MINISTRY OF HEALTH
AND SANITATION
THE REPUBLIC OF SIERRA LEONE

NATIONAL PRIMARY HEALTH CARE OPERATIONAL HANDBOOK

DIRECTORATE OF PRIMARY HEALTH CARE

NATIONAL PRIMARY HEALTH CARE

OPERATIONAL HANDBOOK

MARCH 2021

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ABC	Activity-Based Costing
ADC	Area Development Committee
ANC	Antenatal care
ARIs	Acute Respiratory Infections
AVHF	Acute Viral Haemorrhagic Fever
BECE	Basic Education Certificate Examination
BEmONC	Basic Emergency Obstetric and Newborn Care
BPEHS	Basic Package of Essential Health Services
CARMMA	Campaign for the Accelerated Reduction of Maternal Mortality in Africa
CBHMIS	Community-Based Health Management Information System
CBIS	Community-Based Information Systems
CBS	Community-Based Surveillance
CEmONC	Comprehensive Emergency Obstetric and Neonatal Care
CHA	Community Health Assistant
CHC	Community Health Centre
CHIS	Community Health Information System
CH0	Community Health Officer
CHP	Community Health Post
CHW	Community Health Worker
CM0	Chief Medical Officer
CMR	Child Mortality Rate
CMS	Central Medical Store
CPR	Contraceptive Prevalence Rate
CQI	Continuous Quality Improvement
CRPD	Convention on the Rights of Persons with Disabilities
CRVS	Civil Registration and Vital Statistics
CSOs	Civil Society Organizations
DFN	Directorate of Food and Nutrition
DFR	Directorate of Financial Resources
DHIS	District Health Information System
DHMT	District Health Management Team
DHRH	Directorate of Human Resources for Health
DHS	District Health System
DHSE	Directorate of Health Security and Emergencies
DM0	District Medical Officer
DMS	District Medical Store
DOTS	Directly Observed Therapy, Short Course
DPC	Disease Prevention and Control
DPHC	Directorate of Primary Health Care
DPHS	District Public Health Superintendent
DPI	Directorate of Planning and Information
DPPI	Directorate of Policy, Planning and Information
DRE	Digital Rectal Exam
DHRH	Directorate of Human Resources for Health
DTC	Drug and Therapeutic Committee

ECD	Early Childhood Development
eHA	eHealth Africa
EmONC	Emergency Obstetric and Newborn Care
ENT	Ear, Nose and Throat
EPI	Expanded Programme on Immunization
EVD	Ebola Viral Disease
FANC	Focused Antenatal Care
FBO	Faith-based Organizations
FGM/C	Female Genital Mutilation/Cutting
FIFO	First In, First Out
FHCI	Free Health Care Initiative
FMC	Facility Management Committee
FP	Family Planning
GAM	Global Acute Malnutrition
GBV	Gender-Based Violence
GoSL	Government of Sierra Leone
HAIs	Healthcare Associated Infections
HIS	Health Information System
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information System
HRH	Human Resources for Health
HSRP	Health Sector Recovery Plan
HTS	HIV testing services
iCCM	Integrated Community Case Management
IDSR	Integrated Disease Surveillance and Response
IEC	Information Education Communication
IHP	International Health Partnership
IHPAU	Integrated Health Projects Administrative Unit
IHR	International Health Regulations
IMCI	Integrated Management of Childhood Illnesses
IMNCI	Integrated Management of Newborn and Childhood Illnesses
IMR	Infant Mortality Rate
IP	Implementing Partner
IPC	Infection Prevention and Control
IPT	Intermittent Preventive Treatment
ISSV	Integrated Supportive Supervision Visit
ITN	Insecticide-treated Nets
IUD	Intrauterine Device
JSS	Junior Secondary School
KAP	Knowledge, Attitudes and Practices
KPI	Key Performance Index
LBW	Low Birth Weight
LLINs	Long-Lasting Insecticide-treated Nets
MAM	Moderate Acute Malnutrition
MCHA	Maternal and Child Health Aides
MCHP	Maternal Child Health Posts
MDA	Mass Drug Administration
MDSR	Maternal Death Surveillance and Response
MEST	Ministry of Education Science and Technology

MHPSS	Mental Health and Psychosocial Support
MICS	Multiple Indicator Cluster Survey
MIYCF	Maternal Infant and Young Child Feeding
M&E	Monitoring and Evaluation
MMR	Maternal Mortality Rate
MNCH	Maternal, Newborn and Child Health
MoHS	Ministry of Health and Sanitation
MSG	Mothers' Support Group
MSM	Men who have sex with men
MTNDP	Medium-Term National Development Plan
MUAC	Mid-Upper Arm Circumference
NCDs	Non-Communicable Diseases
NCRA	National Civil Registration Authority
NEMS	National Emergency Medical Services
NGOs	Non-Governmental Organizations
NHISS	National Health Information Systems Strategy
NHSRP	National Health Sector Recovery Plan
NHSSP	National Health Sector Strategic Plan
NIDs	National Immunization Days
NMCP	National Malaria Control Programme
NMSA	National Medical Supplies Agency
NMTDP	National Medium-Term Development Plan
NNT	Neonatal Tetanus
NTD	Neglected Tropical Disease
OPD	Outpatient Department
PAC	Post-Abortion Care
PFA	Phycological First Aid
PHC	Primary Health Care
PHEIC	Public Health Emergencies of International Concern
PHU	Peripheral Health Unit
PHWS	Patient and Health Worker Safety
PMTCT	Prevention of Mother-to-Child Transmission
PNC	Postnatal Care
PPP	Public-Private Partnership
PRM	Physical and Rehabilitation Medicine
QCI	Quality of Care Improvement
QA/QI	Quality Assessment/Quality Improvement
RAAB	Rapid Assessment of Avoidable Blindness
RMNCAH	Reproductive Maternal, Newborn, Child and Adolescent Health
RRIV	Reports Request and Issue Voucher
SAM	Severe Acute Malnutrition
SARA	Service Availability and Readiness Assessment
SCD	Standard Case Definition
SDGs	Sustainable Development Goals
SECHN	State-Enrolled Community Health Nurse
SGBV	Sexual and Gender-Based Violence
SLDHS	Sierra Leone Demographic Health Survey
SLeSHI	Sierra Leone Social Health Insurance

SOP	Standard Operating Procedures
SOW	Scope of Work
STIs	Sexually Transmitted Infections
TB	Tuberculosis
TBA	Traditional Birth Attendant
TMPs	Traditional Medicine Practitioners
TOR	Terms of Reference
TT	Tetanus Toxoid
TWG	Technical Working Group
U5MR	Under-Five Mortality Rate
UHC	Universal Health Coverage
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
VCCT	Voluntary Confidential Counselling and Testing
VDC	Village Development Committee
WASH	Water, Sanitation and Hygiene
WHO	World Health Organization
WHO AFR0	WHO Regional Office for Africa
WHO LMIS	WHO Logistics Management and Information System,
WHO mhGAP	WHO Mental Health Gap Action Programme,
WHO PEN	WHO Package of Essential Noncommunicable Disease Interventions

FOREWORD

Over the past four decades and more, Sierra Leone has made steady progress in mainstreaming and strengthening Primary Health Care (PHC) with the planned introduction of PHC services. However, there remains a huge unfinished business as we usher in the Universal Health Coverage (UHC) and Sustainable Development Goals (SDGs). Recently the Government of Sierra Leone has launched the UHC Roadmap for achieving UHC and SDG. Achieving these goals requires a strong, efficient and sustainable health system which encompasses a strong Primary Health Care (PHC) as its foundation. PHC is the most equitable, effective and efficient approach to enhance people's physical and mental health, as well as social well-being.

