivery room 3.Lying in ward 4 Medical records area 5.In-patient ward (male and female) 6.Laboratory 7.Pharmacy/dispensing unit 8.Injection, dressing and minor procedure room 9.Store	
Toilet	2	3	6	6
Water	Clean source	Clean source	Clean source	Clean source
Electricity	National grid or any alternative	National grid or any alternative	National grid or any alternative	National grid or any alternative
Waste Disposal – Segregate all waste				
General Waste	Burn in a protected pit / dispose through LGA municipal waste	Burn in a protected pit / dispose through LGA municipal waste	Burn in a protected pit / dispose through LGA municipal waste	Burn in a protected pit / dispose through LGA municipal waste

	Outreach Post	Primary Health Centre Level 1	Primary Health Centre Level 2	Primary Health Centre Level 3
Infectious Waste	On site in an incinerator / burn in a protected pit	On site in an incinerator / burn in a protected pit	On site in an incinerator / burn in a protected pit	On site in an incinerator / burn in a protected pit
Highly Infectious Waste	On site in an incinerator / burn in a protected pit	On site in an incinerator / burn in a protected pit	On site in an incinerator / burn in a protected pit	On site in an incinerator / burn in a protected pit
Biodegradable Waste	Bury on site	Bury on site	Bury on site	Bury on site
Sharps	Remove offsite in a container	Remove offsite in a container/burn in an incinerator on site	Remove offsite in a container/burn in an incinerator on site	Remove offsite in a container/burn in an incinerator on site
Fence		With gate and generator house	With gate and generator house	With gate and generator house
Signpost	Visible from both entry and exit points	Visible from both entry and exit points	Visible from both entry and exit points	Visible from both entry and exit points
Staff Housing		Within facility Premises	Within facility Premises	Within facility Premises
		1-bedroom apartment	2 Units of 1-bedroom flats	2 Units of 1-bedroom flats
Other Requirements*	Bicycle (1) or motorcycle (1)	Bicycle (1) or motorcycle (1)	Ambulance (1)	Ambulance (1)
	Canoe (1)	Canoe (1)	Mobile phone (1)	Mobile phone (1)
	Mobile phone (1)	Mobile phone (1)	Computer (2)	Computer (2)
		Small motorboat (1)	Internet service	Internet service
			Motorcycle (1)	Motorcycle (1)
			Small motorboat (1)	Small motorboat (1)
● Optional for states, based on needs and resource availability				

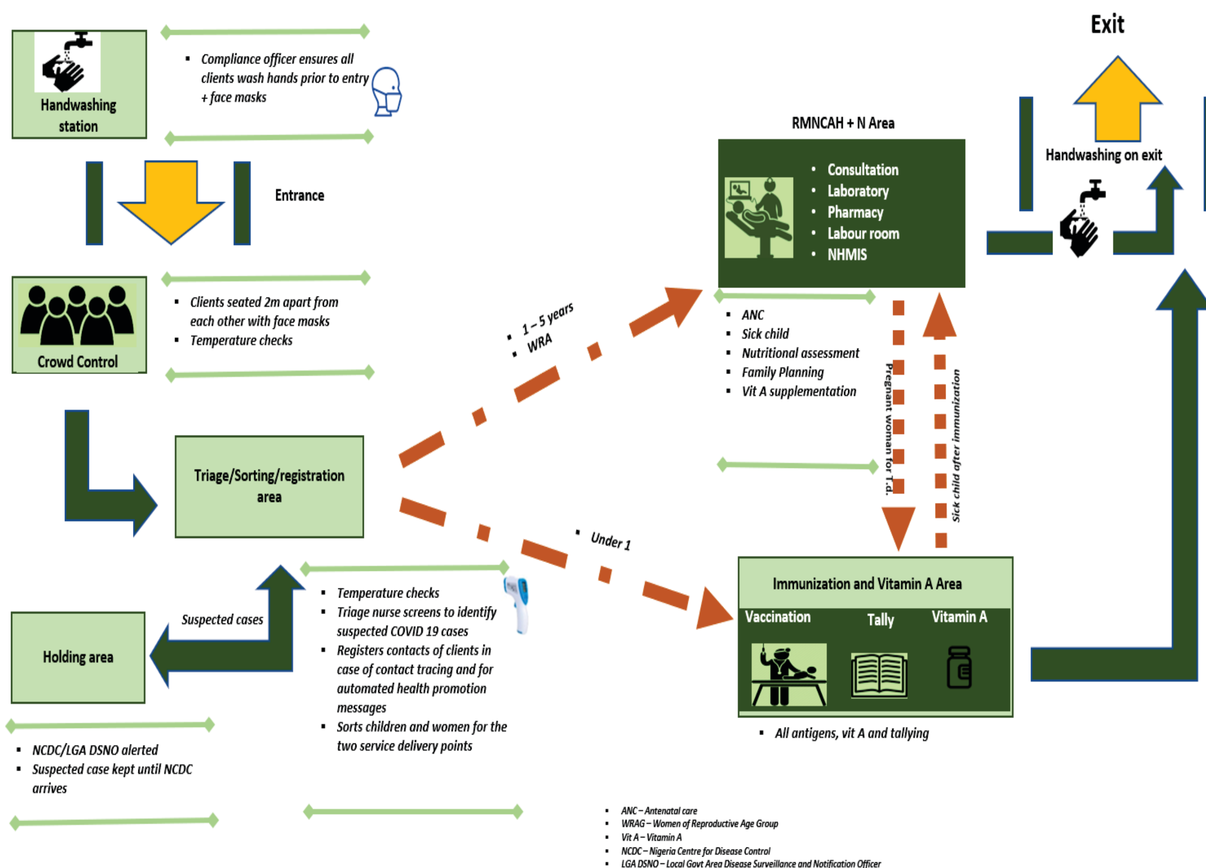
Given the lessons learnt from the country's response to COVID-19 pandemic, the agency in articulating its PHC optimisation strategy, proposed a model facility layout to guide the architectural design of PHC facilities (levels 1 -3). The model facility layout (Figure 9) makes provision for infrastructural adjustments that include the following: screening and triage areas; holding areas; handwashing stations and physical barriers (e.g., plexiglass).

Figure 9: Recommended PHC facility layout to enhance infection prevention



For the fixed and temporary outreach posts, in addition to the standards recommended in Table 16, it is intended that client flow will follow the pattern illustrated in Figure 10.

Figure 10: Client flow at fixed and temporary outreach posts



3.2.2. Essential equipment, Consumables and Furniture

Basic essential equipment, consumables, furniture, and other general items are required to ensure good quality of care and effective diagnostic and treatment service provision at the health facility and within the community. Table 17 lists the essential items and the quantities required at the different service delivery levels. However, the quantities of consumables needed are dependent on the prevalence of disease conditions, target population size and utilization rate. It is imperative to note that consumables should not be used beyond their expiry dates and must be checked to ensure that they are in good condition before use.

Table 17: Lists of essential items and the quantities required at the different service delivery platforms

S/N	ITEM DESCRIPTION	Household	Community	Outreach post	PHC Centre (Level 1)	PHC Centre (Level 2)	PHC Centre (Level 3)
	Medical Equipment	Quantity					
1	AMBU Bag with Face mask	0	0	0	1	1	2
2	Artery forceps (medium)	0	0	0	3	6	8
3	Bowls (stainless steel) with stand	0	0	1	2	4	6
4	Centrifuge manual vacuum	0	0	0	0	2	4
5	Cup with cover for ORS	0	0	4	6	10	12
6	Diagnostic Set	0	0	1	1	1	2
7	Dissecting forceps	0	0	2	4	6	8
8	Dressing Forceps	0	0	2	2	2	4
9	Dressing scissors	0	0	2	3	4	6
10	Dressing trolley	0	0	1	2	3	5
11	Drinking Mug*	0	0	2	6	10	12
12	Drinking mug stainless steel*	0	0	4	4	4	6
13	Fetoscope (stainless steel)	0	0	2	2	4	6
14	Forceps jar	0	0	1	2	3	5
15	Gallipots (medium)	0	0	2	6	6	8
16	Graduated medicine cup (stainless steel)	0	0	2	10	10	12
17	Incision and drainage kit	0	0	2	2	6	8
18	Kidney dish (large stainless steel	0	0	2	4	6	8
19	Length measures for babies	0	0	2	2	4	6
20	Manual Aspiration Set	0	0	0	0	2	4
21	MUAC Tapes (Nutrition)*	0	0	2	4	4	6
22	Mucus Extractor	0	0	0	2	4	6
24	Pen torch	0	0	1	2	2	4
25	Respiratory timer*	0	10	1	2	5	6
27	Speculum Vagina (Sim) set of 3	0	0	0	1	1	2
28	Sphygmomanometer (mercurial, tabletop)	0	0	1	2	3	6
29	Sponge holding forceps	0	0	1	2	2	4
30	Stainless covered bowl for cotton wool	0	0	1	4	6	8
31	Stainless instrument tray	0	0	1	2	3	5
32	Stethoscope	0	0	1	2	3	5

S/N	ITEM DESCRIPTION	Household	Community	Outreach post	PHC Centre (Level 1)	PHC Centre (Level 2)	PHC Centre (Level 3)
33	Stitch removal / suture scissors	0	0	2	2	3	5
34	Suction Pump	0	0	0	1	2	4
35	Suture kit	0	0	1	2	2	4
36	Tape measure	0	0	4	2	4	6
38	Thermometer (oral)*	0	10	5	5	10	12
39	Thermometer (rectal)	0	10	5	5	10	12
	Infrared thermometers*						
40	Ultrasound scanning machine	0	0	0	0	1	1
	Consumables						
1.	Blood Lancet (Pack of 100)	0	1	1	1	1	1
2.	Cotton wool (100g)	0	1	1	1	1	1
3.	Disodium hydrogen phosphate (NAHPO) (for buffered water)	0	0	0	1	1	1
4.	Distilled water						
5.	Dyes (stain powder)	0	0	0	0	1	1
6.	Elastic Band	0	1	1	1	1	1
7.	Ethanol (ethyl alcohol), 70%, 95%,100% (absolute)	0	0	0	0	1	1
8.	Ether, anaesthesia or technical grade, or ethyl acetate	0	0	0	0	1	1
9.	Eye goggles	0	0	1	1	1	1
10.	Hand sanitizer						
11.	Face masks (pack of 100)	0	0	1	1	1	1
12.	Formalin (formaldehyde)	0	0	0	0	1	1
13.	Gauze bandage (4.5cm x4.5cm)	0	0	3	5	10	15
14.	Glacial acetic acid	0	0	0	0	1	1
15.	Gloves disposal (packs of 50	0		2	4	4	8
16.	Glycerol	0	0	0	0	1	1
17.	Hep B testing kits (packs of 50	0	0	0	4	4	10
18.	HIV test kits (packs of 50	0	1	0	4	4	10
19.	Hydrochloric acid, concentrated (HCL)	0	0	0	0	1	1
20.	Iodine Crystals (1)	0	0	0	0	1	1
21.	Isopropanol (isopropyl alcohol)	0	0	0	0	1	1
22.	LLINs	20	30	30	50	50	100

S/N	ITEM DESCRIPTION	Household	Community	Outreach post	PHC Centre (Level 1)	PHC Centre (Level 2)	PHC Centre (Level 3)
23.	Malaria RDT kits (pack of 25)	0	2	2	4	4	8
24.	Mercuric chloride crystals (HgCl)	0	0	0	0	1	1
25.	Methanol (methyl alcohol)	0	0	0	0	1	1
26.	Microcuvette for Hb 3x1/Box - 2	0	0	0	1	1	2
27.	Phenol crystals (carbolic acid)	0	0	0	0	1	1
28.	Phosphotungstic acid crystals	0	0	0	0	1	1
29.	Plasters (2.5cm x5yards)	0		3	5	10	1
30.	Plastic Apron	0			2	4	1
31.	Polyvinyl alcohol (PVA)	0	0	0	0	1	1
32.	Potassium dihydrogen phosphate (KH,PO) (for buffered water)	0	0	0	0	1	1
33.	Potassium iodide crystals (KJ)	0	0	0	0	1	1
34.	Soap/ hand sanitizers	0	0	1	2	4	1
35.	Sodium acetate powder (CH, COONs) or sodium acetate crystals	0	0	0	0	1	1
36.	Sodium chlorine (NaCl)	0	0	0	0	1	1
37.	Sodium citrate crystal (C611507Na321120)	0	0	0	0	1	1
38.	Specimen bottles for stool and urine	0	0	0	0	100	150
39.	Stains (solutions)	0	0	0	0	1	1
40.	Sterile gloves (box of 100)	0	0		1	2	3
41.	Syringes and needles, pack of 100 (2cc & 5cc)	0	0	1	4	4	6
42.	Urine Dip stick for sugar and Albumin (Pack of 110)	0		2	10	10	15
43.	Xylene	0	0	0	0	1	1
	Lab Equipment						
1	Binocular Microscope	0	0	0	0	1	1
2	Haemoglobinometer	0	0	1	2	2	2
3	Test tube rack	0	0	0	0	1	1
	Clinic Equipment						
1	Angle poised lamp	0	0	1	1	2	2

S/N	ITEM DESCRIPTION	Household	Community	Outreach post	PHC Centre (Level 1)	PHC Centre (Level 2)	PHC Centre (Level 3)
2	Aspirator	0	0	1	2	4	6
3	Autoclave	0	0	0	0	1	2
4	Baby dressing table for maternity	0	0	0	0	1	2
5	Bed pan (stainless steel)	0	0	0	3	4	6
6	Bed Screen	0	0	0	2	5	6
7	Delivery couch with stirrups	0	0	0	1	2	4
8	Drip stand	0	0	0	2	4	6
9	Examination couch	0	0	1	2	3	4
10	Hospital bed with mattress	0	0	0	6	10	10
11	Ice packs	0	0	8	8	8	10
12	Instrument Cabinet	0	0	0	1	1	2
13	Mackintosh sheet	0	0	1	2	2	4
14	Medicine cupboard	0	0	0	1	1	2
15	Nursery Cots with Mattress	0	0	0	2	2	2
16	Sharps bin	0	0	1	3	5	6
17	Stadiometer	0	0	1	1	2	3
18	Sterilizer (medium) 15 Litre	0	0	0	1	2	2
19	Sterilizing Drums (set of 3)	0	0	0	1	1	1
20	Trolley patient stretcher	0	0	0	0	1	2
21	Urinal (Female) stainless steel	0	0	0	2	4	4
22	Vaccine carriers	0	0	1	1	1	2
24	Weighing scale (Adult)	0	0	1	1	2	2
25	Weighing scale (Child)	0	0	1	1	3	4
26	Wheelchairs	0	0	0	2	4	4
27	Foetal stethoscope (Aluminium)	0	0	0	1	2	2
	Personnel Commodities						
1	Personal protective equipment	0	0	2	3	5	6
2	Boots	0	0	2	3	5	6
3	Aprons and bags for CHIPS agents	0	10	0	0	0	0
4	Khaki jacket for CEFPs	0	2	0	0	0	0
5	Life jackets	0	Required in riverine areas. Quantities dependant on number of people going out				
6	Mobile phones	0	2	0	0	0	0

S/N	ITEM DESCRIPTION	Household	Community	Outreach post	PHC Centre (Level 1)	PHC Centre (Level 2)	PHC Centre (Level 3)
7	Tablet devices	0	1	1	1	1	1
	General Items						
1	Bed sheets & pillowcase	0	0	0	12	24	24
2	Brooms	0	0	2	5	10	10
3	Bucket with Tap	0	0	1	2	3	4
4	Buckets (plastic)	0	0	0	4	6	6
5	Chairs	0	0	5	10	12	12
6	Dust bin (pedal) metal	0	0	3	6	6	6
7	Filing cabinet	0	0	0	1	3	4
8	Fire Extinguisher (9kg)	0	0	1	2	2	2
9	Generator set	0	0	0	1	1	1
10	Kerosene lamp	0	0	1	2	4	4
11	Long benches	0	0	0	8	12	12
12	Mop buckets	0	0	1	2	4	4
13	Mops	0	0	3	6	12	12
14	Motorcycle	0	1	0	1	1	1
15	Rechargeable lamp with Fluorescent	0	0	1	2	4	4
16	Refrigerator medium	0	0	0	1	2	2
17	Set of Aluminium Pot & Utensil	0	0	0	0	1	1
18	Small size cooking gas cylinder	0	0	0	0	1	1
19	Solar-powered refrigerators	0	0	0	1	1	1
20	Standing fan	0	0	1	4	6	6
21	Swivel stool	0	0	1	1	2	2
22	Tabletop Cooker	0	0	0	0	1	1
23	Wall clock	0	0	1	4	6	6
24	Writing table and Chairs	0	0	1	2	6	6

3.3. Human Resources

Human resources are one of the three major health system inputs and are, arguably, the most important. The performance and benefits that a health system delivers depend largely on the knowledge, skills, motivation, and attitude of those responsible for service delivery. Human resources within the health sector comprises the different categories of clinical and non-clinical staff, including

community-based health workers responsible for provision of population and individual health services.