Our commitment for PHC goes back to the eighties following the Alma-Ata Declaration in 1978 where Sierra Leone participated. The Government of Sierra Leone subsequently made a determined effort to implement the ideals of PHC by parliamentary ratification and by the establishment of the Directorate of Primary Health Care (DPHC) to oversee all PHC programmes in the country. Forty years after the Alma-Ata Declaration, Sierra Leone through its high-level delegation, was again part of the 2018 conference of PHC in Astana, Kazakhstan and reaffirmed its commitment to act on the demands of the PHC declaration

Successful operationalization of PHC ideals in Sierra Leone requires full understanding among the health workforce, of the PHC system and the essential packages of promotive, preventive, curative, rehabilitative and palliative health services to be delivered to all people keeping the standards and norms for quality of care at the best possible. For this purpose, the Ministry of Health and Sanitation revised the 2004 national PHC Operational Handbook.

This PHC handbook is aligned with the current health sector policies, strategies and incorporates up to date standard guidelines and protocols across all programs to serve as a reference and guide for District Health Management Teams, Local Councils, program managers, service providers and implementing partners during planning, provision of PHC services, community engagement and ownership by citizens on matters related to health and wellbeing. Availing the PHC operational handbook to all actors of PHC and the proper use of it by all, will create a fertile ground to implement PHC in a harmonised and standardised manner.

On behalf of the Ministry Health and Sanitation I wish to extend my appreciation to the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF), the Foreign, Commonwealth and Development Office of the Government UK, and other development partners for their untiring efforts in the revision and production of the National PHC operational handbook. Special thanks also go to all staff from the Ministry of Health and Sanitation at all levels for their contribution, more so with staff and the leadership of the Directorate of Primary Health Care Services.

Hon. Dr. Dr Austin Demby

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Minister of Health & Sanitation

REMARKS

To advance the implementation of PHC, Sierra Leone has developed a PHC handbook as early as in 1987, which was revised in 1990, 1997 and 2004. The PHC handbook is a critical document for guiding the implementation of current PHC policies and strategies as well as sub-regional and global developments in the public health care arena for Sierra Leone. The Ministry of Health and Sanitation has again revised the 2004 operational handbook to guide PHC actors in Sierra Leone.

This handbook has been revised following the 2018 Astana Declaration on PHC in the context of the 21st century, after 40 years of the Alma-Ata declaration, and 2019 Cotonou Declaration on Community Component of PHC in the Central and West African Region where Sierra Leone has affirmed its commitment to translate them into action through its revised health sector policies and strategies. Sierra Leone has recently launched a national UHC Roadmap and we believe that the achievement of UHC and SDGs will depend largely on a strong, efficient, effective, and sustainable PHC system with a well informed and evidence-oriented workforce including health managers.

This operational handbook is a tool for the Ministry of Health and Sanitation including District Health Management Teams to streamline the structures and mechanisms for management, coordination, collaboration, networking and community engagement, focusing on the common targets, feeding into continuous improvement of performance and hence of health outcomes. Moreover, it will guide PHC service managers and providers to work within the community partnership approach to enable clients, households and communities increase their control over their situations through more informed decisions and actions.

The Ministry of Health and Sanitation is committed to make the operational handbook available with full trust that it will be used by all who are working to advance Primary Health Care in Sierra Leone.

Rev. Canon Dr. Thomas T. Samba (MD, MPH,FWACP)

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Chief Medical Officer

ACKNOWLEDGEMENTS

The process of revision of the Primary Health Care (PHC) operational Handboook was participatory: A National Steering Committee meeting followed by consultative meetings at subnational and national levels with participation of representatives of PHC key actors from the 16 District Health Managaements Teams, local Councils, Paramount Chiefs Peripheral Health Units, UN Agencies and NGO Partners. The handbook was finally validated at a national level.

Many contributed to the development of this operational handbook; Supported by an international consultant from WHO and local consultant from UNICEF, a national working team drawn from programs of the Ministry of Health and Sanitation and PHC partners have worked to produce this handbook. My special thanks to these team members which include Consultants Prof. Dan Kaseje (as the International Consultant) and Dr. Noah Conteh (as local Consultant), National Community Health Workers' Services (CHW) Coordinator- Ms Elizabeth Musa, Dr. Alhassan Seisay, Dr. Alhassan Fouard Kanu, National CHW Regional Coordinators: Sr. Fanta Amara, Zainab Bangura, Mr. Mohamed Marrah M & E Officer of the Directorate of PHC Services from the Ministry of Health and Sanitation, Dr. Hailemariam Legesse from UNICEF, Mr. Selassi Amah D' ALMEIDA from WHO for their technical contribution during the preparation of the Handbook.

I extend my special appreciation to the World Health Organization and the United Nations Children's Fund for their support from initiation to the finalization of revision of the operational handbook. Special thanks also go to the Foreign, Commonwealth and Development Office for the generous support without which the completion of the PHC handbook would not have been realized. We recognise and appreciate Sight Savers for their support in funding the retreat workshop for the development of the Roadmap for the PHC Operational Handbook in 2019.

Finally, many thanks to all Directorates and Programs of the Ministry of Health and Sanitation, representatives of DHMTs, Local Councils, Paramount Chiefs, NGOs and CSOs who contributed immensely to this Handbook during the consultative and validation meetings.

Dr. Alie H. Wurie

Alie Wurie

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Director, Primary Health Care

EXECUTIVE SUMMARY

The Primary Health Care (PHC) Handbook was last revised in 2004 and is overdue for revision to reflect the current global, regional and national policies such as the Sustainable Development Goals (SDGs), universal health coverage (UHC), the 2018 Astana Declaration, the Ouagadougou Declaration, and the Sierra Leone Medium-Term National Development Plan (MTNDP) (2019-2023) and the National Health Sector Strategic Plan (NHSSP) (2017-2022); the Free Healthcare
Initiative to deliver free care to all pregnant and lactating women, children under five and other select at-risk groups launched in 2010 to accelerate progress towards UHC.

The Health Sector Recovery Plan (2015-2020) focused attention and investments on the most pressing issues facing the sector, applying the lessons learnt from the tragic disaster of the Ebola epidemic in 2014-2015. There is a keen interest in leveraging the resources and experience of the Ebola epidemic to make significant strides towards UHC by enhancing the population's access to health care across all stages of the life cycle.

PHC is essential health care, based on practical, scientifically sound and socially acceptable methods and technology, made universally accessible to individuals and families in the community through their full participation and at a cost that the community and country can afford to maintain at every stage of their development, in a spirit of self-reliance and self-determination. The Government of Sierra Leone (GOSL) made a determined effort to implement the ideals of PHC by parliamentary ratification and by the establishment of the Directorate of Primary Health Care (DPHC) to oversee all PHC programmes.

This Revised Handbook is a tool for the DPHC to streamline the structures and mechanisms for management, coordination, collaboration, networking and community engagement, focusing them on the common targets, feeding into continuous improvement of performance and hence of health outcomes. This is achieved through synchronizing efforts to produce optimum results by enabling better implementation of PHC policies and strategies.

It is intended to help service managers and providers to work within the community partnership approach to enable clients, households and communities increase their control over their situations through more informed decisions and actions. This would empower both communities and providers to improve health care at all levels, with an enhanced effective demand for quality care, with mutual accountability for better health for all.

The vision of PHC is that it provides efficient, basic essential, integrated, high-quality services that are accessible to everybody, especially the most vulnerable, in order to contribute to the achievement of the Sustainable Development Goals (SDGs) and to the aspiration of Sierra Leone to be a middle-income economy by 2030. The objectives of PHC articulated in this Handbook include the following goals:

1. Promote effective leadership and accountability in the governance and management of health systems

2. Deliver high impact, high-quality, safe integrated, affordable and equitable essential care for all
3. Generate information to monitor progress in PHC and emergency preparedness
4. Promote health-care financing approaches that enhance UHC and social protection
5. Promote inclusive community engagement in decisions and actions for health
6. Accelerate the development, management and retention of skilled PHC manpower
7. Ensure coordination of activities and feedback mechanisms within decentralization

Although key health indicators improved between 1999 and 2013, Sierra Leone still has some of the poorest maternal and child health outcomes in the world, with the highest maternal mortality ratio of around 1,165 deaths per 100,000 live births; and non-communicable diseases, including mental ill-health and physical disabilities. The country remains under constant threat of outbreaks such as Ebola, yellow fever, meningitis, lassa fever and cholera. In response the Handbook summarizes the priority focus at the primary-care level for reducing preventable maternal, neonatal and child mortality, and for improving nutrition, water, sanitation and hygiene, oral health, ear nose and throat and eye health services.

The Handbook is an operational PHC guide for service providers and managers in the implementation of these priorities. It articulates and renews commitment to the PHC principles of equity and social justice; to an assets-based approach emphasizing the contribution and engagement of communities and service consumers as partners in the delivery of a high impact, high quality, integrated essential care package, and thus ensures ownership and self-reliance; to an intersectoral partnership and collaboration; to sustainability; and to use of appropriate technologies by a skilled, compassionate workforce.

The Handbook also provides a framework for the coordination of PHC services decentralized to the district councils. It outlines the community engagement processes, community entry, the organization into health units, governance and linkage to the health system through health committees. It describes leadership and governance formation, composition, roles and functions at each node of engagement.

Effective engagement of the community rests on four key interlinked principles: legitimacy of governance, inclusive participation, social capital and a capacity-based approach to engagement. It is the application of these principles that enables communities to strengthen their role in health as equal partners based on their capacities, such as their knowledge, experience, skills, resources and practices.

Evidence indicates that households are the majority financiers of the health system, as more than two thirds of the total health expenditure (72 per cent) comes from out-of-pocket payments for services by households. They therefore deserve to be recognized partners in decisions and actions for health as significant investors in health. It also describes the identification, training and deployment of community level workforce,

which include Community Health Workers (CHWs) and traditional medicine practitioners (TMPs).

It involves all partners in implementing, monitoring and evaluating the plans and budgets prepared at each nodal level, and includes all stakeholders in all the steps of the planning cycle linked to the district and national planning processes. The operational plans provide frameworks for integrated supportive supervision, performance management, monitoring and evaluation using data from the community and health management information system.

The Handbook defines levels of service delivery in primary health care, the functions and therefore the required staffing, physical facilities for each level, norms and standards, as well as the required referral system to ensure continuum of care. It outlines a framework for continuous quality improvement focusing on the patient-centred approach. It summarizes the guidelines for health worker and patient safety through effective infection prevention and control (IPC) at all levels of the health system. It outlines Integrated Disease Surveillance and Response (IDSR) at all levels of the health system.

It also outlines the roles and functions of hospitals in PHC which include service delivery and a leadership role in the following spheres: integrated supportive supervision, quality assurance, capacity-building and mentorship for task-shifting and task-sharing as the disease spectrum changes, expanding specialized care through mobile services and the application of information technologies.

The Handbook outlines resources for PHC: 1. PHC financing sources and mechanisms that promote universal health coverage (UHC) ensuring social protection, financial controls and accountability in the health sector; 2. It outlines the induction and reorientation of a District Health Management Team (DHMT) and peripheral health units' (PHU) personnel to PHC to enable them to implement tasks according to the guidelines. It provides guidance on staff motivation and relations at the workplace; and 3. It explains the selection and procurement of drugs and medical supplies, their distribution and warehousing, and the digitalization of the supply chain information system for effective inventory management.

Implementation of the Handbook's guidelines and contents will be undertaken through induction, and the training of DHMT and PHU managers as trainers in the roll-out of the PHC, according to the Revised Handbook. The training of trainers will lead to the launching of the Revised Handbook in districts as they become ready and interested in implementing the revised guidelines, with targeting of all the 16 districts in 2020.

Rev. Dr. Thomas T. Samba
Chief Medical Officer

Chapter l
INTRODUCTION AND BACKGROUND

1. Introduction

Sierra Leone is a signatory to the famous declaration "Health for All by the Year 2000", formulated at the World Health Organization (WHO)/United Nations Children's Fund (UNICEF) conference at Alma Ata in 1978, using Primary Health Care (PHC) as the strategy. As per the Alma Ata Declaration, primary health care is:

> "Essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination. It forms an integral part both of the country's health system, of which it is the central function and main focus, and of the overall social and economic development of the community. It is the first level of contact of individuals, the family and community with the national health system bringing health care as close as possible to where people live and work, and constitutes the first element of a continuing health care process".

The principles of PHC, as highlighted in the Alma Ata Declaration, are equitable and accessible distribution, community involvement, a focus on prevention and control, appropriate technology, a multisectoral approach, sustainability and constant monitoring.

PHC services in Sierra Leone were flagged after consideration of the Alma Ata Declaration by the Parliament of Sierra Leone. Since then a determined effort has been underway to implement the ideals of PHC. This commitment to PHC was demonstrated by the parliamentary ratification of the "Health for All by the Year 2000" pledge in the 1980s. This was followed by the establishment of the National PHC Steering Committee and the subsequent creation of the DPHC to oversee all PHC programmes, such as the following: malaria control, leprosy/tuberculosis, STIs/ Human Immunodeficiency Virus (HIV)/AIDS, onchocerciasis/NTD Mental Health Expanded Programme on Immunization and Integrated Management of Childhood Diseases programmes, among others.