Within the primary health care space at the ward level, the health workforce will include:

Clinical Staff/Volunteers

- Medical doctors (where available)
- Nurses/midwives
- Community Health Officers (CHOs)
- Community Health Extension Workers (CHEWs)
- Junior Community Health Extension Workers (JCHEWs)
- Laboratory Technicians
- Pharmacists/Pharmacy technicians
- Health Educators
- Nutritionists
- Community Health Influencers, Promoters and Services (CHIPS) Agents

Non-Clinical Staff/Volunteers

- Health Attendants/assistants
- Security Men
- Emergency transport service (ETS) driver
- Community Engagement Focal Persons (CEFP)
- N-Power Staff
- Maintenance officers/cleaners
- Other community volunteers (community leaders)

In Wards where Environmental Health Officers are available, they are to be responsible for environmental health services.

3.3.1. Rationale for the determination of Human Resource Requirements

The number and distribution of frontline clinical staff at each service delivery platform in the Ward Health System was determined using different criteria. For Primary Health Care (PHC) Centre Level 3 facilities expected to provide the comprehensive package of care (Optimal PHC pack), the Workload Indicators of Staffing Need (WISN) approach developed by the World Health Organization (WHO) was adopted. This is a systematic method that determines the number of a particular cadre of health worker that is required to cope with the workload of

a given health facility, with activity (time) standards applied for each workload component. It considers the time it takes to provide specific interventions to a target population and calculates the number of skilled workers required to do so. The ward population size, and thus the number of health facilities required to provide services, was also considered in the determination of equitable distribution of health workers within facilities across the ward.

For PHC Centre Level 2 facilities expected to provide the minimum services required for the facility to be designated functional, criteria were developed to determine the minimum number and cadre of staff working as a unit qualified to provide those services. To safely and effectively provide the 'Intermediate Pack' which includes labour and delivery services, this team must include (at least two midwives and two Community Health Extension Workers (CHEWs) with training in Modified Life Saving Skills (MLSS) to account for night shifts and rest days. This, therefore, means that in Phase 2, every ward must have at least one PHC Centre Level 2 staffed by a team of midwives and CHEWs in an equal ratio.

At least two JCHEWs should be available to provide services in each Health Outreach Post. To determine the number of health posts required in each phase, criteria were developed considering the number and distribution of settlements in the ward. The total number of JCHEWs required is, therefore, dependant on the number and distribution of these health outreach posts.

Where available, a medical officer may provide services at both PHC Levels 2 and 3. The recommended distribution of clinical health workers by level of care is in Table 18. It is recommended that staffing norms be used for computation of staff needs, but for PHC Centre Level 3 facilities, it would be most appropriate to use the Workload Indicator of Staffing Needs (WISN) approach to determine optimum staff needs. The recommended distributions presented in Table 18 are based on staffing norm. These will need to be appropriately revised and adapted by states.

The number and distribution of health facility support staff (clinical and non-clinical) at the different service delivery platforms of the Ward Health System was also determined by considering the minimum number required to provide a specific service for the hours of operation of the facility.

Table 18: Recommended distribution of clinical health workers by level of care

Personnel	Household	Community	Health Outreach Post	PHC Centre Level 1	PHC Centre Level 2	PHC Centre Level 3
Medical officer (If available)	0	0	0	0	1	1
Nurse/Midwife	0	0	0	0	2	TBD (WISN)
Community Health Extension Workers (CHEWs)	0	0	0	2 with MLSS	2 with MLSS	TBD (WISN)
Junior Community Health Extension Workers (JCHEWs)	0	0	2	2	4	TBD (WISN)
CHIPS Agents		10				
CEFPs		2				

At the community and household levels, a minimum of two Community Engagement Focal Persons (CEFPs) and ten (10) CHIPS Agents per Ward will provide services as outlined by the CHIPS Programme. The recommended distribution of support staff by level of care is shown in Table 19.

Table 19: Recommended distribution of support staff by level of care

Personnel	Household	Community	Health Outreach Post	Primary Health Centre Level 1	Primary Health Centre Level 2	Primary Health Centre Level 3
Pharmacy Technician /Pharmacist	0	0	0	0	1	2
Medical Laboratory Technician	0	0	0	0	1	2
Health Records Technician	0	0	0	0	1	2
Accountant Clerk	0	0	0	0	1	1
Driver	0	0	0	0	1	1
Health Attendant/Assistant	0	0	0	2	2	2
Security Personnel	0	0	0	2	2	3
Cleaners	0	0	1	1	2	3

3.3.2. Roles and Responsibilities

This section describes the roles and responsibilities of the different members of the health team.

Officers In-Charge (The most senior clinical person)

- Provide services beyond the level of expertise of other staff according to guidelines (Standing Orders)
- Encourage the practice of rational drug use.
- Ensure management of clients according to Standing Orders or national guidelines
- Establish a two-way referral for clients, including appropriate links between facility staff and the CHIPS agents
- Ensure adherence to standards of care for provision of high quality of care.
- Responsible for day-to-day management of the facility
- Assign responsibilities to other health workers
- Supervise functions assigned to other health workers
- Maintain discipline in the facility
- Oversee the upkeep of the facility and its surroundings
- Develop ward action plans and draw up schedule of activities with the WDC
- Supervise data collection, collation, and analysis especially the NHMIS
- Organize regular staff meeting and feedback on on-going activities.
- Organize continuous education for the health team and the community.
- Conduct community diagnosis exercises
- Plan for health interventions with other health workers and the community
- Ensure community participation in health and health-related programmes.
- Ensure adequate record keeping, ordering and accountability of health equipment, supplies and medicines
- Ensure that Facility Management Committee, VDC and WDC meet regularly
- Ensure conduct of verbal autopsy for maternal and perinatal deaths

Medical Doctor

A medical doctor where available will be the head of the facility and the health team in the ward. The medical doctor's roles will include the following:

- Periodically visit the PHC facilities in the LGA, review conditions that influence the epidemiologic data of the LGA, may provide services and support training of health workers."
- Plan and provide oversight for implementation of activities at the facility and community levels in the ward

- Attend to all referrals from the ward.
- Provide technical oversight for service provision and data management
- Ensure that essential medicines, vaccines, consumables, and essential equipment are always available in the facility.
- Conduct supervisory visits to other health facilities in the ward.
- Provide on the job training and mentoring for the health workers.
- Establish referral linkages with other facilities.
- Hold regular meetings with staff on the smooth running of the facility.

Community Health Officers (CHO)

- Spend 30% of working time in the community.
- Ensure provision of integrated PHC services in the health facility.
- Ensuring quality and continuity of care.
- Initiate, direct and work with community and other staff to find solution to identified health problems.
- Carry out with other senior health professionals (where available) day to day health administration services in the target population.
- Organize and participate in health education for patients and their families.
- Carry out community mobilization for health action including coordinating the community-based efforts of CHEWs/JCHEWs/CHIPS Agents.
- Participate in house mapping, numbering, placement of home-based card and facility master register.
- Initiate community diagnosis and continuous health needs assessment.
- Ensure that supportive supervision is given to health workers at community and facility levels using standard guidelines and protocols.
- Carrying and supervising administrative activities and procedures (client record, consumption statistics, registers etc.)
- Participate in the monitoring and evaluation of health activities.
- Identify training needs, organize, direct, and conduct training and continuing education programs team including on the job training for members of health team including community-based workers.

Nurses/Midwives

- Provide maternal, new-born and child health services including:
    - Provision of antenatal care
    - conducting normal deliveries
    - Provision of BEmONC
    - Identification and referral of emergencies

    - Provision of essential and emergency new-born care
    - Provision of immunization services
    - Delivery of Integrated Management of Childhood Illnesses
    - Provision of Infant and Young Child nutrition services
- Provide sexual and reproductive services
- Provide adolescent reproductive health
- Screen and manage NCDs
- Diagnose and treat malaria, tuberculosis, HIV/AIDS, NTDS and other communicable diseases
- Provide basic oral, eye, and mental health services
- Manage minor/common ailments using the National Standard Treatment Guidelines
- Provide first aid, conduct triage and referrals for accidents and emergencies
- Provide care for the elderly
- Ensure quality of care
- Participate in outreaches and conduct follow up home visits
- Perform administrative functions where applicable.

Community Health Extension Workers (CHEW)

- Spend 60% of working time in the community.
- Manage clients according to Standing Orders.
- Ensure all pregnant women are identified and have access to antenatal care service.
- Conduct normal deliveries if trained on Modified Life Saving Skills (MLSS)
- Detect and refer pregnancy and labour complications
- Provide Child health services
- Maintain high quality of care
- Establish a two-way referral for client
- Perform administrative functions including attending WDC meetings
- Visit communities regularly to assess community-based services.
- Ensure community participation in health and health-related activities.
- Provide community-based health care services
- Mentor and provide integrated supportive supervision to CHIPS agents
- Develop work schedule and monthly work plan with the approval of the supervising officer
- Carry out community mobilization for health action
- Supervise house numbering and placement of home base records
- Train, support and supervise community-based health workers and JCHEWs

- Work with other health workers and community in identification of health problems, prioritization, and planning solution to the problems
- Prepare or assist the supervising officer to develop budget for implementation of the plan
- Manage and monitor utilization of resources in health facility (medicines, equipment, and other commodities)
- Organize and run integrated PHC services in the health facilities (where CHOs are not available) based on their skills and competence
- Keep adequate records, analyse data, and compile monthly reports

Junior Community Health Extension Workers (JCHEW)

- Spend 80% of their working time in the community.
- Work with other health workers and the community to carry out community diagnosis and health needs assessment in the community and plan solutions to the identified health needs
- Mentor and provide integrated supportive supervision to CHIPS agents
- Identifying learning needs of community-based health workers and participate in their training
- Collect and collate health data for monitoring and evaluating PHC activities and the community
- Ensure community participation in health and health-related activities
- Carry out basic clinical procedures in the facility as contained in the Standing Orders
- Conduct home visits and provide basic preventive and curative care and essential community health services with guidance from the Standing Orders.
- Promote two-way referral.

Pharmacy Technicians

- A Pharmacist or Pharmacy Technician where available will oversee both the pharmacy and store.
- Receive written prescription or refill requests and verify that information is complete and accurate.
- Maintain proper storage and security conditions for medicines.
- Ensure rational dispensing of medicines
- Receive and store incoming supplies, verify quantities against invoices and inform head of facility of stock needs and shortages.
- Monitor medicines use and requisition appropriately to ensure regular availability

- Maintain adequate record including bin card, requisition forms etc.
- Keep proper records of purchase using ledgers

Laboratory Technician

- A Medical Laboratory Scientist or Technologist where available will oversee the laboratory.
- Perform technical procedures according to protocols
- Maintain quality results by adhering to standards and controls and utilizing approved testing procedures.
- Ensure a safe and secure environment for clients and co-workers by following established standards and procedures and complying with legal regulations.
- Maintain patient confidence by keeping laboratory information confidential.

Health Records Technicians

- Health Records Technician where available will oversee the medical records unit.
- Keep records of patients
- Fill completely and accurately all forms, cards and registers used in client management.
- Ensure that information contained in the facility record is complete, accurate and only available to authorized personnel.
- Collate, validate, and transmit community-based data
- Conduct basic analysis of health facility and community-based data to inform local action

CHIPS Agents

- Conduct house mapping, numbering, household listing and completion of household register
- Conduct home visits
- Line list pregnant women and infants
- Counsel and health educate household members
- Identify and refer pregnant women to PHC facilities
- Identify and refer children to PHC facilities for immunization and track defaulters
- Identify and refer children with severe acute malnutrition
- Provide basic treatment of sick children and first aid
- Counsel on family planning and water and sanitation
- Distribute basic commodities (LLINs, misoprostol, chlorhexidine, Mama kits)

- Conduct community surveillance
- Document and transmit data of the work carried out
- Document and report maternal and child mortalities
- Encourage birth registration

Community Engagement Focal Persons (CEFP)
- Conduct community mobilization
- Promote male participation
- Engage with men to address barriers to service uptake including immunization
- Support CHIPS agent in house mapping, numbering, household listing and filing household registers
- Verify, validate, and transmit data collected by the CHIPS Agents
- Facilitate monthly immunization data reconciliation between village heads, health facility and community leader
- Track immunization defaulters
- Participate in review meetings

Ward Focal Persons
- Provide oversight for service delivery in the ward
- Participate in development of work plans and distribution of resources for outreaches and campaigns
- Identify and prioritize settlements into low, medium, and high risk
- Participate in Integrated Supportive Supervision (ISS)
- Participate in community engagement meetings
- Collate and analyse ward level data
- Participate in WDC meetings
- Provide feedback to the Local Government health authority

3.3.3. Recommended In-service Training for the different categories of Health Workers

Table 20 provides a summary of in-service trainings that are recommended for the different categories of health workers,

Table 20: Recommended in-service training for the different categories of health workers

Category/Cadre	Training Needs & Purpose
Ward Development Committee	• **Participatory Learning &Action (PLA):** an approach for learning about and engaging with communities • **Advocacy and lobbying skills –** for effective engagement with LGA leadership • **Community empowerment for income generation activities** • **ISS, financial management and essential medicines management** to function effectively in co-managing the BHCPF
Facility Management Committee	• **Management level training**: to build valuable skills in managing health facilities e.g., bookkeeping, and financial management, essential medicines management, quality assessment and improvement courses
Doctors/nurses/midwives	• **Helping Babies Breath (HBB):** to gain essential skills of new-born resuscitation • **Emergency Newborn Care Courses (ENCC):** to reduce neonatal morbidity and mortality • **Basic Emergency Obstetric and Neonatal Care (BEmONC):** to reduce maternal and new-born mortality • **Modified Life Saving Skills (MLSS):** to reduce mortality, for capacity building and mentorship • **Long-Acting Reversible Contraception (LARC):** to improve reproductive health in adolescents • HIV screening and counselling • Prevention of Mother-to-Child Transmission of HIV/AIDS (PMTCT) • Primary eye/mental/oral health training •
CHEWS	• **Routine Immunization Training**: to improve uptake of vaccines • **Integrated Management of Childhood Illness (IMCI):** to reduce deaths and illnesses in under 5 and improve growth and development in children under 5 • **Modified Life Saving Skills (MLSS):** to equip participants with basic knowledge, skills, and attitude to help revive, resuscitate, or sustain a person experiencing cardiac arrest or respiratory failure. • **Family Planning, including LARC:** to emphasize on the importance of informed reproductive choices, with the aim of improving women's health • HIV screening and counselling • **Health Management Information System (HMIS) training:** to support planning, management and decision making in health facilities • **District Health Information System2 (DHIS2):** to equip participants with needed knowledge on how to report, analyse and also disseminate for most health programmes
CHIPS Agents and CEFPs	• **Mentoring and refresher training**

3.4 Laboratory Services

Basic laboratory services are essential not only for strengthening PHCs, but also, for their sustainability. In the current age of 'laboratory medicine', medical care becomes comprehensive only with the support of basic laboratory facilities. Studies have also found that facilities that have laboratory support, along with other infrastructural facilities, are an important determinant influencing the utilization of health services.[10,11] Ensuring basic laboratory services at PHCs not only improves the quality of medical care but also generates demand for essential medicines at the facility. This in turn improves the potential of the PHC as a centre providing essential package of health care services. Table 21 summarises basic laboratory services needed at the different levels of care.

Table 21: Basic laboratory services to be provided at the different levels of care

Laboratory Services	Household	Community	Outreach Post	Primary Health Centre Level 1	Primary Health Centre (2)	Primary Health Centre (3)
Cervical cancer screening (visual inspection) with Acetic acid					X	X
Screening for HIV with HIV Kit	**X**	**X**	**X**	X	X	X
Screening for Syphilis				X	X	X
Haemoglobin screening				X	X	X
Screening for chronic Hep B infection			X	X	X	X
Urinalysis (screening using dipstick)	X		X	X	X	X
Urine microscopy					X	X
PCR at 6weeks					X	X
Hb/PCV for all Nigerians			X	X	X	X
					X	X
TB Diagnosis (with GeneXpert)					X	X
Screening for diabetes					X	X
Screening for Hypertension	X	X	X	X	X	X
Parasitological diagnosis of malaria (RDT)	X		X	X	X	X
Parasitological diagnosis of malaria (microscopy)					X	X
Distribute appropriate information, education and communication (IEC) on the promotion of laboratory services			X	X	X	X

[10] Harrison JP, McDowell GM. The role of laboratory information systems in healthcare quality improvement. Int J Health Care Qual Assur. 2008;21(7):679-91. doi: 10.1108/09526860810910159.

[11] Cook J. Laboratory Integration and Consolidation in a Regional Health System. Laboratory Medicine. 2017; 48(3): e43–e52. Doi: https://doi.org/10.1093/labmed/lmw069.

Establish appropriate laboratory services in PHCs				X	X	X
Encourage community participation and partnerships to support laboratory services in PHCs		X	X	X	X	X
Distribute PHC Laboratory technical guideline				X	X	X
Availability of basic Laboratory equipment, Personnel, reagents and Test kits, Personal Protective Equipment (PPE)				X	X	X

3.5 Health Financing

Millions of people, especially the poor, across the globe do not have access to health services because they cannot afford to pay for them. On the other hand, the poor are being thrown further into poverty due to catastrophic health expenditure. Governments and international organizations have long recognized the need to improve the health of the poor through the promotion of equity and fairness by devising efficient direct or indirect payment mechanisms to ensure an unhindered access to health service delivery. One of the targets of SDG 3 is universal health coverage through financial risk protection as one of the means of achieving this target.