The implementation of PHC services was hampered, among other factors, by a multiplicity of vertical programmes in the 1980s/1990s, the devastating civil war of 1991 to 2002 and, more recently, by the Ebola epidemic in 2014-2015.

As a result of these events, MoHS developed national health sector recovery plans that had the overall goal of enhancing population access to health care across all stages of the life cycle and consolidating service delivery at PHC levels of care in order to improve productivity. The goal was to reduce poverty, hunger and child and maternal deaths, and to improve education performance. The PHC approach is an effective means for bringing

about improvement in health and contributing to general socio-economic development.

1.2 The purpose, scope, audience and organization of the Handbook

1.2.1 The purpose and scope

Emerging issues at the global, regional and national levels—such as the SDGs, the Universal Health Coverage, International Health Regulation, the 2018 Astana Declaration, the Sierra Leone Medium-Term National Development Plan (2019-2023) and the recent National Ebola Recovery Strategy for Sierra Leone (2015-2017)—are some compelling reasons for the review of the PHC Operational Handbook.

The Revised Primary Health Care Handbook seeks to reflect the contemporary policy environment and the key elements of the relevant policy guidelines targeting the operational level. The aim is to guide the front-line primary health care service providers, managers and supervisors in their implementation, monitoring and evaluation activities at all levels of primary health care. The aim is to enhance the operations of the PHC service provider at all levels.

This Revised Handbook should enable better implementation of policies and strategies, such as the Basic Package of Essential Health Services (BPEHS); Reproductive, Maternal, Neonatal Child and Adolescent Health (RMNCAH) and Nutrition, Water, Sanitation and Hygiene (WASH) and Human Resources for Health. It should assist community health workers and provide the needed competencies and standards required to implement them.

The Handbook provides a framework for service delivery, mentoring, supervision and coaching in the implementation of national health policies and strategies. The overall goal is to standardize the PHC approach in the country so that all activities are synchronized to produce optimum results.

Specifically, the Handbook seeks to:

- Update the content to reflect current national, regional and global health policies, strategies and developments.
- Guide the development and implementation of PHC services throughout Sierra Leone
- Guide the District Health Management Teams, primary health care workers, and other stakeholders in their tasks at different levels of PHC
- Outline the operational aspects of PHC — the functions and requirements, norms and standards of each service delivery point
- Establish quality assurance and improvement guidelines for PHC services
- Outline a framework for delivery of a comprehensive integrated primary health care service package
- Establish accountability structures between the community and the health system to enable effective provision and uptake of high-impact interventions
- Strengthen community-based health information system for an iterative bidirectional dialogue aimed at monitoring and evaluating continuous improvement in health outcomes

- Set out an accountability framework with targets cascaded from national plans to districts, chiefdoms, PHUs and villages
- Ensure coordination of activities within decentralization, including feedback mechanisms

1.2.2 Who are the target audiences for the Handbook?

This Handbook targets front-line service providers, managers and all key stakeholders, responsible for enhancing the provision of quality health services. The Directorate of Primary Health Care (DPHC), the District Health Management Teams (DHMTs), PHC service providers and partners will use the Handbook to reinforce PHC provision to promote universal access to quality services at primary levels of care.

The Handbook is to be used at the front lines of service delivery and management, as an operational tool to guide the implementation of the existing policies, strategies and initiatives at community, MCH post, community health post, community health centre and district hospital levels, including private and faith-based hospitals and clinics.

This Handbook is a guide both for MoHS personnel and for all stakeholders, including other ministries, departments and agencies, development and implementing partners (Ips) and civil society organizations working in the health sector.

1.2.3 The organization of the Handbook

This Handbook is organized into the following 15 chapters:

- Chapter 1 presents an introduction to PHC, its basic concepts and principles
- Chapter 2 deals with PHC services in Sierra Leone
- Chapter 3 deals with the policy environment
- Chapter 4 describes the PHC priorities in Sierra Leone based on the burden of disease and hence the core primary health-care interventions
- Chapter 5 addresses community engagement to enhance ownership and accountability
- Chapter 6 presents the guidelines for planning and implementation of PHC services the role of hospitals in PHC (responsibility for quality assurance, logistics and support supervision to ensure continuum of care and the financial implications of financing PHC).
- Chapter 7 presents the norms and standards for service delivery and a functional referral system
- Chapter 8 presents quality assurance and improvement
- Chapter 9 presents infection prevention and control
- Chapter 10 presents surveillance in PHC
- Chapter 11 presents the role of hospitals in PHC
- Chapter 12 presents financing and financial management in PHC
- Chapter 13 presents human resource management in PHC
- Chapter 14 presents drugs and supply chain management
- Chapter 15 present the health management and information system.

1.3. The context of PHC in Sierra Leone

1.3.1. Country profile

The country comprises of about 15 distinct language groups reflecting the diversity of cultural traditions. Administratively, Sierra Leone is divided into five major regions, namely Northern Province, Southern Province, Eastern Province, North-West Province and the Western Area where the capital Freetown is located. The five provinces are divided further into 16 districts, which are in turn subdivided into 190 chiefdoms, as of 2017, made up of a collective of villages. The chiefdoms are governed by local paramount chiefs. The Western Area is divided into two districts, Western Area Urban and Western Area Rural, with no chiefdoms.

With the devolution of services to local councils, the country was divided into 22 local councils which were then further subdivided into 446 wards by the Provinces Amendment Act 2017. Councils are mandated to establish a budgeting and finance committee, a development planning committee and a local technical planning committee to oversee the preparation and review of their local development plan which is reflected in national budgeting system.

The Districts Officers collaborate with paramount chiefs in the implementation of government policies.

The country went through a ruinous civil war from 1991-2002, which wreaked havoc on the social, institutions, including the health, cultural and economic systems. The Sierra Leone Demographic and Health Survey (SLDHS) 2008 and 2013 showed encouraging improvements in health indicators, but this progress was reversed by the Ebola outbreak in 2014/2015. The health workforce (doctors, nurses, midwives) to population ratio is 2:10,000, which is very low compared to the UHC recommended threshold of 45:10000. The health workforce is inequitably distributed with 50 per cent serving in the capital city, Freetown alone, where only 16 per cent of the population lives (Basic Package of Essential Health Services 2015).

The workforce is currently dominated by auxiliary-level workers, a majority of whom are unpaid, with major gaps in various essential skills. Therefore, the quality of care is poor, with grossly inadequate basic amenities and poor standards for patient and health-worker safety. In a recent assessment only 35 per cent of health facilities had the required basic equipment for service delivery, which is grossly inadequate, and has led to the current situation whereby quality is a critical problem (Basic Package of Essential Health Services 2015).