For a health system to perform efficiently and effectively, appropriate amount of revenues must be generated, risks pooled effectively, appropriate incentives provided, and resources allocated for effective, efficient, and equitable interventions and services. This makes health financing a particularly important component of any health system.

By understanding health care financing mechanisms, the following questions can be answered:

- Are resource mobilization mechanisms equitable, do the rich subsidize the poor and vulnerable groups?
- Is the distribution of resources equitable, efficient, or are richer populations benefiting more from public financing than poorer populations?
- Do provider payments reward efficiency and quality?
- What mechanisms have been put in place to ensure universal access to financial risk protection?

3.5.1. Functions of Health Care Financing

There are three key functions of health financing. These are described hereunder:

1. **Revenue Generation/Collection.**
   This is concerned with the sources of revenue for health care, the type of payment (contribution mechanism), and the agents that collect these revenues. All funds for health care, excluding donor contributions, are

collected in one way or another from the general population or certain subgroups. The primary sources of revenue are:

a. Out-of-pocket expenditure (OOPE) by individuals and households, which predominate as the major financing mechanism in Nigeria accounting for 76.6% of total health expenditures (THE) in the country according to the National Health Account of 2017.[12]
b. The three tiers of government also make provisions for budgetary allocations to tertiary, secondary and primary health care service provision respectively. Mobilisation for funds from these sources currently stands at 14.4%. In addition to this allocation, 1% of the Consolidated Revenue Fund has been assigned to the Basic Health Care Provision Fund (BHCPF) which has been established in line with the National Health Act to fund PHC. States, development partners, philanthropists and others are expected to contribute to the Fund.
c. Social, Private and Community-based health insurance schemes are mandatory insurance systems set up for public sector workers, where payroll taxes from employees and employers are collected and placed in an independent fund separate from other government finances. Only about 1.1% of the population are covered under social health insurance (SHI). Though these schemes are primarily for government workers, at the state level, they are open to both formal and informal sector workers. As at June 2019, 11 states have begun enrolling clients, with 8 providing service to clients.
d. Private sector (private for profit and private non-profit organisations)
e. Community-based financing schemes: Communities contribute resources to a common pool to pay for health services for members in need.
f. Development partners: Bilateral and multilateral organisations and philanthropic organisations (e.g., BMGF) also finance health systems through grants, loans, and in-kind contributions.
g. International financial institutions: The World Bank, Islamic Development Bank, and African Development Bank also provide loans and grants to governments of low-income countries to finance health systems

[12] Federal Ministry of Health. National Health Accounts 2017. Technical Report. April 2019. Abuja/Geneva/Brussels: Federal Ministry of Health, Abuja, Nigeria/European Union/World Health Organization. Available at: https://www.health.gov.ng/doc/FINAL-VERSION-NHA-2017.pdf (Accessed: October 10, 2021).

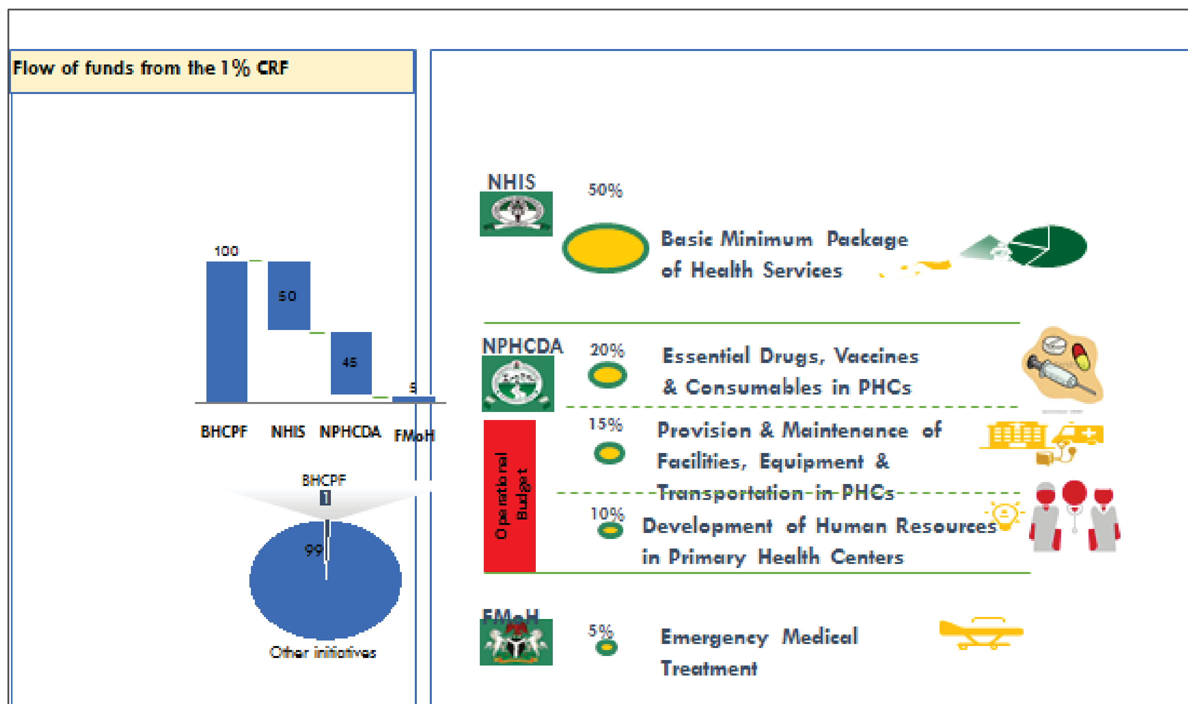
2. **Pooling of Resources**
   This aspect of health care financing is concerned with the accumulation and management of funds from individuals or households in a way that protects individual contributors against the risk of having to pay the full cost of care out-of-pocket in the event of illness. Various forms of taxation, social health insurance schemes and community-based health financing aimed at sharing the financial risk and funds among the contributing members are the focus of this function. In social health insurance, premium is based on income, so that there is cross-subsidy, with the rich paying a higher proportion.

3. **Purchasing of Health Services**
   Purchasing refers to the process by which funds are allocated to providers to obtain health services on behalf of a designated population. Purchasers of health services are typically the Ministry of Health (MoH), social security agencies, insurance organizations, health maintenance organisations and individuals or households who purchase at the point of care. If designed and undertaken strategically, purchasing can improve health systems performance by promoting quality, efficiency, equity and responsiveness of health service provision and, in doing so, facilitate progress towards Universal Health Coverage. This applies to the performance-based financing employed by states that benefit from Nigeria State Health Investment Project (NSHIP). Under this arrangement, PHC facilities are at least partially funded on the basis of achieving a certain set of results. The other mechanism is the Direct Facility Financing (DFF), which is based on an approved business plan as applicable under the BHCPF.

3.5.2 Basic Health Care Provision Fund (BHCPF)

The additional funding from the federal government through the BHCPF for PHC is shared through the NPHCDA, NHIS and FMoH gateways as shown in Figure 8. This fund is shared across PHC facilities – one per ward – in the country. Stipulations on use of the Basic Health Care Provision Funds are shown in Figure 11.

Figure 11: Stipulations on Use of the Basic Health Care Provision Fund



The funds passing through the NHIS (50%) are deployed to provide the Basic Minimum Package of Health Services from facilities to:

- General population: Screening for hypertension and diabetes, treatment of malaria, counselling on prevention of malaria, hypertension and diabetes and emergencies (RTA)
- Children - Treatment of common childhood illness including diarrhoea, dysentery, acute respiratory infection (ARI), Malnutrition, severe measles, pneumonia, and childhood immunizations.
- Women - Maternal Health services including routine ANC, Skilled Birth Attendance (SBA) at delivery, elective caesarean section (C/S), emergency maternal and new-born care, postnatal care (PNC) and family planning (FP)

The funds administered through the NPHCDA gateway (45%) go directly to beneficiary PHC facilities (1 per ward) through the State Primary Health Care Board (SPHCB) and are used for the following:

- 20% for essential medicines, vaccines, and consumables
- 15% for provision and maintenance of facilities, equipment, and transport

- 10% for development of human resources (5% goes to CHIPS Agents and 5% to midwives).

The funds administered through the FMoH gateway (5%) are used for the following:
- 2.5% is used to provide emergency medical treatment
- 2.5% used for emergency outbreak response through Nigeria Centre for Disease Control (NCDC)

3.6. Health Information System
Strong health information systems (HIS) are the backbone of strong health systems and are central to improved health outcomes. Health information system (HIS) has been utilized for collecting, processing, storing, and transferring information required for planning and decision-making at different levels of the health sector. A properly functioning HIS ensures the right information gets into the right hands at the right time, enabling policymakers, managers, and individual service providers to make informed decisions, from budgeting to services provided to individuals at facility and community levels. HIS is used for planning, implementation, monitoring, and evaluation at all levels of the health care delivery system. Effective Health Information System is equally essential for the sustenance of health care system as it:
- promotes information for effective programme planning and implementation.
- allows for timely corrective measures to be taken in the event of programme encountering problems.
- encourages efficient use of resources and improves programme effectiveness.
- promotes feedback based on empirical facts that can be used for programme review and re-planning.
- enhances good governance and accountability.

In the past, the impact of health services on the population was hampered by the dearth of reliable data, weak and uncoordinated information support system. In 1995, the Federal Ministry of Health, its parastatals and agencies recognized the need to review the existing health system and the need for a co-coordinated health information system for the effective management of the health system. This led to the establishment of the National Health Management Information System. Currently we have a community-based health information system and the district

health information system that feeds into the National Health Management System (NHMIS). In 2004, the Primary Health Care was merged into the NHMIS, and the community-based health information system introduced and harmonised into the NHMIS.

The District Health Information System (DHIS) is used to implement the HMIS at district level. DHIS 2 is a web-based software that supports functions of accurate and valid collection of data, aggregation, storing, sharing, transmission, analysis, reporting and display at every level of the district health system from health facilities to LGA, state and national levels. It allows disaggregation of data analysis up to health facility level. In addition, the community-based health information system (CHIS) instance has been created on the DHIS platform.

3.6.1. Community-based Health Information System (CHIS)

CHIS collects, analyses, reports, and uses community-based health and social data. The information is used to guide policy, programming, targeting of services to populations in need, monitoring the continuum of care and addressing equity, access, and accountability.

CHIS data are used by CHIPS Agents and other community-based volunteers, facility-based health workers, workers in other sectors and government officials involved in planning services and making resource allocation decisions at various levels of government; and civil society organizations (CSOs) advocating services. A well-functioning CHIS can support civil registration and vital statistics, by providing information to the registry on births and deaths. Table 22 summarises functions of community-based health information system at different levels.

Table 22: Functions of Community-based Health Information System at Different Levels

	Planning: design, implementation, resource allocation	Reporting	Accountability	Identifying people in need of service &referral or linkage to service	Case management and appropriate referrals	Planning for supervision	Identifying community needs
SDP							
Community/CHIPS Agents and community volunteers		X	X	X	X		X
Civil Society/CBOs	X	X	X	X	X	X	X
PHC Facility	X	X	X		X	X	X
Ward Development Committee	X	X	X			X	X
LGA/State and federal Government	X	X	X			X	

The routine data collected is used for:

- Planning and resource allocation
- Identifying people in need and referring/linking them to PHC services
- Providing treatment and making appropriate referrals
- Reporting
- Accountability

The CHIS supports health functions at various PHC levels. The CHIS is captured on the DHIS 2 platform. In addition, the CHIPS data is captured on the CHIPS instance on the DHIS 2 platform.

Ward level data Collection Tools

Information about demographic profile of households in the community, health care need creation activities, services provided by the CBHWs and linkage to PHC facilities are collected using appropriate tools and reported by CBHWs. Records

of PHC facilities service provision activities including community outreaches are documented by individual healthcare workers, summarised, and reported by the officer in charge (OIC) of the facility. Table 23 summarizes the data collection tools used at community and facility levels in the ward, data elements collected personnel responsible and reporting timeline.

Table 23: Data Collection Processes within the Ward Health System

S/No	Data Tool	Description	Collected by	Reporting Timeline
		COMMUNITY LEVEL DATA		
1	Household Register	List members of households within CHIPS Agents catchment area, recording sociodemographic information, WASH Practices and information on births and deaths	CHIPS Agent/JCHEWs	Initial mapping, listing and registering household members conducted before CHIPS Agents begin service provision. Data to be updated and submitted when changes occur in households or at least every 6 months
2	1000 days checklist	Identifies pregnant women and children aged less than 2 years Records uptake of services at health facility critical during pregnancy and up to when the child is 24months (2 years) – a period which corresponds to 1000 days. It serves as a community-based record of utilization of services vital to pregnant women and children up to 2 years of age and guides the CHIPS Agents to provide time targeted counselling to pregnant women and children under – 2 years.		CHIPS Agents submit data in real time to National Instance on CHIPS on DHIS 2
3	Mother and child card (mothers' card and child health card)	The Mother's card is a home-based record that documents services received at the health facility and in the community (from CHIPS Agents) by a pregnant woman during the course of the pregnancy. It serves as a visual cue for the CHIPS		Data is reported monthly to LGA, State and Ward following verification and validation procedures JCHEWs report

S/No	Data Tool	Description	Collected by	Reporting Timeline
		Agent on the appropriate counselling to provide to the pregnant woman and documents the date when the recommended counselling was done and provides the pregnant woman with pertinent information related to her pregnancy including – ANC/PNC Appointments, Information on Emergency Transport Services (ETS).		Monthly (Latest 3 days after end of month)
4	Home-based card	Home-based cards document/record services provided by the CHIPS		Home-based cards document/records services provided by the CHIPS Agents to the household to be kept permanently in the home as a home-based record of service provision.
5	Referral form	Referrals made in the community to health facilities by CHIPS Agents are to be documented in the Referral Form. Clients are given a copy of the referral form to take to the health facility. Following treatment, the health worker completes a feedback slip which is returned to the CHIPS Agent		
6	Community Commodity Dispensing form	Records medicines and commodities dispensed by the CHIPS Agents and information on recipients to be used for verification		
7	Commodity Requisition and Issuance form	Records commodity and supply requests from focal health facility and documents commodities received by CHIPS Agents from supervising CHEW		
8	Community line list form	Identifies eligible children and defaulters		
9	New-born line list form	Identifies children eligible for immunization		

S/No	Data Tool	Description	Collected by	Reporting Timeline
10	Monthly Summary Form	Used by the CEFP to summarize and collate CHIPS Agents service delivery and referral activities in the ward.		
11	Community based surveillance	Notification of suspected case of epidemic prone diseases	DSNO	Monthly
		FACILITY LEVEL DATA		
1	Facility daily out-patient care register	Out-patient attendance and services offered in the facility	OIC/M&E	
2	Facility daily in-patient care register	Inpatient services provided in the facility		
3	Health Facility daily general attendance register	Records daily general attendance		
4	Health Facility daily ante-natal & post-natal care register	ANC & PNC health services provided to pregnant women in the health facility		
5	Health Facility daily labour and delivery register	Labour and Delivery services provided to women in the health facility		
6	Health Facility daily family planning register	Family Planning services provided to clients in the health facility		
7	Health Facility PMTCT/ARV register for PHCs	Track prophylaxis given to HIV positive pregnant women and exposed infants throughout gestation and breastfeeding period		
8	Health Facility daily/session immunization tally sheet	Number of clients administered with the various antigens per session		
9	Child immunization register	Shows immunization services provided in the health facility and present immunisation status of children seen in the health facilities		
10	Tetanus Diptheria register of women of childbearing age	Td immunization administered to women of childbearing age		
11	Monthly Health Facility Immunization Summary	Monthly summary of the number of clients administered with the various antigens		
12	Health Facility Monthly Summary Form	Summarizes reports of activities in the month		
13	NHMIS Quarterly Form	Summarizes at the end of a quarter services offered in the health facility, monitoring and supervisory visits made, health facility staff trained and community involvement		

S/No	Data Tool	Description	Collected by	Reporting Timeline
14	Annual summary records of PHC services	Summarizes reports of activities in the year		
15	Referral forms	Disease condition for referral		
		Pre-referral treatment given		
16	Discharge summary forms	In-patient records		
17	Inventory control card	Accountability in the utilization of health commodities		
18	ledgers and bin cards			
19	Daily Consumption Records			
20	Combined Report and Requisition Form (CRRF)			

3.6.1.1. Data Collation

Community level data collected by the CHIPS Agents are sent to the CEFPs who collate and clean the data with the supervising CHEWS before transmitting to the CHIPS instance on DHIS2. Facility level data from the outreach posts and PHC clinics are collated at the PHC facility for onward transmission to the LGA. Feedback is maintained between each level via paper-based and electronic verification and validation activities.