1.3.2 The health context

This section provides a general overview of Sierra Leone's health indicators and trends over time. Despite significant investment over the past several decades, Sierra Leone retains some of the worst health indicators in the world as improvements in health indicators were punctuated by slowdowns and reversals during both the civil war and the Ebola epidemic. Life expectancy remains low, while Sierra Leone's maternal, under-five and neonatal mortality ratios all remain poor compared to other countries across the

region. Some of the key outcome indicators have shown some improvements since the launch of the last HSSP in 2010. In particular, many key coverage indicators that are collected through both the Demographic and Health Survey (DHS) (2013 and 2019) and the Multiple Indicator Cluster Survey (MICS) (2010 and 2017) have registered improvements.

Table 1: Sierra Leone at a Snapshot

1. Demography and Population	**Indicator**	**Source and Reference Date**
Total **Population - 2019**	7,875,827	Statistics Sierra Leone, SLIHS 2018
Urban Population - 2019	3,349,039	Sierra Leone Integrated Household Survey, 2018
Rural Population - 2019	4,526,788	Sierra Leone Integrated Household Survey, 2018
Contraceptive Prevalence Rate - **2019**	21%	Sierra Leone Demographic and Health Survey 2019
Infant Mortality Rate (Rate Per **1,000) - 2019**	75/1,000 live birth	Sierra Leone Demographic and Health Survey 2019
Under-five mortality Rate (Rate **Per 1,000) - 2019**	94/1000 live birth	Sierra Leone Demographic and Health Survey 2019
Maternal Mortality Ratio (Rate per 100,000 live births)	717/100,000 live birth	Sierra Leone Demographic Health Survey, 2019
Life Expectancy (Year) - 2017	50.88 years	2015 Sierra Leone Census, 2015
2. Income and the Economy	**Indicator**	Source and Reference date
Nominal GDP - 2017	$ 3.7 billion	Ministry of Finance
Nominal GDP - 2018	$ 4.08 billion	Ministry of Finance
GDP per capita — 2017	$503	countryeconomy.com
GDP per capita — 2018	$523	countryeconomy.com
Real **GDP Growth Rate — 2017**	3.8%	Ministry of Finance
Real **GDP Growth** Rate — **2018**	3.5%	Ministry of Finance
Population Below $ 1.25 a day (%)	56.7%	Statistics Sierra Leone, SLIHS 2018
Country Income Classification (Low, Lower, Middle, Upper Middle or High)	Low	United Nations Development Programme (UNDP) Human Development Report

The improvements in outcome indicator trends have, unfortunately, not been reflected in the maternal, infant and neonatal mortality ratios, all of which are showing a steady decline between the 2013 and 2019 DHS (see table 2). However, more should be done for SDG-3 and UHC.

Table 2: Selected Demographic Health Survey Indicators 2013, 2019

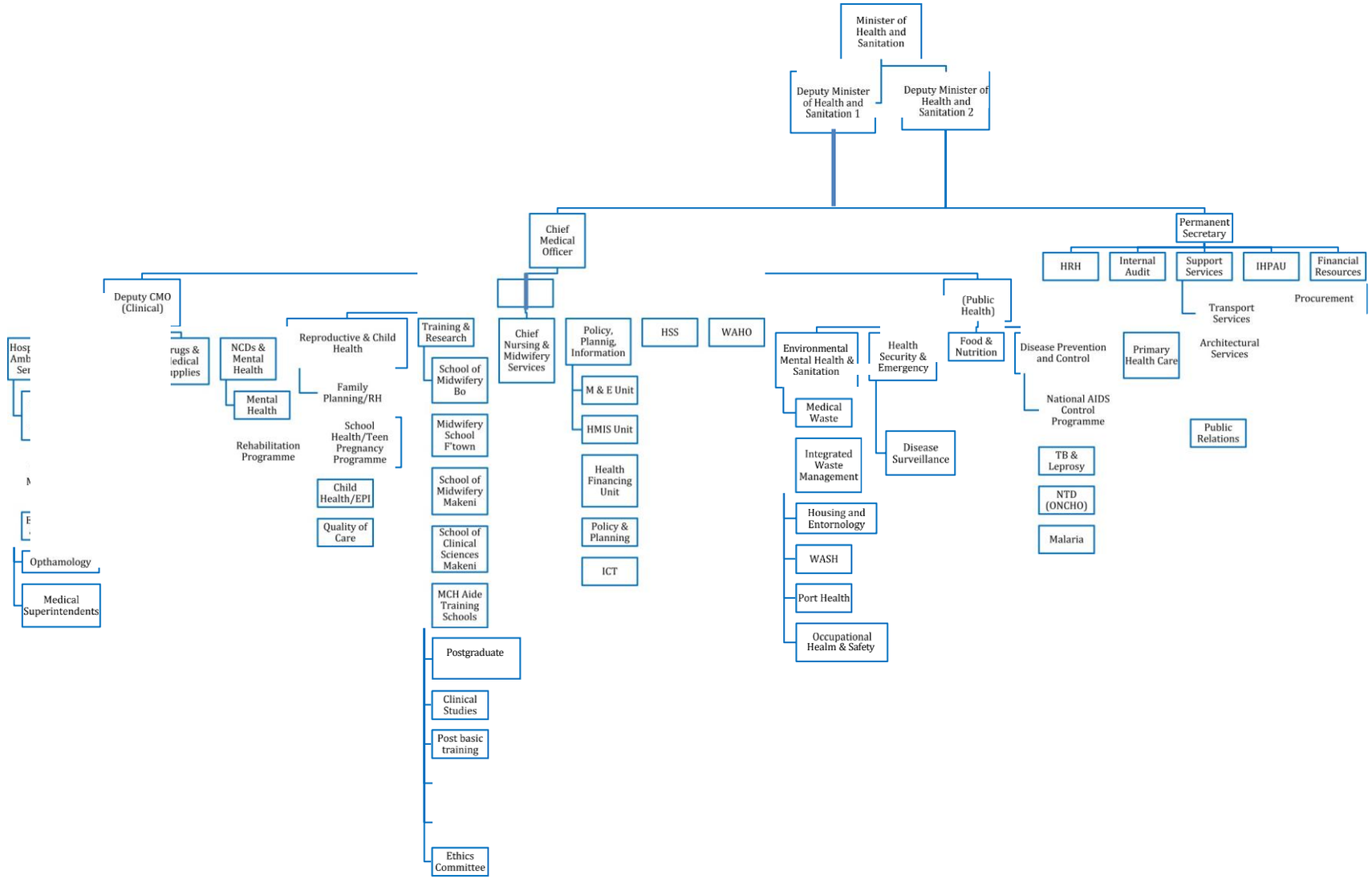
Indicators	DHS 2013	DHS 2019
IMPACT INDICATORS		
Infant mortality rate (per 1,000 live births)	92 /1,000	75/1,000
Under-five mortality rate (per 1,000 live births)	156 /1,000	1221,000
Maternal mortality ratio (per 100,000 live births)	1165 /100,000	717 /100,000
Prevalence of HIV (Perc. of pop. aged 15-49)	1.50%	1.6%
Total Fertility Rate	4.9	4.3
OUTCOME / OUTPUT INDICATORS: RMNCAH		
% Births attended by skilled staff (Public and Private)	54% MCHA 14%, Nurse 44%	77.4
% Pregnant Women making 4 antenatal visits	76	79
Contraceptive prevalence rate (% of women 15-49)	16%	21%
Unmet need among married women for family planning	25%	24.8%
% Children < 1 yr fully vaccinated	58	49
OUTCOME / OUTPUT INDICATORS: Nutrition		
Prevalence of Underweight (Wt/Age) among children 6-59 months (2SD)	16%	14%
Prevalence of Stunting (Ht/Age) among children 6-59 months (2SD)	38%	30%
Prevalence of Wasting (Ht/Wt) among children 6-59 months (2SD)	9%	5%
OUTCOME / OUTPUT INDICATORS: Communicable Diseases		
# Health facilities with VCT / PMTCT / ARV	708 / 691 / 136	829/826/829
% children sleeping under LLITN night before	49%	59
TB Case Detection Rate	78	
TB Treatment success rate	89	