Collection and reporting of community level data occurs either through two systems, which are:

1. Mix of Paper-Based and Electronic collection
2. Fully Electronic data capture and reporting

Under the mix-method, summary of community level data collected by using hard copy forms by CBHWs are verified by the CEFP who then submits the collated hard copy to the supervising CHEW in the facility. Household and community level data are entered on a programme specific electronic platform on DHIS2. It then reports both aggregate and individual household data to all governance levels (LGA, State, and National).

At facility level hard copy data capture and electronic reporting operates concurrently. Health care workers record summary of PHC activities in the various registers and the activity registers using hard copy forms. They transmit activity summary electronically and submit the hard copy to the LGA Monitoring and Evaluation (M&E) officer.

3.6.1.2. Data Flow

The flow of information at the community level starts with the CBHWs transmitting to the focal PHC and onward to the LGA, state and national levels using either format of report. Feedback is maintained between each level via paper-based and electronic verification and validation activities. Similarly, summary of activities in health outposts and PHC clinics within a ward reaches the focal PHC centre which aggregates such with its own records for transmission and submission to the LGA levels and onwards to State and National with similar levels of two-way feedback as shown in Figure 12.

Figure 12: Data flow chart

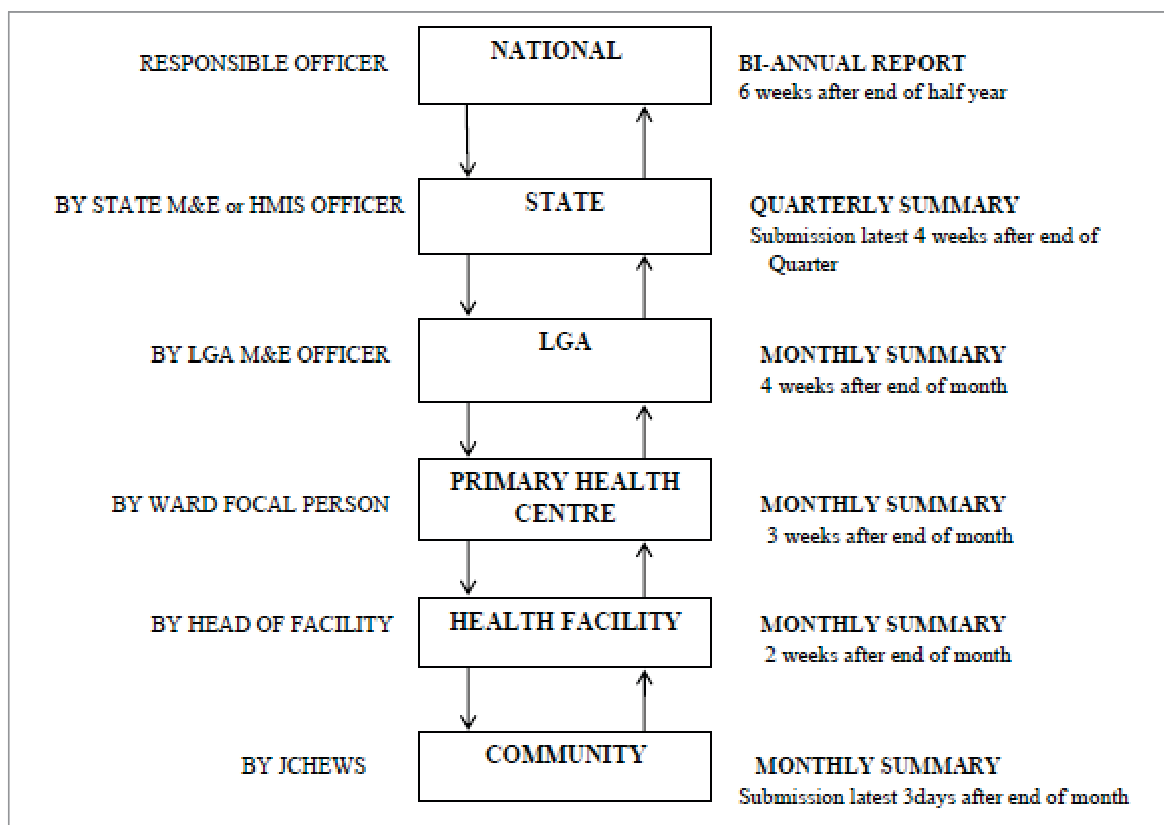
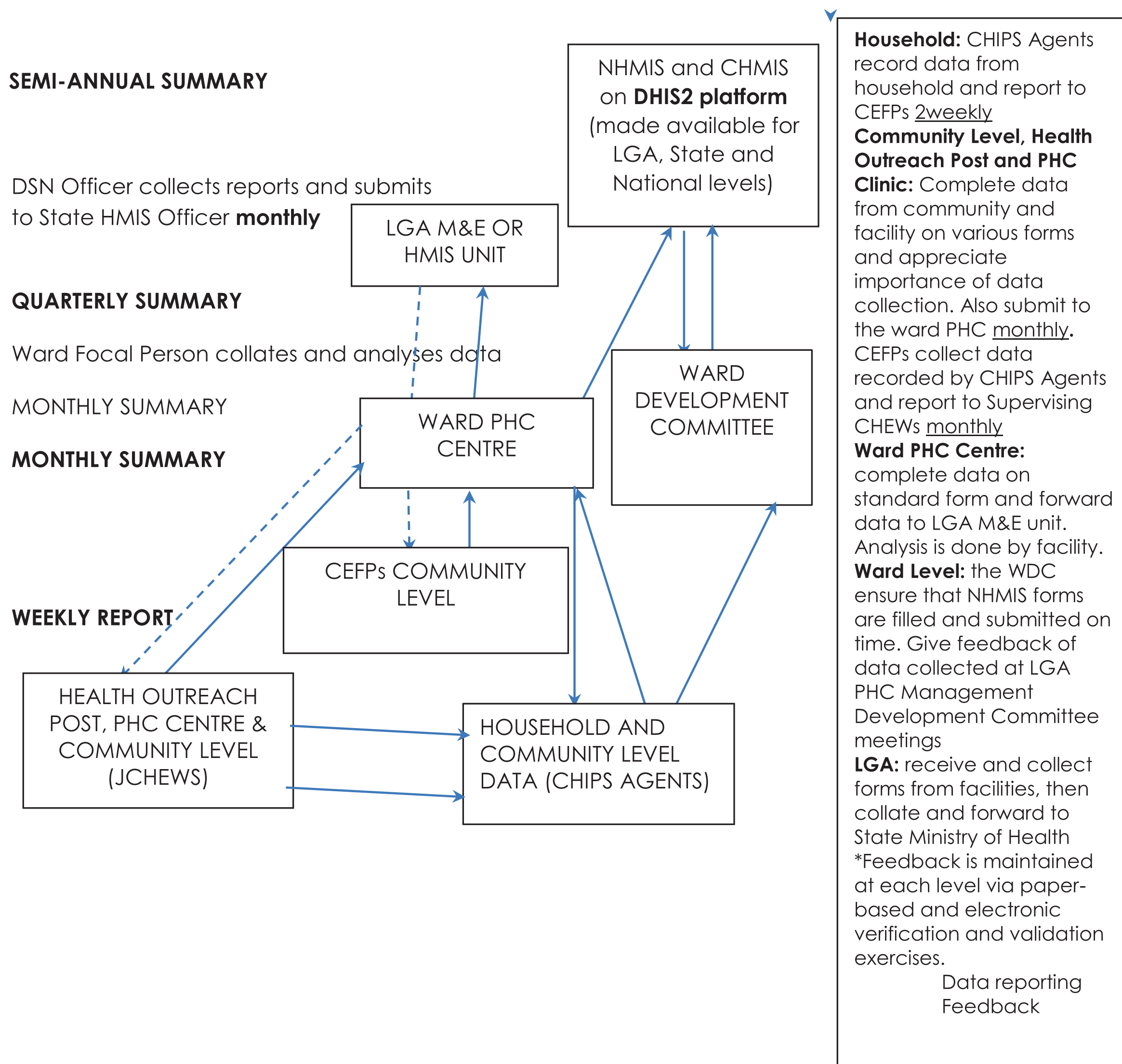


Figure 13: Data Flow within the Ward Health System



3.6.1.3. Data Management Roles

Table 24 provides details of data management roles of the different ward health system stakeholders. Different stakeholders working in the community have specific roles in monitoring and evaluation. While some roles are unique to specific stakeholders, all are responsible for ensuring that data quality is maintained at all levels.

Table 24: Data Management Roles of ward health system stakeholder

Health Worker	Roles
CBHWs	● Collect community level data during home visits and outreaches using programme tools ● CBHWs will conduct home visits to households in their catchment areas ● Record household information at first visit using Household Register ● Update Household Register periodically and as the need arises ● Record each interaction with an Encounter/Referral Form ● Refer clients using referral slip to the PHC facility ● Provide regular updates to supervisor during mentoring and supervision ● Report community data fortnightly to designated Supervisor (Encounter register)
CEFPs	● Monitor CBHW activities fortnightly on data issues ● Verifies quality of data generated by CBHW on monthly basis ● Promotes male involvement in addressing barriers to service utilization ● Facilitate community sensitization and mobilize the community for health actions ● Facilitate monthly reconciliation meeting between community leaders and the HF
Ward Development Committee	● Oversee CBHWs and CEFPs activities in the community ● Review and endorse community data submission in the CBHWs Monthly Summary form ● Conduct ward monthly forum meeting
CBHWs Supervisor (CHEW)	▪ Collect community data from CBHWs fortnightly ▪ Mentor CBHW and CEFPs in the community (weekly) ▪ Provide supportive supervision (with the OIC of focal facility) to CHIPS personnel (Monthly) ▪ Oversee CBHW and CEFPsMonthly review meeting ▪ Verify community information with data in household register at supervision ▪ Provide regular feedback to the CBHW during supervisory visits and review meetings
OIC	▪ Collate and assess Health Data (Community and Facility) ▪ Conduct periodic verification of data (Can be assigned to other staff e.g. N – Power Health volunteers) ▪ Provide supportive supervision (with supervising CHEW) to CBHWs and CEFPs (Monthly) ▪ Submit CBHW programme data to the LGA Focal Person
LGA CBHWs Desk officer	Work with LGA M&E officer to: ▪ Collate community data for all the wards in the LGA ▪ Review data from the wards for correctness and verify where needed ▪ Report community data to the state (and or DHIS 2) monthly ▪ Report CBHWs commodities and logistics data to State Focal Person (Monthly) ▪ Conduct ISS visits to all wards in the LGA monthly (as part of a team that will comprise state, partners and periodically national PHC team) ▪ Provide feedback to the WDC and focal PHC facility
State Focal Person	Work with the state M&E officer to: ▪ Collate data for all LGAs, review and provide feedback to relevant LGAs ▪ Participate in quarterly ISS visits with LGA teams ▪ Conduct state quarterly review meetings with LGAs and other stakeholders ▪ Participate in National Review Meetings ▪ Report CBHWs Data for the state to National PHC Team
Development partners	▪ Participate in planning and execution of routine ISS

Health Worker	Roles
	▪ Participate in design and implementation of baseline, mid-year and annual evaluations ▪ Participate in state quarterly review meetings ▪ Participate in National Review Meeting ▪ Provide technical and other support for all M&E functions
National PHC Team	▪ Monitor overall trends from the programme ▪ Collation and maintenance of data from all states ▪ Provide technical support to any state that experiences issues with the CBHWs programme and data management

3.6.1.4. Data Quality assurance

To ensure that correct and reliable data are collected and made available on a timely basis to inform decision making, the M&E systems of the ward health system plan for routine data quality checks which include the following:

1. Verification of community data recorded by CBHWs agents done by CEFPs
   This is conducted monthly using random sampling of 40% the assigned CBHWs combined with purposive sampling of CBHWs identified as having data quality challenges. M&E Officer verifies 30% of data generated by the selected CBHWs.
2. Validation of data collected by CEFPs is done by their supervising CHEWs
   The supervising CHEW randomly verifies data entered/approved by the CEFPs into the DHIS 2. CHEW also randomly verifies data entered by the CBHWs during supervisory visits, by checking levels of agreement between information contained in the household registers with that in the encounter registers.
3. WDC validation of community data
   WDC monthly meetings provide opportunity for community's oversight over data generated in the ward. This is achieved by random review of data collected by CEFPS and participation of designated members in data validation exercise conducted by the CHEW. Reconciliation of line listing of pregnant women and children eligible for immunization also takes place between CBHWs and facility representatives.
4. Monthly review meeting facilitated by CHEWs for all CBHWs to review their performance, feedback on data they collected, discussion on challenges to service delivery and providing updates on guidelines and standards of operations.
5. LGA monthly review meeting convened by LGA Desk Officer with LGA M&E Officer, supervising CHEW and OIC in attendance to discuss areas of community-based programme implementation, data management and review of capacity of supervisors.

6. Quarterly data quality assurance exercise by a team from National, State and LGA using a standardized checklist.
7. Civil Society Organizations monitor WDC activities including review meetings, data management, and monthly feedbacks.

3.6.1.5. Basic Data Analysis and Use

To ensure responsiveness of healthcare services, interventions and programme to community needs, its effectiveness and efficiency, basic data analysis are recommended at different levels to promote evidence-based decision making.

1. Community level
   Data collected at community level should be aggregated and summarized in form of absolute numbers, proportions, bar charts, pie charts and pictograms. It can depict estimate of total population, socio-demographic indices of the population, frequency of illness episodes, mortality pattern, marriage and birth patterns, utilization of services and summary of activities of CBHWs. It can be used for health education, behaviour change communication, community sensitization and mobilization for health actions. It helps in the identification of health resources, needs, problems, prioritization, and planning for action.

2. Facility level
   Community level data and activity reports from outreach and health facilities should be summarized and presented in form of absolute numbers, simple tables, proportions, bar charts, pie charts and pictograms. It can depict estimates of total population, target population for basic services, utilization of services and summary of activities of CBHWs. It can be used to plan for outreach services, improving facility services including basic clinical services, health education, behaviour change communication, community sensitization and mobilization for health actions. It will serve as an advocacy tool for community participation, ownership, and partnerships during engagement with the latter at WDC meetings.

3. LGA level
   Data from different wards should be aggregated and compared at LGA level to assess health care need and problems, utilization of services and factors affecting utilization. This can be used for prioritization of health problems and needs, planning for evidence-based health interventions

that are responsive to needs and interest of the population, resource allocation, implementation, and evaluation.

4. State and National levels
   At this level, advanced analysis of disease burden, utilization of available health services and impact of existing interventions and programmes should be done. This can be used to inform policies, strategic planning, resource allocation, implementation, and evaluation.

3.6.2. Monitoring, Evaluation, Reporting and Documentation

Monitoring is the collection of routine data to track level of attainment of targets. The information systems described provides the information needed for this. It is important that each stage of programme planning, and implementation is monitored to identify bottlenecks to implementation in good time and address them. Monitoring could also be done through review meetings.

Evaluation of public health programmes involves periodic systemic activities aimed at measurement of how well community-based health programs have met expected objectives of increasing services utilization and/or assessing the extent of the impact of the interventions on population health indices. It also informs resource allocation, design, and implementation of further health interventions. This can be achieved through several steps:

1. Baseline assessment to provide objective numerical basis for assessing program performance during evaluation processes.
2. Mid-year review conducted by States with support from NPHCDA using standardized templates.
3. Annual review conducted at National level where stakeholders from states meet to identify gaps, best practices and lessons learned and develop action plans for steps in program implementation.
4. Programme Assessment Performance Management and Action (PAPA) is an assessment tool which uses a modified Lot Quality Assurance Sampling

(LQAS)[13,14,15] methodology on Reproductive, Maternal, New-born, Child, Adolescent and Elderly Health plus Nutrition (RMNCAEH+N) to assess performance and monitor outcome of National Emergency Maternal and Child Health Intervention Centre (NEMCHIC) interventions.

5. External evaluation by external auditors, NGOs, and other stakeholders to ensure effective programme evaluation and feedback for improvement.

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[13] Measure Evaluation. Lot Quality Assurance Sampling Measures Performance. Available at: https://www.measureevaluation.org/our-work/evaluation/lot-quality-assurance-sampling-used-to-measure-program-performance. (Accessed: October 10, 2021). North Carolina, USA: University of North Carolina.

[14] Ormond L, Adeyemi O, Patrick D, Okoh F, Oresanya OB, et al. Tracking the Quality of Care for Sick Children Using Lot Quality Assurance Sampling: Targeting Improvements of Health Services in Jigawa, Nigeria. PLoS ONE 2012; 7(9): e44319. https://doi.org/10.1371/journal.pone.0044319.

[15] Abegunde D, Orobaton N, Shoretire K, Ibrahim M, Mohammed Z, Abdulazeez J, et al. Monitoring maternal, newborn, and child health interventions using lot quality assurance sampling in Sokoto state of northern Nigeria. Glob Health Action. 2015;8:27526. doi: 10.3402/gha.v8.27526.