1.3.3 The health system governance and management structures

The health system of Sierra Leone is managed by the Ministry of Health Sanitation with its top management body consisting of the Minister and two deputy ministers and the

Chief Medical Officer (CMO) through the Deputies, and the Permanent Secretary lead the Clinical and Public health programmes respectively (see the MoHS Organization Chart). Sierra Leone has a decentralized health system with DHMT led by the District Medical Officer (DMO) in each of the 16 districts managing the primary health care delivery. With regards to health service delivery, Sierra Leone has a three-tier system with tertiary and secondary hospitals at the top and middle respectively and the primary level at the bottom for delivery of primary health care service (see organization charts below).

Figure 1: Ministry of Health and Sanitation Organization Chart



1.3.4 Decentralization of PHC services

In terms of decentralization and district-level management of health services, the Local Government Act — passed in parliament in 2004 — outlines a broad plan for the devolution of the management of basic services to a set of local councils which have "the highest political authority in the locality responsible, generally for coordinating and promoting the development of the locality and the welfare of the people in the locality." The Act was revised in 2017 to promote participatory processes in local councils and encourage citizens' inclusion and involvement in governance. The major shift in 2017 was towards greater decentralization, devolution of authority and resources to the district level, which provides a strong framework for implementation of primary health care, one that requires the responsible participation of everyone to ensure the provision of quality healthcare.

The inter-ministerial committee, under the Chair of the Vice President, that oversees decentralization provides an excellent mechanism for intersectoral collaboration in primary health care, given its membership that includes the key health-related ministries and representatives of district councils. It is an overarching senior-level government-led structure that can ensure that health is considered a priority by all sectors, and that can focus on health in all policies thereby addressing the social determinants of health. For the implementation of this Handbook and its desired impact the newly reviewed Local Government Act 2017 needs to be fully implemented.

1.3.5 The PHC Governance and Management Structures

The following three charts comprise the organizational structure of three levels of the health-care system:

Figure 2: Primary Health Care Organization Chart

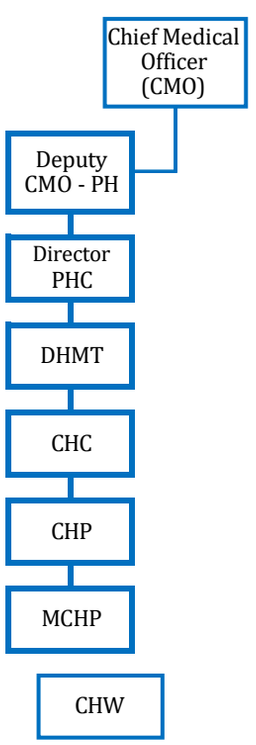


Figure 3: District Health Management Team Organization Chart

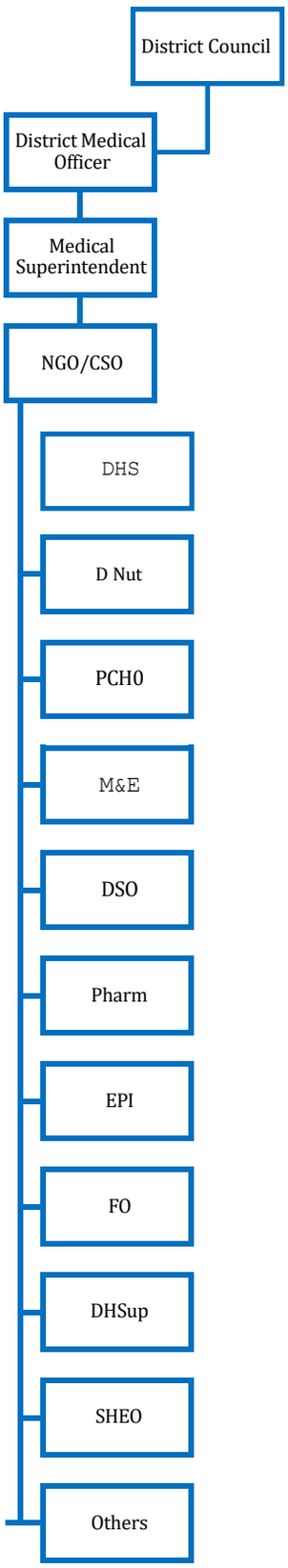
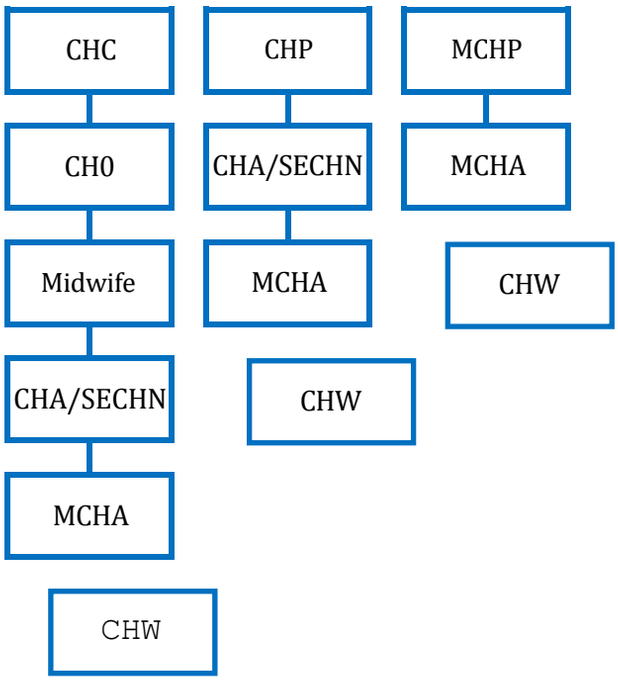


Figure 4: Peripheral Health Unit Organization Chart



Chapter 2

THE POLICY ENVIRONMENT, PHC PRINCIPLES AND THE SIERRA LEONE HEALTH CARE DELIVERY SYSTEM

The concepts, policy orientations, principles, approaches, goals and objectives that shape primary health-care interventions can be traced to the global, regional declarations and national policies, strategies and plans. This chapter presents the key global, regional and national policies and the PHC principles derived from them. It also outlines the Sierra Leone National Health Care Delivery System. These are the anchors of primary health care in Sierra Leone.