CHAPTER 4. ENABLING ENVIRONMENT FOR ATTAINMENT OF WHSS GOALS

4.1. Leadership and Governance

Governance is a critical element of the ward health system strategy and increasingly regarded as salient theme on the development agenda. Leadership and governance in building the ward health system involve ensuring that strategic policy frameworks exist and are combined with structures that deliver effective oversight, support coalition-building for priority health issues, ensure a well-regulated system, and promote accountability for a system that will be resilient and resistant to external shocks, including pandemics.

4.1.1 Local Government Health Authority (LGHA)

There are two key bodies that provide support for the implementation of the WHSS. These are the Local Government Advisory Committee and the LGHA Management Team.

A. Local Government Advisory Committee

Composition

- Hon. Chairman (Committee chairman)
- Director PHC/MOH (Committee Secretary)
- LGA Supervisory Councillor for Health
- Directors of other departments in the LGA (Works, Agriculture, Finance, Education, Community Development, Personnel etc)
- One representative of National Orientation Agency (NOA)
- One representative of Traditional Council
- One representative of Religious Leaders
- Head of one referral public hospital
- One representative of private health sector
- One representative of women leaders
- One representative of health training institutions where available
- One representative of CSOs/CBOs
- Two representatives of WDC (on rotational basis)

Roles and responsibilities

- Advocate, mobilize and allocate resources for PHC activities
- In conjunction with the communities and relevant stakeholders constitute or adapt a WDC as appropriate.

- Develop effective working relationship with the communities through their WDCs
- Hold implementers to account for effective and efficient use of resources
- Support LGHA MT on implementation of PHC in the LGA
- Identify and fund the PHC capital projects

Terms of Reference

In carrying out the above functions, the Advisory Committee shall:

- Meet quarterly
- Record minutes of meetings and review implementation of recommendations from previous minutes at the subsequent meeting
- Adopt minutes of meetings and ensure that the Chairman and Secretary sign them
- Comply with the quorum set to hold meetings
- Review reports on PHC activities and performance from LGHA MT and advise on measures to improve PHC outcomes
- Engage with opinion leaders especially at the LGA level to garner political commitment and ownership

B. Local Government Health Authority Management Team (LGHA MT)

Composition

- Director PHC/MOH
- Two Deputy Directors
- Programme Officer, Planning, Research and M & E
- Programme Officer, Disease Control
- Programme Officer, Immunization
- Programme Officer, Essential Drugs and Logistics
- Programme Officer, Health Promotion
- Programme Officer, Nutrition
- Programme Officer, Reproductive, Maternal & Child Health
- Administrative Officer
- Finance and Accounts Officer

Roles and Responsibilities

- Planning, budgeting, and management for LGHA resources for effective implementation, supervision, monitoring, and coordination of PHC activities in all wards in the LGA

- Ensure that health system performance gaps (clinical and managerial/administrative) identified during supervision at PHC facilities are addressed through appropriate capacity building and quality improvement interventions
- Enable and encourage community members to participate in initiating, implementing, and monitoring decisions and plans that consider their local health needs, priorities, capacities, and resources
- Provide LGA-wide partner coordination and alignment with priorities and planning to prevent duplication and gaps in health service delivery and maximize available resources in the health facilities and wards
- Work with partners in other sectors (e.g., education, agriculture, and works) on initiatives aiming to promote health in the ward
- Advocate for, identify and mobilize resources to address current and future gaps in health service delivery at PHC facilities
- Provide technical and management support to WDCs and facilities to achieve better health outcomes

Terms of Reference

The management team shall:

- Meet monthly
- Record minutes of meetings and ensure compliance with recommendations from such minutes
- Adopt minutes of meetings and ensure that the Chairman and Secretary sign them
- Comply with the quorum set for starting meetings
- Ensure provision of appropriate human resources for health in the health facilities
- Ensure provision of basic amenities in the health facilities such as light, potable water, access road and staff quarters
- Ensure provision of funding and material support e.g., vaccines, essential medicines and equipment for implementation of activities in the wards.
- Provide technical support in the areas of capacity building: training of health workers, CHIPS agents and members of the development committees
- Ensure provision of kits for the CHIPS agents
- Supervise, monitor, and evaluate health activities taking place in the ward
- Collaborate with the WDCs and VDCs to establish health facilities in the communities in the ward where there are none

- Coordinate the activities of other partners at the ward level such as development agencies, NGOs, and community-based civil society organizations
- Replicate the Ward Health System in all the wards in the LGA

4.1.2 Community Development Committees

There are two citizen-led structures responsible for providing citizens' perspective to the structure and functioning of primary health care service delivery points as well as broader health-related issues at the community level – The Ward Development and Facility Management Committees.

I. Ward Development Committee

Citizen and community participation are at the heart of primary health care implementation. This is essential for effective and accountable governance. In recognition of this, NPHCDA has provided a structured and institutionalised framework for this participatory local governance at the ward level through the establishment of Ward Development Committees across the country. The WDC works alongside the local government PHC department staff and health workers in co-managing PHC at the ward level in mobilising and managing community resources for health actions.

Process of WDC formation

The WDC will be formed by the LGHA MT ward and community representatives

Selection of WDC members

- Identify and invite all stakeholder groups to nominate representatives and submit names.
- Publicize/advertise the election through local radio stations and television channels, town announcers, community information board and other community structures
- Elect ward members from those nominated at a townhall/public meeting
- The chairman and the secretary of the WDC must have a minimum educational qualification of secondary school certificate to be eligible for election into such post

Capacity building Training

Once elections have been conducted a 5-day capacity building workshop will be organised to train WDC members on the following

- Job description and terms of reference (TOR)

- Community engagement
- Understanding governance
- Conflict management
- Communication and report writing
- Financial management and budget development
- Accountability framework and performance management

Composition (15-20 members)

- Community leader
- Ward councillor
- Religious leader(s)
- One representative (the chairman) from each VDC (maximum of six) in the ward
- Ward focal person/Supervisor for the ward
- The Community Engagement Focal Person
- The Wards Community Development Officer (if available)
- Head (Officer in charge of the apex PHC) in the area
- Representative of community-based organizations
- Representatives from other health related sectors e.g., headmasters of primary schools, principals of secondary schools, Agricultural extension workers, Water and sanitation staff, etc
- Representatives of PPMVs and youth organizations
- Representatives of CHIPS Agents
- Representative of NGOs/CSOs/CBOs in the ward

At least 40% of membership will be **women**; and at least one woman should hold an executive post

Roles and Responsibilities

- Participate in the identification of the health and social needs of people in their wards and development of plans to respond to them, forwarding all the developed plans to the LGA.
- Forward all health/community development plans (village, facility, and Wards levels) to LGA
- Liaise with government and other voluntary agencies in finding solutions to their problems while also mobilising human, financial and material resources to respond to their identified needs.
- Support financial management processes of the PHC facilities including development of business plans for utilisation of BHCPF (Ensure that a bank

account is opened with a reliable commercial bank for BHCPF for the ward and each facility)

- Participate in the management of the ward commodity logistics system inclusive of distribution of vaccines for Routine Immunisation and other vaccination activities
- Participate in quality improvement processes, death reporting and social autopsy of maternal and child deaths in the community
- Participate in mobilisation of their communities for participation in health interventions.
- Oversight functions in supervising, monitoring and evaluation of the implementation of PHC activities in the wards, including data validation(of data generated by community based health workers).
- Participate in the selection processes of community-based health workers

Terms of Reference

The WDC shall:

- Each executive committee member shall serve for a tenure of 3 years with a maximum of 2 tenures
- A WDC executive who has served two terms in a position can contest for election into another position or choose to remain a non-executive member (non-executive members have no tenure limit)
- Meet monthly
- Comply with the quorum of members set for starting the meeting
- Record minutes of meetings to be signed by the Chairman and Secretary after approval at the next meeting
- The committee should approve budgets and the chairman authorizes the expenditure
- The Treasurer should keep record of all financial transactions
- Advise, where there is a Bank Account, signatories to be the Committee Chairman and Treasurer, and if necessary, the Secretary
- Ensure that NHMIS forms are correctly filled and submitted on time
- Develop a community action plan for the ward with a 6-12-month implementation timeframe.

II. Facility Management Committee

Facility Management Committee represents another layer for promoting community accountability and improving community confidence and use of health services. With the direct financing facility being introduced through the Basic Health Care Provision Fund, their role is expanded to include financial

planning and oversight for continuous service quality improvement in the health facilities.

Composition

- WDC (or VDC) Chairman or his or her representative as Chairman
- OIC and all unit heads in the facility
- Account Officer of the facility

Roles and Responsibilities

- Work with other health facility staff to promote improvements in health services and client satisfaction
- Ensure maintenance of the health facility infrastructure, equipment, vehicle etc.
- Designate the Officer-in-Charge of the facility to follow up on the Planned Preventive Maintenance requirements for the facility
- Identify resources from government and other stakeholders to improve services within the facility
- Ensure CHIPS agents/ Community Engagement Persons submit/transmit data of their work and validation is done by the supervising CHEW
- Monitor the activities of the CHIPS personnel (CHIPS agents and CEFPs) in the ward
- Provide monthly reports of the activities of the committee to the Ward Development Committee or Village Development Committee as applicable

Terms of Reference

- Meet once a week
- The FMC Chairman or in his/her absence the Secretary, will call FMC meetings
- Two third of the FMC members must be present to form a quorum for the meeting to hold and decisions made by the Committee shall be valid
- The secretary of the committee keeps record of minutes of meetings
- Recommend that minutes of meetings be signed by the Chairman and Secretary after approval at the next meeting
- Ensure enrolment and registration of beneficiaries of BHCPF
- Ensure provision of basic minimum package of health services in line with BHCPF guidelines
- Invest in demand creation for increase in uptake of services
- Ensure continuous quality improvement (infrastructure, human resources, and services)

- Any suspected financial mismanagement to be thoroughly investigated and appropriate sanctions shall be recommended (refund, suspension or dismissal) to higher authorities e.g., LGHA
- All misconducts in the health facility are to be thoroughly investigated and appropriate sanctions taken or recommended to higher authorities.

4.1.3 Governance Mechanism for Epidemic Response (GMER)

In the fall-out of epidemics, it is expected that sub-state health system managers and health workers are aware of, and have been trained to, deploy critical structures which can, and should be activated in managing public health emergencies. The structure – Public Health Emergency Rapid Response Team (PHERRT) – and the processes adopted in response to the COVID-19 pandemic can be deployed for future public health emergencies.

Public Health Emergency Rapid Response Team

The Public Health Emergency Rapid Response Team (PHERRT) is a technical, multidisciplinary team that is readily available for quick mobilization and deployment in case of emergencies to effectively investigate and respond to emergencies and public health events that present significant harm to humans, animals, and environment irrespective of origin or source. The PHERRT exists at the LGA level, however, they are responsible for epidemic response at both the LGA and ward level. The proposed membership of the PHERRT is in Table 25.

Table 25: Proposed membership of the Public Health Emergency Rapid Response Team (PHERRT)

S/N	Proposed Members
1.	Surveillance Officer
2.	Risk Communication Officer
3.	Laboratorian
4.	Environmental Health Officer
5.	LGA administrator or equivalent
6.	LGA Divisional police officer
7.	Traditional/Religious leaders
8.	LGA civic or community representative (for example, the LGA Chief Executive
9.	LGA PHC coordinator/ Medical Officer of Health
10.	Medical officer/Medical director in-charge of facility
11.	Area Veterinary officer or equivalent
12.	LGA public health nurse
13.	LGA DSNO
14.	LGA education officer
15.	LGA water officer/WASH officer
16.	LGA engineer
17.	LGA pharmacist/Logistic officer
18.	Wildlife officer and Natural resources
19.	Local Immunization officer (where applicable)
20.	LGA community development officer
21.	Immigration officer

Roles and responsibilities of the PHERRT

1. Investigate rumours and reported outbreaks, verify diagnosis and other public health emergencies including laboratory testing.
2. Collect additional samples from new patients and old ones if necessary (human, animals, food, and water)
3. Conduct follow-up by visiting and interviewing exposed individuals, establish a case definition and work with community to find additional cases.
4. Assist in laying out mechanisms for implementing infection prevention and control measures.
5. Assist in generating a line list of cases and conduct a descriptive analysis of data (time, place, and person) to generate hypothesis, including planning for a further analytical study.

6. Propose appropriate strategies and control measures including risk communications activities.
7. Establish an appropriate and coordinated risk communication system through a trained spokesperson.
8. Coordinate rapid response actions with national and local authorities, partners, and other agencies.
9. Initiate implementation of the proposed control measures including capacity building.
10. Conduct ongoing monitoring/evaluation of the effectiveness of control measures through continuous epidemiological analysis of the event.
11. Conduct risk assessments to determine if the outbreak is a potential Public Health Emergency of International Concern.
12. Prepare detailed investigation reports to share with PHEMC.
13. Contribute to ongoing preparedness assessments and final evaluation of any outbreak response.
14. Meet daily during outbreaks and quarterly when there is no outbreak.
15. Participate in simulation exercises.

4.1.4 Accountability Framework

The guiding principles are:

- Mutual accountability: It is a process by which two (or multiple partners) agree to be held responsible for the commitments that they have voluntarily made to each other.
- Transparency: Good governance, openness and responsiveness will be integrated and imbibed into the implementation of the Ward Health system strategy to serve all Nigerians in an honest, trustworthy, and transparent manner.
- Rewards and sanctions: To enhance accountability, a reward system and sanctions should be put in place.
- Ethics and respect for human rights; Both providers and consumers of health care at all levels of health care delivery particularly communities will be treated with courtesy, dignity, impartiality, and respect for all persons.
- Multi-sectoral collaboration: deliberate collaboration among various stakeholder groups and sectors to jointly achieve a policy outcome
- Community participation/engagement; NSHDP II will be people-centred and promotes health through a primary health care system where the community is at the heart of health services delivery. The interests of people are of central priority when making decisions. The needs of individuals, families, and

communities are identified and addressed by implementing a coordinated approach to service delivery and helping individuals participate in decision making to improve their health and well-being through proactive engagements using participatory approaches.

- Equity and gender sensitivity: Fairness, trustworthiness, respect, and justice will be watchwords, in addition to ensuring that planned interventions and activities address the health needs of women, men, girls, and boys across all levels and sectors of society. Key stakeholders will advocate for establishment and/or strengthening of structures, systems and processes that facilitate attainment of NSHDP II goals and objectives.
- Sustainability: being able to maintain and support programs and processes continuously over time.
- Evidence-based: relies on scientific evidence for guidance and decision making.
- Quality of care: Stakeholders will endeavour to guarantee for all Nigerians the highest level of health care standards with fast and efficient services.
- Shared commitments: goals all parties working together strive to honour.
- Responsiveness: the quality of reacting quickly and positively.

Ward Development Committee

- Each member must ensure 75% attendance at all meetings to maintain membership.
- Keep minutes and attendance of meetings.
- Develop quarterly work-plans addressing the needs and priorities of the ward in triplicates. Submit a copy to the SPHCB through the LGA, keep a copy and submit the last to the LGHA.
- Submit quarterly report of implementation progress.
- Provide feedback to the community on work being done
- Provide quarterly financial report to the community leaders, LGHA and the SPHCB.
- Monitor CHIPS personnel and make appropriate recommendations for rewards and sanctions.

Facility Management Committee

- Each member must ensure 75% attendance at all meetings to maintain membership.
- Ensure minutes and attendance of meetings are kept.

- Ensure facility quality improvement plans are developed quarterly and submitted to the WDC and LGHMT.
- Ensure implementation of quality improvement plans in accordance with approved work plan and budget.
- Ensure financial records are properly kept, and suspected mismanagement investigated and reported appropriately.
- Ensure monthly activity reports are developed and made available to the WDC/VDC.
- Ensure adherence to standards in the work of the health facility.
- Ensure adequate monitoring of the work of health workers, including implementation of appropriate rewards and sanctions.

Health Facility Officer in Charge

- Ensure that patients' records are kept and must have identification number.
- Display the nominal roll that includes all regular and ad hoc staff.
- Ensure the availability of duty roster.
- Keep staff attendance register.
- Display drug list, services, and their cost.
- Maintain an inventory of equipment and update it quarterly.
- Display map of catchment area.
- Display schedule of their services including outreaches.
- Maintain records of outreaches.
- Display monthly statistics.
- Keep reports of ISS including actions taken based on findings.
- Keep minutes of meetings.

Health Facility Staff

- Ensure punctuality to work and absence from work with permission only.
- Respond to patients in a timely manner, with respect and empathy.
- Ensure maintenance of patient confidentiality and security of records.
- Ensure adherence to standards of practice in line with established guidelines and SOPs/Standing Orders/Job Aids.
- Ensure accurate documentation of patient encounters and services provided.
- Ensure strict adherence to infection prevention guidelines.
- Ensure provision of Integrated Supportive Supervision (ISS) and mentoring for health workers of lower cadre.

- Demonstrate professionalism at work, promote teamwork and industrial harmony.

4.2 Partnerships and Participation

4.2.1 Partnerships

Partnership in health is a collaborative relationship between two or more parties based on mutual understanding for the achievement of common goals. All players or stakeholders at each level, through their actions, will influence health service delivery.