2.1 Global policies

2.1.1 The 2030 Agenda for Sustainable Development and the SDGs

A number of recent policy developments in the health sector are particularly relevant to PHC. These include the United Nations Sustainable Development Goals that should be implemented around the world by the year 2030. The 2030 Agenda for Sustainable Development provides a framework and targets for measuring performance together with neighbouring countries. Sustainable Development Goa1 3 (SDG 3) seeks to ensure healthy lives and to promote well-being for all.

2.1.2 The Universal Health Coverage

UHC is to ensure quality health care is available to every citizen of Sierra Leone at all times without causing any financial hardship as a result of seeking such care.

UHC has three related objectives which are:

1. Equity in access to health services - everyone who needs services should access them, not only those who can pay for them.
2. The quality of health services should be good enough to improve the health of those receiving services.
3. People should be protected against financial risk, namely, the cost of using services should not put people at risk of financial harm. (https://www.who.int/hea1th_financing/universa1_coverage_definition/en/)

As Sierra Leone continues to make progress in the post-recovery phase of the health system priorities, there is a renewed call for long-term, sustainable and equitable progress towards achieving Universal Health Coverage and improving health for all Sierra Leoneans. The GOSL harnesses the focus and intent of the SDGs to deliver on this promise. The SDGs recognize the importance of partnerships within and across sectors, the crucial priority of focusing on systems to improve health and well-being and ensuring no one is left behind. Sierra Leone is a key partner in the UHC2030 (formerly known as the International Health Partnership (IHP)). The country's active engagement in this initiative speaks to the government's commitment to strengthening the country's health system towards UHC.

2.1.3 The Paris Declaration on Aid Effectiveness (2005)

The Paris Declaration's five principles, designed to promote development and overcome

impediments to the effectiveness of aid, are:

1. Ownership—developing countries must exercise leadership over their own development policies.
2. Alignment—donors must base their support on countries' own development strategies and systems.
3. Harmonization—donors must coordinate their activities and minimize the cost of delivering aid.
4. Managing for results—developing countries and donors must orient their activities for achieving the desired results.
5. Mutual accountability—donors and developing countries are accountable to each other for achieving development results.

2.1.4 The 2018 Astana Declaration on Primary Health Care

In 2018 the global community convened in Astana, Kazakhstan, to review 40 years of achievement since the Alma Ata Declaration (WHO/UNICEF 1978), and renewed its commitment to primary health care through the Astana Declaration (WHO 2018). The Astana Declaration urges governments and societies to prioritize, promote and protect people's health and well-being, both in terms of populations and individuals, ensuring that the basic essential primary health care services -- of high quality, safe, comprehensive and integrated -- are accessible, available and affordable for everyone, everywhere.

Noting that health is a government responsibility, the latter should make bold political choices for mainstreaming primary health care across all sectors, and reaffirm the primary role and responsibility of governments at all levels in promoting and protecting the right of everyone to the enjoyment of the highest attainable standard of health, provided with compassion, respect and dignity by health professionals who are well-trained, skilled, motivated and committed.

The Declaration also stresses the need for a health-conducive environment in which individuals and communities are empowered and engaged in maintaining and enhancing their health and well-being through partnership with the health system, building on their capacities, experience and health improvement efforts.

The Astana Declaration reaffirms all the Alma Ata principles and strategies of equity and community engagement: an integrated basic essential care package; the need for intersectoral collaboration to address factors influencing health status beyond the health sector; the orientation of the workforce in PHC; and the application of appropriate and acceptable technology in the era of massive technological advances that are expanding opportunities for greater access to care.

The Declaration adds the dimensions of sustainability, constant monitoring, evaluation and operational, ethical practice in PHC perhaps more clearly than the Alma Ata Declaration. Leave no one behind by providing access to quality PHC services across the continuum of care, while also noting affordability is currently undermined by the growing burden of non-communicable diseases, which lead to poor health and premature deaths. This is due to unhealthy lifestyles, insufficient physical activity and unhealthy diets.

2.2. Key Africa regional policies

2.2.1. Ouagadougou Declaration on PHC and Health Systems

Sierra Leone is a signatory to the Ouagadougou Declaration on PHC and Health Systems which urges member States to update their national health policies and plans according to the PHC approach; use priority health interventions as an entry point to strengthen national health systems, including referral systems; expedite decentralization to accelerate progress towards the SDGs and UHCs by improving access, equity and quality of health services; promote intersectoral collaboration and public-private partnerships (PPP) and community engagement, with a view to improving the use of health services by addressing social determinants.

The Ouagadougou Declaration also addresses the following themes: the Health Workforce challenges through training, management, motivation and retention care; the enhancement of the sustainable mechanisms for availability, affordability and accessibility of essential medicines, commodities, supplies and appropriate technologies; the use of community-directed approaches; enhanced health information and surveillance systems and operational research for evidence-based decisions; and sustainable strategic health financing policies and plans that protect the poor and vulnerable and prevent catastrophic health expenditures.

The goal is to achieve compliance with African regional commitments and promote health awareness among the communities, including the diaspora, to adopt healthier lifestyles, enhance ownership of their health and be more involved in health-governance and related activities.

The above speaks to the pillars of the Ouagadougou Declaration of PHC and Health Systems, which are: Leadership and governance; Service delivery; Human resources for health; Sustainable health financing and social protection; Medical products and health technologies; Health information systems (HIS); Research for health; Community ownership and participation; and Partnership for health

2.2.2. African Union Agenda 2063

The African Union Agenda 2063 clearly outlines the aspirations of Africans to prioritize the practices of PHC. These aspirations include mobilization of the people and their ownership of continental initiatives in the spirit of self-reliance, inclusive participation in decision-making structures and accountable governing structures at all levels; holding ourselves, our governments and institutions accountable for results. Countries must aspire for the realization of the full potential of citizens, especially women, youth, boys and girls, and with freedom from fear, disease and want. They must also aspire for sustainable and long-term stewardship of their resources for development towards dignified living, quality of life, sound health and well-being and respect for human rights, justice and the rule of law.

2.2.3 Abuja Declaration, 2001

Sierra Leone is a signatory of the Abuja Declaration, pledging to achieve a minimum target of allocating at least 15 per cent of its national annual budget to the health sector. The Government of Sierra Leone, like most other African countries, has not achieved this

goal, but efforts are being made to reach the target with strong advocacy from MoHS.

2.2.4 Campaign for the Accelerated Reduction of Maternal Mortality in Africa (CARMMA)

The Campaign for the Accelerated Reduction of Maternal Mortality in Africa was launched in 2009 with the aim of lowering the unacceptably high levels of maternal and child deaths on the continent. Sierra Leone took up the campaign as a way of redoubling its efforts to improve the health and survival of mothers, babies and young children. The country has launched the campaign with the implementation of commitments, policies and activities that include mobilization; the development of national road maps; resource mobilization; strengthening of health systems; development of monitoring and evaluation mechanisms; promotion of integrated HIV and AIDS; and strengthening of reproductive and family planning services.