At the ward level, the various partners include PPP (private facilities, PPMV, TBA, Traditional healers, barbers, and saloon stylists) development partners, implementing partners, academia, philanthropists, CBOs, CSOs, NGOs, FBOs and NURTWs.

- PPP:
    - Identify and engage Private facilities to provide preventive, curative, and promotive health services to communities within the ward especially in hard-to-reach areas.
    - Build capacity of PPMV to provide pre-referral treatment of PPH, diarrhoea, malaria and pneumonia, disease surveillance and outbreak response.
    - Build capacity of Private facilities and PPMVs to collect, collate and transmit program specific data, vital registration, mortality, and morbidity statistics to the PHC facility.
    - Private laboratory and diagnostic facilities could support PHC facilities and the community with subsidized quality services.
    - Build capacity of TBAs and traditional healers to identify and refer danger signs. Generate demand for immunization and FP services. Support community-based delivery of health services increase awareness for health through sensitization activities.
    - Build capacity of barbers and saloon stylists to sensitize and mobilize women of reproductive age (WRA) for Reproductive, Maternal, New-born, Child, Adolescent and Elderly Health plus nutrition (RMNCAEH+N) services including family planning, and immunisation services.
    - Use community-based insurance schemes in partnership with cooperatives and associations to provide health insurance to community members

- Academia:
  - Provide technical support to on-going activities within the PHC and community
  - Support result driven and evidence-based models for service delivery, teaching, and practice
  - Support training, capacity building and mentoring of facility and community-based health workers.
  - Staff of colleges of medicine through the community-based health research innovative training and services programme (CRISP) strengthen the development and implementation of PHC at health facilities used for Community-Based Medical Education (CBME) through community-based education trainings for various cadres of health workers, integrated and linked service delivery through the existing community, primary, secondary and tertiary health facilities linked to the CBME programmes and carrying out research activities.

- Implementing Partners, CSOs, FBOs, NGOs:
  - Implementing partners to conduct trainings and capacity building programs for community and facility-based health workers.
  - deliver appropriate health programs within the ward and strengthen the PHC system as appropriate.
  - CSOs to perform oversight function for health services by monitoring CHIPS Agents, holding the FMC and WDC respectively accountable to their TORs. Monitor the DRF and budget expenditure closely.
  - NGOs and FBOs to support in the delivery of community-based health services and outreach programs especially in hard-to-reach terrains.

- NURTW and other transport services:
  - Identify individuals within the community who can support emergency transport from the community and facilities with their vehicles
  - Engage NURTW members and other local transport union members to transport women in labour or with danger signs, women, neonates and children with danger signs and other emergency conditions
  - Facilitate use of NURTW services with the use of transport vouchers
  - Engage Traditional/WDCs/Influential community members as custodians of transport voucher.
  - Advocate to philanthropists in the community to fund/reimburse transport vouchers.

Ward Development Committee

It is essential that the WDC, with support from the LGHA:

- Explores avenues for Public-Private-Partnership (PPP) within the ward.
- Opens and maintains a register of all PHC partners operating within the ward.
- Ensures the inclusion and harmonization of the activities of all partners in the ward in alignment with the community action plan.
- Monitors and supervises the activities of all partners in the ward.

A partnership desk and register will be established and maintained at the ward level. The register shall contain details of partners – full name, country of origin, funding source, area of focus, geographical coverage, scope of work and duration of project.

Partners shall adopt an integrated approach to training, service delivery, supervision, and monitoring. The partners are expected to attend WDC meetings and provide briefings on the progress of implementation in the ward. WDC should have a copy of all signed MoUs with relevant partners that spell out details of involvement, expected benefits, obligations/roles of each party, and accountability framework.

4.2.2 Community Participation

Community participation is the involvement of members of the community in identification and prioritization of their needs, determining and planning solutions to respond to these needs, mobilisation of resources and participation in the implementation as well as monitoring and evaluation of programmes. It is a key principle of PHC as it promotes ownership, sustainability, self-reliance and fosters voice and accountability.

Communities will participate in the RWHSS in several different ways:

Participating in the formation and membership of WDC and FMC. These committees ensure community co-manage the RWHSS and health facilities respectively.

- Identify prevailing local health needs and develop interventions through development of the community action plan.
- Participate in the selection and support the training of community health workers and in monitoring their work.
- Participate in community-based financing schemes including BHCPF.

- Mobilize community resources for health action, including community transport scheme, community volunteers and other financial and material resources to support the implementation of health interventions.
- Monitor the work of health workers to ensure provision quality healthcare services and effective management of resources, including drug revolving funds, where they are run.
- Use already existing structures for communication to ensure dissemination of information (community information board CBOs, religious groups, TBAs, town announcers etc.)
- Use of community mobilization, awareness, and advocacy activities to ensure members participate in health activities
- Utilize members of the community to ensure community-based distribution of drugs and commodities.
- Mobilize and organize community groups such as women groups, scouts, school children and teachers, and other volunteers and assign them specific roles in planning and coordination of outreach activities.
- Hold regular town hall meetings to share progress and feedback on implemented programs and activities.

CHAPTER 5. PHASED IMPLEMENTATION OF WARD HEALTH SYSTEM AND SERVICES

5.1 Phased Provision of Health Services

Recognising that states are at various stages in the development of their WHS, and considering possible resource constraints, a phased implementation of the WHSS and services is proposed. States can, therefore, start from their current point and build up to the optimum. However, by 2030, all wards across the country should have fully functional primary health centres providing the optimal package of care to the community.

The World Health Organisation (WHO) recommends that in the journey towards universal health coverage, one area that requires expansion is the package of services to be provided.[16] The ideal is to provide all the promotive, preventive, curative, rehabilitative and palliative care people need, when needed, of sufficient quality to make a difference. However, for many states, it may not be feasible. to start with the ideal. The recommendation is for states to expand the bucket of services provided, starting with the minimum package until they achieve the optimum. For states just starting, they should commence with the introduction of the Minimum PHC Pack and graduate to the full Optimal PHC Pack; this should be accomplished within 10 years (see Figure 14 for full details of the different healthcare packages).

Figure 15 provides the roadmap for expanding PHC services in a Ward, with clear benchmarks from 2020 to 2030. By 2030, it is expected that 80% of PHC facilities in a ward should be at Level 2 while the number of health posts and PHC centre Level 1 are reduced to about 5%.

[16] World Health Organization (WHO). Essential health packages: what are they for? What do they change? DRAFT Technical Brief No. 2, 3 July 2008. WHO Service Delivery Seminar Series. Switzerland, Geneva: World Health Organization. Available at: https://www.who.int/healthsystems/topics/delivery/technical_brief_ehp.pdf. Accessed: 18 October, 2021.

Figure 14: The PHC services to be rendered by type of facility

HP - Restricted PHC Pack	PHC level 1 - Basic PHC Pack	PHC level 2 - Intermediate	PHC level 3 – Optimum PHC Pack
▪ Antenatal care ▪ Post natal care (Mothers) ▪ Family planning (counselling, distribution of condoms and contraceptives) ▪ Child Health (management of cough, fever and diarrhoea) ▪ Immunization ▪ Nutrition screening ▪ Management of uncomplicated Malaria ▪ Screening for STIs ▪ HIV/AIDS screening ▪ Treatment of topical infections ▪ Tuberculosis screening (symptomatic) ▪ Screening for hypertension, diabetes, breast cancer and cervical cancer ▪ Health Promotion, education & counseling ▪ Community based surveillance	▪ **Restricted PHC pack** ▪ Family planning (Insertion of IUDs, Implants, injectables) ▪ Nutrition deficiency treatment (minor) ▪ HIV/AIDS (continuation of care) ▪ Tuberculosis (continuation of care) ▪ Management of STIs ▪ Treatment of topical infections ▪ Infection prevention & medical waste management ▪ Emergencies including trauma, violence, ▪ All medical and obstetrics emergencies ▪ Public Health Emergencies and Outbreak Preparedness and Response	▪ **Restricted PHC pack** ▪ **Basic PHC pack** ▪ Labour and Delivery including BEmONC	▪ **Restricted PHC pack** ▪ **Basic PHC pack** ▪ **Intermediate PHC pack** ▪ Adolescent Health ▪ Management of hypertension, diabetes and HIV/AIDS ▪ Management of Sickle Cell Disease ▪ Eye Health ▪ Water and Sanitation ▪ Food Safety and Hygiene ▪ School health services (children aged 5 – 14) ▪ Management of hepatitis ▪ Neglected Tropical Diseases ▪ Cardiovascular diseases & Cancers ▪ Oral Health ▪ Mental Health (Including substance abuse) ▪ Care of the Elderly

5.2 Phased implementation of Infrastructure and Human Resource Requirements

Majority of wards in the country may not have PHC Centres Level 3, which is meant to provide the Optimal Pack necessary for attainment of UHC. It is therefore recommended that within the 10-year target, all states should work towards reducing the number of health posts to the barest minimum, upgrade Level 1 facilities to at least PHC Level 2 and ensure availability of adequate numbers of Level 3 PHC Centres

As shown in Table 26, States should invest in getting adequate number of midwives and CHEWs, available for service delivery over time.

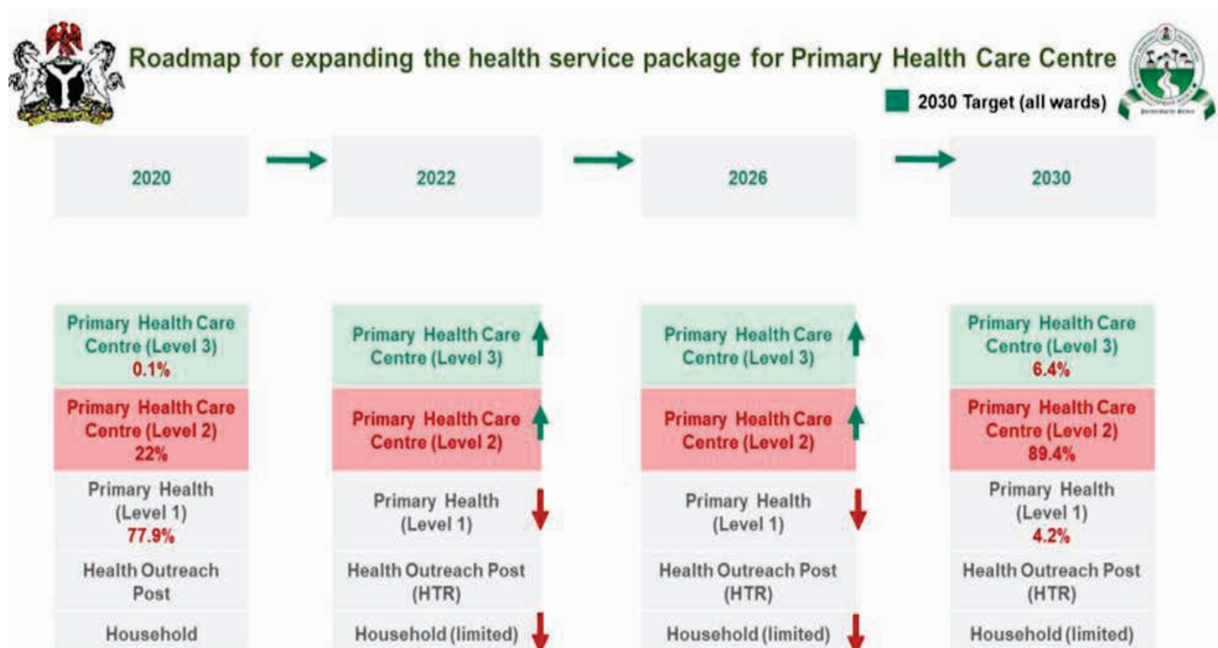
The number of more trained health workers available to provide services, especially at the PHC centre should increase with time, from 2 midwives to 4, while the number of JCHEWS decreases. At the commencement of implementation, in phase 1, states may invest in CHIPS Personnel, a minimum of 10 CHIPS Agents and 2 CEFPS per ward to provide community-based health services, but with time, they should be phased out and replaced with JCHEWs, whose training stipulates

that they spend 80% of their time in the community, doing what the CHIPS Personnel are currently doing.

Table 26: Phased Expansion of Health Workforce

Description	Phase 1 (2022)	Provisions per Ward Phase 2 (2026)	Phase 3 (2030)
CHIPS Personnel	12	6	0
	Outreach		
JCHEWs	2	4	6
	PHC Centre		
JCHEWs	4	3	6
	PHC Level 1		
Number of Midwives	0	0	0
CHEWs			
	PHC Level 2		
Number of Midwives	1	1	1
CHEWs	2	3	4
	PHC Level 3		
Number of Midwives	2	2	4
CHEWs	2	3	3

Figure 15: Roadmap for expanding the health service package for Primary Health Care Centres



CHAPTER 6. GUIDELINES FOR COSTING THE WARD HEALTH SYSTEM STRATEGY

This section serves as a guide to states in costing their ward health system. The ward health system is made up of 6 building blocks:

1. Service delivery
2. Health workforce
3. Access to essential medicines
4. Health financing
5. Leadership/Governance
6. Health Information System.

The next sub-sections provide guidance on costing the first three building blocks. It lays out the components to cost, the assumptions underlying each of the cost parameters, the data requirements, and potential sources of the required data.
Costing the ward health system should help states to collaborate with the partners, private sectors, and stakeholders to mobilize the financial resources required to achieve fully functional ward health system across the state.

6.1. Specific Guidelines for Costing the Ward Health System

States should estimate the financial requirements for their ward health system across three components:

1. Services
2. Infrastructure and
3. Human Resource for Health

6.1.1. Services

The following cost elements should be considered for the service component of the ward health system:

1a. Cost of commodity and supply

1b. Cost of transportation of health workers to out-of-facility service delivery sites

1c. Cost of PHC commodities delivery

1a. Cost of commodities and supplies

The computation of costs for commodities and supplies for the ward health system should use an ingredient (bottoms-up) approach. The following formula are to be used:

Cost of commodities and supply =∑ Cost of Commodities and Supplies per Service

Cost of commodities and supply per services = PIN x∑ (Quantity of Commodity required per case x Unit price of commodity/supply)

States should first adapt the services to cost for each intervention from the list of services provided. For each service, states should do the following:

i. Estimate the **Population in Need (PIN)** that will receive each of the defined PHC services based on current PHC service utilization data. *See the previous section for the list of defined PHC services. More details on the PIN computation in the next subsection.*

ii. Adapt the **quantity of commodity required per case** across the different interventions/services. *The quantity of commodities required per case for each defined PHC services is detailed in Appendix 1 as a guide*.

iii. Adapt the **unit cost of commodities and supplies** needed (Unit cost of commodity/supply). *The States can adapt the unit cost of commodity required per case for each defined PHC services from sources such as the UNICEF supply catalogue, WHO essential drug price list, State Health Insurance Scheme drug price list.*

1a Population in Need (PIN)

The PIN is the only variable in the computation of service commodity required that needs to be computed from scratch. The answer varies from state to state based on their disease burden and service utilization data. The formula below shows how to compute the PIN.

PIN = Target Population x Incidence/Prevalence x Target Coverage x % Target coverage achieved

Description of the terms used is provided below:

Total population:

- This represents the entire persons living within a geographical area (in this case a ward). Let the projected population of a sample ward be 18,205.

Target population:

- This is where the sub-population that will receive the intervention is identified, the target population for all services in the ward health system should be identified for proper costing.

Example: Children under 5 years to receive treatment for diarrhoea is 3,641 (20% of the total population in the ward). Some other examples of the target populations to look for include the number of Pregnant women, adolescents, children aged < 1 month, children aged 0-59 months, and children aged 1-59 months.

Incidence/prevalence:

- Incidence refers to the rate of occurrence of new cases of a health condition in the target population at a given time for the intervention/services considered, while Prevalence is the total number of cases in the target population at a given time.

  Example: The annual incidence of diarrhoea is 14.3%

  NB. The prevalence rate of a given condition is preferred for the computation, where the data is not available or the disease occurs in more than one episode in a year, the incidence rate can used.

Target coverage:

- This defines the portion of the population that the Federal or State government plans to cover within the primary health care system.

  Example: the target coverage for diarrhoea treatment in children under 5 is 80%.

Target coverage achieved (service utilization):

- This defines the extent to which the target coverage has been (or will be; for future plans) attained at the Primary Health Facility levels; given retrospective service utilization data.

  Example: the proportion of target coverage reached for diarrhoea treatment in children under 5 across PHC facilities is 45%.

Illustration for the computation of PIN of diarrhoea service:

PIN = Target Population x Incidence/Prevalence x Target Coverage x % Target coverage achieved

PIN = 3,641 x 14.3% x 80% x 45%

PIN = 188

States should refer to the *National Population Statistics data* from the *Nigerian Bureau of Statistics* to validate the Total and percent Target populations and population growth rate.

States can update the incidence/prevalence data, target coverage and service utilization data (from reliable sources) to determine the population in need of the different services.

1b. Computing the transport cost for service delivery channels

Cost of transportation of health workers to out-of-facility service delivery sites = ∑Transport cost for each service delivery channel (e.g., HIV commodities, TB commodities)

Transport Cost for each service delivery channel = Number of planned health facilities x planned frequency of sessions per year x average cost of transport per session

In computing the transport cost for service delivery channels (outreach and mobile sessions), the states should:

A. Estimate the planned number of health facilities to deliver outreach and mobile session.
B. Determine the frequency of session per year. States can adapt the Reach Every District (RED) strategy.
C. Estimate the average cost of transportation per session per health facility.

1c. Computing the cost of commodity delivery across all supply chains in the ward

Total commodity delivery cost =∑cost of delivery across all supply chains in

Cost of delivery across each supply chain = Number of delivery sites x frequency of delivery x average cost of transport per delivery

In computing the transport cost for supply delivery channels (e.g., vaccine supply chain, commodity supply chain), states should consider the following:

A. Number of delivery sites: Each ward should have a focal delivery site to receive commodities from the central store. All other existing facilities will collect commodities from the focal health facility (serving as the delivery site) in the ward.
B. Frequency of delivery per year: The frequency of delivery across all existing supply chain should be identified. The goal should be to harmonize all existing supply chain channels to utilize a singular channel and frequency

for delivery. The frequency of collection by other PHC facilities in the ward should also be considered.

C. Average transport cost per delivery: Across each supply chain channel, this includes the transport cost to focal health facilities in the ward and the transport cost incurred by health workers from non-focal facilities in the ward during collection of commodities

6.1.2. Infrastructure

Every health facility in a ward should be assessed to categorize them appropriately (in-line with the revised PHC nomenclature) and determine the level of investment needed to meet the minimum number of functional health facilities required following the standard prescribed in this RWHSS document. This assessment will focus on the services delivered by the health facility - viz-a-viz, the availability of requisite health workers, infrastructure and equipment needed to deliver those services. As detailed in the previous section, the health facilities should be categorized into health outreach post, PHC Level 1, PHC level 2 or PHC level 3 based on the assessment findings.

Next, the minimum number of PHC facilities required in the ward should be determined. The minimum PHC facility requirement would consider:

1. The health outreach post, and
2. PHC level 3 nomenclatures only.

All other existing health facilities (PHC Level 1 and PHC level 2) would be systematically upgraded to meet PHC level 3 standards.

Minimum number of health outreach post per ward

Number of Health Outreach post per ward = Total number of settlements in a ward ÷ Average number of outreach post per

The total number of settlements in the ward should be identified. States can refer to their ***ward micro plans*** to infer the number of settlements therein. Given that an outreach post has a population coverage of 2,000 (lower limit) and the average population per settlement is 400 (based on the ***State's polio microplanning settlement*** data), 1 outreach post should cover an average of 5 settlements.

Minimum number of PHC level 2 facility required per ward

Number of Health PHC level 2 facility required per ward = Total population per ward ÷ Average population coverage per PHC level 2 facility

The average population coverage for a PHC level 2 facility is 20,000. The minimum number required is to be rounded up to the nearest whole number.

Overall infrastructure cost = Facility maintenance cost + Facility renovation cost + Facility upgrade cost + Facility construction cost+ Equipment gap cost

The following describes the variables in the infrastructure cost formula:
Health facility infrastructure and equipment requirements should be costed along the following categories:

i. Facility maintenance
ii. Facility renovation
iii. Facility upgrade
iv. Facility construction
v. Equipment procurement

i. Facility maintenance – Each health facility should consider a monthly cost of health facility maintenance to meet the defined minimum standards for PHCs. Key utility costs to be captured include cost of electricity, fuel and oil for power generator, water, waste management, etc.

Facility maintenance cost = Number of health facility by types x unit cost of facility maintenance per year

ii. Facility renovation - Where health facility interior and exterior do not meet the standard, the infrastructural gaps identified from the health facility assessment should be costed. Key cost elements include building painting, bathroom construction, fence construction, roof construction, gate siting, signpost erection, power generator purchase, generator house construction, sanitary waste collection point siting, staff accommodation construction, etc.

Facility renovation cost = Number of health facility by types of renovation elements required x unit cost of renovation element

iii. Facility upgrade – Where available health facility type is lower than the required type, the cost of upgrading the facility to meet the recommended standard should be computed. An upgrade may include the cost of additional rooms, staff accommodation requirement to meet the appropriate health facility type standard among others.

Facility upgrade cost = Number of additional rooms required to meet standard x unit cost of 1 additional room

iv. Facility construction – Where there is no, or insufficient number of health facilities in the ward, the cost of additional health facilities should be computed. The gap should be computed by subtracting the available health facility type from the required. Only PHC level 2 gaps should be computed.
Note: *When computing PHC level 3 gap, the sum of the available Level 1 PHCs, PHC level 2 and PHC level 3 facilities should be subtracted from the number of PHC level 3 facility required.*

Facility construction cost = Number of health facility gap by types x unit cost of health facility construction

v. Equipment procurement – Where there is no/ or insufficient number of required equipment per health facility type, the cost of the additional equipment required should be computed.

Equipment procurement cost = Number of equipment gap per health facility x unit cost of equipment

The costing for the Facility maintenance will be **recurrent** while costing for the other components will be on a **one-off** basis.

Refer to the previous section of this document to review the list of standard equipment and infrastructural requirements for each level of health facility. The unit cost for each element considered should be sourced from the state approved bill of quantity for PHC development.

6.1.3. Human resource for health

The method for computing the cost of human resource for health (HRH) will vary in the immediate versus midterm; across the recommended PHC facility levels. The Costing process will involve assessing current staff size, determining, and costing the staffing needs.

i. **Assess current staffing**
The current staff strength by cadre should be assessed for each health facility within a ward. A staff assessment checklist should be used to collect baseline HRH information – *where updated HRH database does not exist.*

ii. **Compute staffing needs**
   - Estimate the number of health care workers required by the ward.
   - Determine staffing gap

6.1.3.1 Estimating number of health care workers required per ward

The number of health workers required should be computed along with the defined PHC facility nomenclatures in the ward.

For health outreach posts, the number of health workers required is computed by multiplying the number of health workers required to manage an outreach post (2 JCHEWs) and the number of health outreach post required in the ward *(see previous subsection for computation of outreach post required per ward)*.

The minimum health workers required to keep a health facility open should be used to compute the staffing needs across PHC level 1 facilities. Multiply the number per cadre specified *(refer to the previous section for the number by cadre for PHC level 1 facility type)* by the number of available PHC level 1 facilities in the ward.

The approach for determining the required HRH for PHC level 2 facilities differs across two broad health worker categories

1. Frontline health workers: The total number of health workers needed to deliver all adopted PHC services will be computed in line with the WHO Workload Indication of Staffing Needs (WISN) approach. The cadres considered include Nurses/Midwives and CHEWs.
2. Healthcare support workers: This refers to the minimum staffing standard for support workers needed across all facility types (e.g., 2 health attendants per PHC). For each cadre involved, the standard HRH required per facility is defined across the optimal number of HFs. The cadres considered include health attendants, laboratory technicians, pharmacy technician, environmental health officers, medical record officers, general maintenance staff and security personnel, among others.

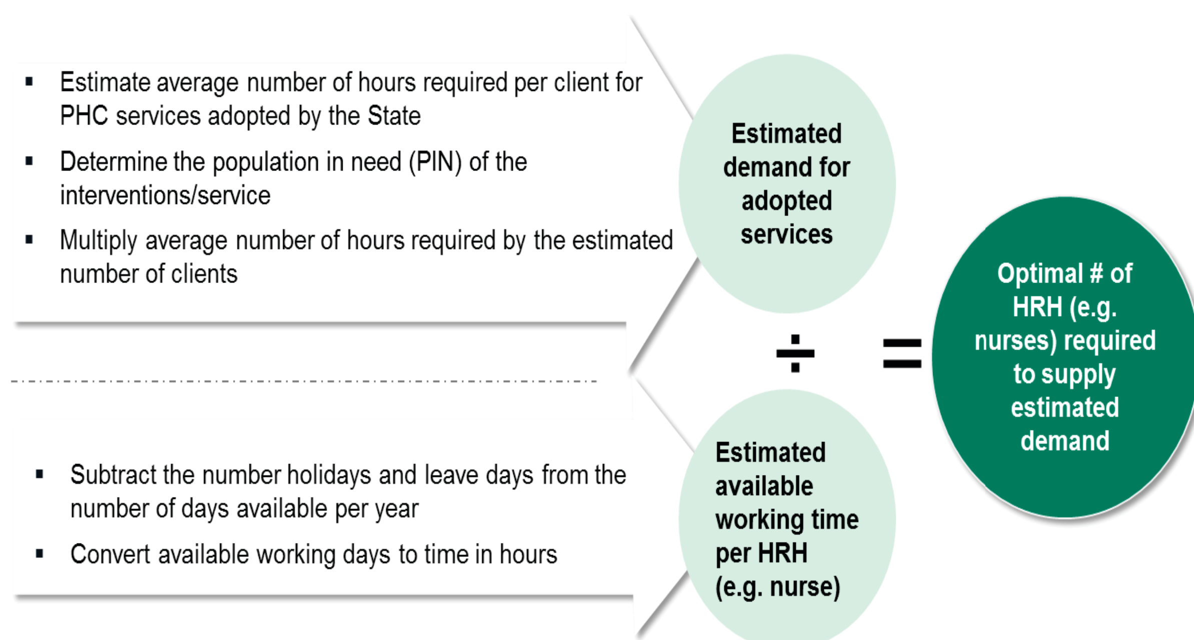
More details on the workload computation approach for determining the health worker need across PHC level 2 facilities are described below.

6.1.3.2 Steps for computing the required number of frontline health worker per cadre (e.g., nurse) – Using workload-based computation (Figure 16).

1. Estimate demand for each of the adopted services
   - Estimate average time in minutes required per client for PHC services adopted by the ward.
   - Determine the population in need (PIN) of the interventions/service.
   - Multiply the average number of hours required by the PIN to obtain the **estimated demand** for adopted services.
2. Estimate available working time per HRH (e.g., nurse)
   - Subtract the number of holidays and leave days from the number of days available per year.
   - Convert the available working days to time in minutes.

Note: The number of frontline health workers required yearly is expected to increase as the computation also considers population growth rate and increase in service utilization across the PHC facilities.

Figure 16: Steps for computing the required number of frontline health worker per cadre (e.g., nurse) – Using workload-based computation



Determine staffing gap

Staffing gap = Number of HRH required - Number of available staff

Once the minimum HRH required in the ward has been computed, the staffing gap across cadre and health facility types should be determined. Subtract the number of available staff per cadre and health facility from the minimum required to **determine staffing gap.**

iii. Costing staffing need (HRH required)

HRH cost = ∑Staffing need per cadre x Personnel cost (salary + fringe benefit + in-service training + upskilling cost)

In costing the staffing need, there are **four** key components to be considered (Table 27)

Table 27: Key components for consideration in costing staffing need

Components	Considerations
Salary	▪ All technical HW cadres are evenly spread across all grade levels within the PHC system ▪ A mid-point approach may be used in obtaining each cadre of Technical Staff's annual emoluments using the CONHESS salary scale
Fringe Benefits	▪ Compensation will be based on the current remuneration package ▪ Compensation may assume a certain percentage of current remuneration (e.g., 10%–20%).
In-service training	▪ All technical health worker cadres are eligible for upskilling ▪ Training may occur for 2 days once every 2 years
Upskilling	▪ Only frontline health workers will require training ▪ Training will cut across interventions where the health worker has been given new roles ▪ Training will occur within 3 – 5 days

Note: These considerations may be redefined to suit current situations in the state

The cost computations considered so far are 1-year costs. Applying the same principle, and considering yearly inflation rate, population growth rate and

service utilization increase where required, the cost for the outer years can be computed.

Note: The cost may be computed over the maximum of 10 years in line with the phased transition plan for the state

APPENDIX 1
ESSENTIAL MEDICINES LIST FOR PRIMARY HEALTH CARE

ESSENTIAL MEDICINES LIST								
SN	**NAME OF DRUGS**	**DESCRIPTION**	**FORMULATION**	**PRIMARY HEALTH CENTRE LEVEL 3**	**PHC CENTRE LEVEL 2**	**PRIMARY HEALTH CARE CENTRES LEVEL 1**	**PRIMARY HEALTH POSTS**	**HOUSEHOLD LEVEL**
1	**ANAESTHETICS (LOCAL)**							
1.1	Lidocaine	Injection Topical,	**Injection:** 1%, 2% + epinephrine (adrenaline) 1:200,000, vial	X	X	X		
			Cream or ointment: 2 - 5%		X			
			Gel or solution: 2 - 4%		X			
2	**ANALGESICS**							
	Acetylsalicylic Acid*	Tablet		X	X	X		
2.1	Ibuprofen	Capsule Tablet,	**Capsule/tablet:** 200 mg and 400 mg	X	X	X	X	
2.2	Paracetamol	Oral liquid, tablet, suppository	**Oral liquid**:125 mg/5 Ml	X		X	X	X
			Suppository:100 mg					
			Tablet:125mg,500 mg					X
			Injection:150 mg/mL					
	***Not for children, use with caution in adults**							
3	**ANTI-ALLERGICS**							
3.1	Chlorphenamine	Oral liquid, tablet	**Tablet**: 2mg	X		X		
3.2	Hydrocortisone	Tablet, Injection vial, cream	**Tablet**: 5mg, 10mg, 20mg **Powder for Injection**: 100mg, 250mg,500mg, 1g **Cream**: 1%	X		X		
3.3	Promethazine	Tablet, oral liquid, Injection	**Tablet**: 12.5mg, 25mg **Oral suspension**: 25mg/ml,50mg/5ml,50mg/ml, 6.25mg/ml25mg/25ml **Injection**: 25mg/ml	X		X		

ESSENTIAL MEDICINES LIST								
SN	**NAME OF DRUGS**	**DESCRIPTION**	**FORMULATION**	**PRIMARY HEALTH CENTRE LEVEL 3**	**PHC CENTRE LEVEL 2**	**PRIMARY HEALTH CARE CENTRES LEVEL 1**	**PRIMARY HEALTH POSTS**	**HOUSEHOLD LEVEL**
4	**ANTICONVULSANTS**							
4.1	Diazepam**	Injection	**Injection:** 5 mg/mL in 2-mL ampoule	X		X		
4.2	Paraldehyde	Injection	**Injection: 5ml, 10 ml**					
4.3	Phenobarbital**	Tablet	**Tablet:** 15 mg, 30 mg, 60 mg	X		X		
		**Use with extra caution						
5	**ANTIDOTES/ANTIVENOM**							
5.1	Atropine	Injection	**Injection:** (sulphate), 1 mg in 1-mL ampoule 0.6mg in 1-ml ampoule	X		X		
5.2	Charcoal (activated)	Powder	**Tablet:** 1 g **Powder/granules:** 5 g sachet	X		X		
5.3	Polyvalent anti snake venom			X				
6	**ANTIHYPERTENSIVE MEDICINES**							
6.1	Amlodipine	Tablet	**Tablet:** 5 mg,10mg	X				
6.2	Amiloride	Tablet	**Tablet:**5mg, 10mg					
6.3	Amiloride + hydrochlorothiazide	Tablet	**Tablet:**5mg, 10mg	X				
6.4	Hydrochlorothiazide	Tablet	**Tablet** :25mg, 50mg,100m**g** **50mg/5ml**	X				
7		**ANTI-DIABETIC MEDICINES**						
7.1	Metformin	Tablet	Tablet 250mg, 500mg	**X**				
7.2	Glibenclamide	Tablet	Tablet 5mg	**X**				
		*** Not for children**						

ESSENTIAL MEDICINES LIST								
SN	**NAME OF DRUGS**	**DESCRIPTION**	**FORMULATION**	**PRIMARY HEALTH CENTRE LEVEL 3**	**PHC CENTRE LEVEL 2**	**PRIMARY HEALTH CARE CENTRES LEVEL 1**	**PRIMARY HEALTH POSTS**	**HOUSEHOLD LEVEL**
8	**ANTI-INFECTIVE MEDICINES**							
8.1	***Antibacterial medicines***							
8.1.1	Amoxicillin	Capsule, dry powder for suspension, dispersible tablets	**Capsule:** (trihydrate),250mg; 500 mg	X	X	X	X	
			Dispersible tablet: 125mg, 250 mg		X			X
			Injection: (sodium salt),500 mg, vial **Powder for oral liquid:** (trihydrate), 125 mg/5 mL					
8.1.2	Ampicillin	Capsule, Injection	**Capsule** 250mg, 500mg **Injection:** Powder for Injection 1g	X		X	X	
8.1.3	Azithromycin	Tablet, Powder for Oral Suspension	**Tablet** 500mg, Oral Suspension	X		X		
8.1.4	Benzathine Penicillin	Injection	**Injection powder**: equivalent to 720 mg (1.2 million units) Vial	X		X		
8.1.5	Benzyl penicillin	Injection	**Injection powder:** (sodium or potassium salt), 600 mg (1 million units)	X		X		
8.1.6	Ciprofloxacin	Tablet	**Tablet 500mg Ear drop 0.2% + hydrocortisone 1.0%**	X		X		

ESSENTIAL MEDICINES LIST								
SN	NAME OF DRUGS	DESCRIPTION	FORMULATION	PRIMARY HEALTH CENTRE LEVEL 3	PHC CENTRE LEVEL 2	PRIMARY HEALTH CARE CENTRES LEVEL 1	PRIMARY HEALTH POSTS	HOUSEHOLD LEVEL
8.1.7	Co-trimoxazole	Tablet, oral liquid	**Oral liquid:** sulfamethoxazole 200 mg + trimethoprim 40 mg/5 mL	X		X		
8.1.8	Ceftriaxone 1g	Injection	1 g /2ml vial	X				
8.9	Cefpodoxime	Tablet, Suspension	**Tablet**:10mg, 200mg, 300mg, 400mg **Suspension**:40mg/5ml	X		X	X	
8.1.10	Doxycycline	Tablet	Tablet 100mg	X		X		
8.1.11	Erythromycin	Tablet, suspension	**Capsule/tablet, enteric/film-coated:** (stearate or ethyl succinate), 250 mg, 500mg	X				
			Injection powder: (lactobionate), 500 mg , vial	X				
			Oral liquid: (stearate or ethyl succinate),125 mg/5 mL	X				
8.1.12	Gentamicin	Injection	**Injection:** (Sulphate), 40mg/ml in 2ml ampoule	X				
8.1.13	Nitrofurantoin	Tablet	**Tablet:** 50 mg, 100 mg	X				
8.1.14	Nystatin	Oral drops	**Oral drops** 0.3%	X		X		
8.1.15	Ofloxacin	Tablet/Capsule/ oral solution/ear drops	**Tablet/capsule** 200mg, 300mg, 400mg **Oral solution** 40mg/ml,	X				

ESSENTIAL MEDICINES LIST								
SN	**NAME OF DRUGS**	**DESCRIPTION**	**FORMULATION**	**PRIMARY HEALTH CENTRE LEVEL 3**	**PHC CENTRE LEVEL 2**	**PRIMARY HEALTH CARE CENTRES LEVEL 1**	**PRIMARY HEALTH POSTS**	**HOUSEHOLD LEVEL**
			20mg/ml,4mg/ml **Ear drop** 0.3%					
8.1.16	Phenoxymethylpenicillin	Tablet	**Powder for oral liquid 250mg / 5ml (Potassium)**	X	X			
8.1.17	Penicillin	Ointment	**Ointment** **5% ointment**	X				
8.1.18	Tetracycline * Chlortetracycline	Capsule/topical	**Capsule:** tablet, (hydrochloride), 250 mg 5% ointment	X				
8.1.19	Sulfamethoxazole + trimethoprim	Tablet	**Tablet:** sulfamethoxazole 400 mg+ trimethoprim 80 mg	X		X		
9	***Amoebicidals***							
9.1	Metronidazole	Tablet, syrup	**Tablet:** 200 mg, 400 mg Syrup: 200mg/5ml	X		X		
10	***Antihelminthics***							
10.1	Albendazole	Oral liquid, tablet	**Oral liquid:** 100 mg/5 mL **Tablet:** 200 mg	X		X		
10.2	Praziquantel	Tablet	**Tablet: 600mg**					
10.3	Pyrantel pamoate	Oral liquid, tablet	**Oral liquid:** 50mg/ml **Tablet**: 180mg (pamoate)	X				
11	***Antifilarials***							
11.1	Diethylcarbamazine	Tablet	**Tablet:** 50 mg	X				
11.2	Ivermectin	Tablet	**Tablet:** 3 mg, 6 mg	X				
	Antiretroviral drugs#							
12	***Antimalarials***							
12.1	Artemether + lumefantrine	Oral liquid, tablet	**Tablet:** 20 mg + 120 mg **Oral**:15/5ml, 3mg/ml	X		X	X	
12.2	Artesunate	Injection, Suppositories	**Injection: 60 mg/ml** **Suppositories**: 100mg	X				

ESSENTIAL MEDICINES LIST								
SN	**NAME OF DRUGS**	**DESCRIPTION**	**FORMULATION**	**PRIMARY HEALTH CENTRE LEVEL 3**	**PHC CENTRE LEVEL 2**	**PRIMARY HEALTH CARE CENTRES LEVEL 1**	**PRIMARY HEALTH POSTS**	**HOUSEHOLD LEVEL**
	Artemisinin	Injection	**Injection** : 150mg/ml					
12.3	Artesunate + amodiaquine	Tablet	**Tablet:** 25 mg + 67.5 mg, 50 mg+ 135 mg, 100 mg + 270 mg	X		X	X	
12.4	Quinine**	Injection	**Injection:** (dihydrochloride), 300 mg/mL in 2-mL ampoule	X				
12.5	Dihydroartemisinin+ piperaquine phosphate	Tablet, Oral suspension	**Tablet: 120mg + 960 mg, 40 mg + 320 mg** **Oral suspension 80ml/ 80mg +640mg**					
12.6	Pyrimethamine + sulfadoxine	Tablet, Oral liquid	**Tablet:** 25 mg + 500 mg	X		X		
13	***Anti-tuberculosis medicines***							
13.1	Ethambutol	Tablet	**Tablet:** (hydrochloride), 100 – 500 mg	X				
13.2	Isoniazid	Tablet	**Tablet:** 100 – 300 mg	X				
13.3	Pyrazinamide	Tablet	**Tablet:** 400 mg	X				
13.4	Rifabutin	Capsule, tablet	**Capsule:** 150 mg	X				
13.5	Rifampicin	Capsule, tablet	**Capsule/tablet:** 150 mg, 300 mg	X				
14	***Antileprosy***							
14.1	*Dapsone*	Tablet	**Tablet:** 100mg	X				
14.2	Clofazimine	Tablet	**Tablet** :50mg	X				
14.3	Minocycline	Tablet	**Tablet:** 50mg, 75mg, 100mg	X				

ESSENTIAL MEDICINES LIST								
SN	**NAME OF DRUGS**	**DESCRIPTION**	**FORMULATION**	**PRIMARY HEALTH CENTRE LEVEL 3**	**PHC CENTRE LEVEL 2**	**PRIMARY HEALTH CARE CENTRES LEVEL 1**	**PRIMARY HEALTH POSTS**	**HOUSEHOLD LEVEL**
		***Not recommended for children and pregnant women**						
		**** Intramuscular, for pre-referral treatment only**						
		***** Use only with Quinine in first trimester of pregnancy**						
14	**ANTISEPTICS AND DISINFECTANTS**							
14.1	Benzoin	Compound tincture	Compound tincture of benzoin	X		X		
14.2	Benzyl benzoate	Emulsion	**Emulsion:** 25%				X	
14.3	Chlorhexidine	Solution/gel	**Gel:** (umbilical cord application)	X		X	X	
			Solution: (gluconate), 5% for dilution					
14.4	Gentian violet							
14.5	Iodine	Solution	**Weak solution of iodine:** 1%	X		X		
14.6	Povidone iodine	Tincture	**Tincture:** 2-7%				X	
14.7	Methylated spirit	Solution	**Solution:**10%	X		X	X	
14.8	Sodium hypochlorite	Solution	**Solution:** different prep preparations with available chlorine from 1-10%	X		X		
15	**DERMATOLOGICAL MEDICINES**							
15.1	Benzoic acid + salicylic acid (Whitfield's)	Ointment	**Cream/ointment**	X		X	X	
			containing benzoic acid, 6% and Salicylic acid, 3%					
15.2	Benzoyl peroxide	Cream/gel	**Cream:** 2.5%, 5%, 10%	X		X		
			Gel: 2.5%, 5%, 10%					
15.3	Benzyl benzoate	Emulsion	**Emulsion:** 25%					

ESSENTIAL MEDICINES LIST								
SN	**NAME OF DRUGS**	**DESCRIPTION**	**FORMULATION**	**PRIMARY HEALTH CENTRE LEVEL 3**	**PHC CENTRE LEVEL 2**	**PRIMARY HEALTH CARE CENTRES LEVEL 1**	**PRIMARY HEALTH POSTS**	**HOUSEHOLD LEVEL**
15.4	Calamine lotion	Lotion	**Lotion:** Zinc oxide + 0.5% ferric oxide	X		X	X	
15.5	Gentamicin	Ointment	**Ointment:** 0.1%					
15.6	Griseofulvin	Ointment/cream	**Ointment:** 5% **Cream:** 1%					
15.7	Methyl salicylate	Ointment	**Ointment/liniment:** 4 - 20%	X		X	X	
15.8	Neomycin + Bacitracin	Ointment, powder	**Ointment:** 5mg neomycin + 500 bacitracin zinc/g **Powder**	X				
15.9	Nystatin	Ointment, cream	**Cream: 100,000 USp unit**	X				
15.9	Zinc oxide	Ointment	**Cream: 100g**	X		X		
15.10	Zinc oxide plaster	Dressing					X	
16	**MEDICINES AFFECTING THE BLOOD**							
16.1	Iron Tablets	Oral liquid, tablet	**Tablet :** 200mg **Oral suspension :** 400 unit/2ml	X		X	X	
16.2	Folic acid	Tablet	**Tablet:** 5 mg	X		X	X	
17	**DRESSINGS AND MEDICAL DEVICES**							
17.1	Absorbent gauze bandages		Dressing	X		X	X	
17.2	Cotton wool (absorbent)			X		X	X	
17.3	Disposable gloves			X		X	X	
17.4	Disposable syringes	2 mL with needles (19, 21Gauge) 5 mL with needles (19, 21 Gauge)		X		X		

ESSENTIAL MEDICINES LIST								
SN	**NAME OF DRUGS**	**DESCRIPTION**	**FORMULATION**	**PRIMARY HEALTH CENTRE LEVEL 3**	**PHC CENTRE LEVEL 2**	**PRIMARY HEALTH CARE CENTRES LEVEL 1**	**PRIMARY HEALTH POSTS**	**HOUSEHOLD LEVEL**
17.5	Elastic plaster dressings			**X**		**X**	**X**	
18	**EAR, NOSE AND THROAT MEDICINES**							
18.1	Chloramphenicol	Ear drops Ointment	**Ear drops:** 0.5%,5% **Ointment:** 0.1%, 1%	**X**		**X**		
18.2	Gentamicin	Eye/Ear Ointment	**Ear drops:** 0.3% **Ear Ointment:**	**X**	**X**		**X**	
19	**GASTRO-INTESTINAL MEDICINES**							
19.1	Hyoscine N-butylbromide	Tablet Oral liquid	10mg, 2Omg 1mg/ml	**X**		**X**		
19.2	Magnesium trisilicate	Compound tablet, oral liquid	**Mixture:** 250 mg/5 mL	**X**		**X**		
			Tablet: 500 mg					
19.3	Oral Rehydration Salts	Low Osmolarity Oral Rehydration Salts, co-packed with Zn	**Low Osmolarity Oral Rehydration Salts, co-packed with zinc sulphate tablets:** 20.5 g ORS (sodium chloride)	**X**		**X**	**X**	
			2.6 g, potassium chloride 1.5 g, sodium citrate 2.9 g, dextrose 13.5 g) + 20 mg dispersible zinc sulfate					
19.4	Zinc gluconate	Oral liquid, dispersible tablet	**Oral liquid**: 12g/60ml **Dispersible tablet**: 20, mg, 20mg	**X**		**X**	**X**	
20	**HORMONES AND SYNTHETIC SUBSTITUTES**							
20.1	Barrier methods	Male and female Condoms with or without spermicide		**X**		**X**	**X**	

ESSENTIAL MEDICINES LIST								
SN	**NAME OF DRUGS**	**DESCRIPTION**	**FORMULATION**	**PRIMARY HEALTH CENTRE LEVEL 3**	**PHC CENTRE LEVEL 2**	**PRIMARY HEALTH CARE CENTRES LEVEL 1**	**PRIMARY HEALTH POSTS**	**HOUSEHOLD LEVEL**
20.2	IUCDs	Copper, Lipple's loop						
20.3	Implants	Levonorgestrel, Etonogestrel releasing						
20.4	Injectables	Levonorgestrel, Medroxyprogesterone acetate, Norethisterone enantate						
20.5	Ethinylestradiol + Levonorgestrel	Tablet	**Tablet:** 30mcg + 150mcg	X				
21	**OPHTHALMOLOGICAL MEDICINES**							
21.1	Chloramphenicol	Eye drops, ointment	**Eye drops:** 0.5% **Eye ointment:** 1.0%	X		X		
21.2	Tetracycline	Eye ointment	Ointment: 1%	X		X		
22	**OXYTOCICS**							
22.1	Ergometrine	Tablet, Injection	**Injection:** (maleate), 0.5 mg/mL **Tablet:** (maleate), 500 micrograms	X		X		
22.2	Misoprostol	Tablet, vaginal tablet	**Tablet:** 200 micrograms	X		X	X	X
22.3	Oxytocin	Injection	**Injection:** 5 units, 10 units / mL in ampoules	X		X		
23	**PSYCHOTHERAPEUTIC MEDICINES**							
23.1	Chlorpromazine	Injection Oral liquid	25mg/ml in 2ml ampoule 25mg/5ml	X				

ESSENTIAL MEDICINES LIST								
SN	**NAME OF DRUGS**	**DESCRIPTION**	**FORMULATION**	**PRIMARY HEALTH CENTRE LEVEL 3**	**PHC CENTRE LEVEL 2**	**PRIMARY HEALTH CARE CENTRES LEVEL 1**	**PRIMARY HEALTH POSTS**	**HOUSEHOLD LEVEL**
		Tablet	100mg					
24	**RESPIRATORY AND EMERGENCY MEDICINES**							
24.1	Adrenaline	Injection	**Injection**: 1mg/ml	X				
24.2	Aminophylline	Tablet, Injection	**Tablet**: 100mg, **Injection:** 25mg/ml hydrate	X				
24.3	Beclomethasone	Inhaler	40mcg/actuation, 250mcg	X		X		
24.4	Betamethasone	Tablet, Injection	**Injection** : 100mg/10ml, 4mg/ml **Soluble solution** : 5000ug	X				
24.5	Dexamethasone	Tablet	**Table**t: 1mg, 4mg, 0.5mg **Injectionection**:1mg/ml, 4mg/ml, 8mg/ml, 10mg/ml	X				
24.6	Hydrocortisone	Tablet	**Tablet**: 5mg, 10mg, 20mg **Solution for Injection**:500mg/5ml **Powder for Injection**: 100mg	X				
24.7	Salbutamol	Tablet, Inhaler	Tablet: 2mg Inhaler: 100mcg/dose	X		X		
24.8	IVF	Ringer's Lactate Normal saline Dextrose saline 5% Dextrose Paediatric saline	500ml, 1L 500ml, 1L 500ml, 1L, 500ml, 1L 500ml, 1L	X				
28	**VITAMINS, MINERALS AND SUPPLEMENTS**							
28.1	Ascorbic acid (Vitamin C)	Tablet	**Oral liquid:** 100 mg/5 mL **Tablet:** 100 mg	X		X		
28.2	Calcium gluconate	Injection	**100mg/ml in 10ml ampoule**	X				

ESSENTIAL MEDICINES LIST								
SN	**NAME OF DRUGS**	**DESCRIPTION**	**FORMULATION**	**PRIMARY HEALTH CENTRE LEVEL 3**	**PHC CENTRE LEVEL 2**	**PRIMARY HEALTH CARE CENTRES LEVEL 1**	**PRIMARY HEALTH POSTS**	**HOUSEHOLD LEVEL**
28.3	Calcium lactate	Capsule	**Capsule**: 650mg	X		X		
28.4	Vitamin A	Capsule	100,000iu, 200,000iu	X		X		
28.5	Vitamin B complex	Tablet, Injection	**Tablet :** 10/4/40/4mg/ampoule **Injection :** 100/2/100/2/2mg/ml	X				
28.6	Vit. K1 (Phytonadione) Prophylaxis for Haemorrhagic Disease of Newborn (HDN)	Injection	**Injection:**2mg/ml	X		X		
28.7	Micronutrient powder	Satchet		X		X	X	
28.8	Ready to use therapeutic food	Satchet		X		X		
29	**MISCELLANEOUS**							
29.1	Water for Injection	Injection	**Injection :** 2 ml, 5 mL, 10 mL, 20 mL, 50-	X		X		
			ml ampoule or, vial	X		X		
29.2				X				
	Acetic acid	**3-5%**		X				

#List of anti-retroviral drugs

Tenofovir+Lamivudine+ Efavirenz	**Tablet:** 300mg+300mg+600mg.
Tenofovir+Lamivudine+ Efavirenz	**Tablet:** 300mg+300mg+400mg.
Tenofovir+Lamivudine+ Dolutegravir	**Tablet:** 300mg+300mg+50mg.
Abacavir+Efavirenz+ Lamivudine	**Tablet:** 600mg+300mg+600mg.
Abacavir+ Lamivudine	**Tablet:** 60mg(sulfate)+30mg; 120mg (sulfate)+60 mg.
Lamivudine+Nevirapine+ Zidovudine	**Tablet:** 30 mg+50mg+60mg.
Lamivudine+Nevi+Zidovudine	**Tablet:** 300 mg+150 mg+200mg.
Lamivudine+Zidovudine	**Tablet:** 30mg+60 mg.

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