2.3. National Health Policies and Strategic Plans

The MoHS of Sierra Leone has been developing National Health Policies and strategic plans as the overarching guidelines for programmes.

2.3.1 National Medium-Term Development Plan (2019-2023)

The National Medium-Term Development Plan (NMTDP) provides the general framework for national development, and health is identified as one of the priority areas for human capital development. The NMTDP calls for the active participation of grass-roots communities and the general public, which is a core principle of primary health care. The Plan reiterates the need for empowering women, children, adolescents, persons with disabilities and Ebola survivors, thereby recognizing the role of vulnerable groups in guaranteeing inclusiveness and empowerment. School health has been identified as a key growth area for children and adolescents hence a priority for both MoHS, the Ministry of Education and the Ministry of Youth Affairs. The role of the PHC is paramount in contributing to human health which is necessary for national development.

2.3.2 National Health Sector Strategic Plan

The NHSSP (2017-2022) states that the vision for the health sector is a well-functioning national health system, one delivering efficient, high quality, accessible, affordable and equitable basic integrated essential health care to all Sierra Leoneans, thus contributing to the socio-economic development of the country. The NHSSP has adopted the pillars of the Ouagadougou Declaration of PHC and Health Systems to address the health system challenges in order to achieve the MoHS vision defined as leadership and governance; service delivery; human resources for health; sustainable health financing; medical products and health technologies; health information systems and research; and community engagement and health promotion — all of which are derived from, or are consistent with, the global and regional policy provisions.

Other key policy statements, guidelines and plans include the National Health Sector Recovery Plan (NHSRP) (2015—2020) which provides a framework for intersectoral collaboration that is central to PHC. In the NHSRP community ownership constitutes a key pillar for attaining a functional and resilient health system.

2.3.3 Free Health-Care Initiative

The Free Health Care Initiative (FHCI) was introduced in 2010, the first year of the

National Health Sector Strategic Plan, to ensure free preventive and curative health services for pregnant women, lactating mothers and children under-five years of age in any government health facility in Sierra Leone. This represented a first step towards universal health coverage attainment.

The FHCI removes payment for services at point of delivery, thus removing the barrier to access of health services caused by an inability to pay for user fees/drugs. It also provides free diagnostics and surgical/obstetric interventions. The FHCI also provides free testing and treatment of malaria, TB/leprosy and HIV/AIDS to the entire population. It recognized that the majority of health-care costs in Sierra Leone are borne by households and patients (Government of Sierra Leone 2010).

The benefits after implementation were direct and immediate, with major gains in utilization and coverage with basic services, including immunization, antenatal care and facility delivery (Ministry of Health and Sanitation, 2011[1])

2.3.4 Public Health Ordinance

The Public Health Ordinance of 1960 provides a legal basis for enforcing a healthy environment for Sierra Leone. It underlines the responsibility of citizens to ensure that their actions do not contribute to ill health among themselves and their neighbours. Society, including human behaviour patterns, have evolved since the enactment hence the need for its revision which is currently ongoing. The ordinance does not highlight community engagement, which is necessary for the promotion of health and well-being, but rather gives powers to the public health system to ensure compliance. The ordinance is being reviewed to make it relevant to the exigencies of the present day.

2.3.5 Draft Public Health Bill

There is a draft public health bill that seeks to amend the Public Health Act, 1960. Like the Public Health Ordinance this act gives responsibility and authority to the state to ensure conditions in which people can live healthy lives, by ensuring health security. It provides a legal basis for enforcing public health standards, and requirements of facilities serving the public. This draft bill includes PHC which adds the dimension of people taking responsibility to stay healthy and contribute to an environment in which people can achieve and maintain well-being.

2.3.6 Core PHC national policies and strategies

The MoHS developed a number of policy guidelines for interventions aimed at achieving the global targets by 2030 that are pivotal to this Handbook. Key among them are the following ones: the BPEHS (2015 — 2020) developed a guide on how and where health services should be delivered in the public sector in Sierra Leone; the RMNCAH strategy, an initiative for all maternal and child health services and malaria treatment, aimed at reaching every child and woman with essential, life-saving interventions; Integrated Management of Newborn and Childhood Illnesses (IMNCI); the Reduction of Malnutrition Strategic Plan (2019-2025), an infant and young child feeding strategy; the Family Planning Costed Implementation Plan 2020; the National Health Information

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See also Theresa Diaz et al., *Healthcare seeking for diarrhoea, malaria and pneumonia among children in four poor rural districts in Sierra Leone in the context of free health care. results ofa cross-sectional survey*, *BMC Public Health*, volume 13, 157 (2013).

Systems Strategy (NHISS); the National Medical Supplies Agency (NMSA) Act; Human Resources for Health (HRH) Strategic Plan (2017-2021); and the Community Health Worker Policy (2016-2020) and Strategy. All of these recent and current policy initiatives transitioned into the current National Health Sector Strategic Plan (2017-2021).

2.3 The vision, objectives and principles of PHC

2.4.1 Vision of PHC

The vision is focused on providing efficient, equitable, sustainable, basic and high-quality services that are accessible and affordable to everybody, especially the most marginalized and people living in hard-to-reach areas -- thus effectively contributing to the SDGs: the road to middle-income status by 2030.

2.4.2 The objectives of primary health care

1. To promote effective leadership, stewardship and accountability in health service delivery and governance to ensure health and well-being for all.
2. To provide a high quality, safe, affordable equitable, basic essential package of health care.
3. To generate information to monitor progress in primary health care services and performance for early detection of health emergencies, preparedness and response.
4. To promote approaches to health-care financing that enhances universal access to care and social protection.
5. To promote inclusive community participation in decisions and actions for health-care delivery
6. To accelerate the development, management and retention of skilled manpower for effective delivery of primary health care services.
7. To ensure regular availability of essential medicines, technologies and products necessary for primary health service delivery at all levels.

2.4.3 The principles of Primary Health Care

As already stated, primary health care was reaffirmed in the Astana Declaration (WHO 2018) which identifies key commitments, values, concepts, principles and strategies to guide the elaboration of this Handbook.

2.4.3.1 Equity and social justice

These concepts mean ensuring that PHC services are equitably offered, targeting the most disadvantaged households trapped in the vicious cycle between poverty and ill health, guided by the fundamental right to health requiring every human being to enjoy the highest attainable standard of health and well-being, by ensuring universal access to basic health services without distinction of any kind, across population subgroups. Achieving equity requires an overall improvement in the health of the population, while increasing/buttressing health gains for those population subgroups, who are disadvantaged, with an emphasis on fairness.

The Astana Declaration affirms this commitment and underlines the importance of health

for peace, security and socio-economic development. Thus, it protects and promotes solidarity, ethics and human rights as a pillar in primary health care. It attaches a special moral urgency to re-examining the conditions of those whose life prospects are poor across multiple dimensions of well-being. Placing a priority on those so situated is a hallmark of social justice.

2.4.3.2 Capacity/Asset-based approach

PHC is capacity-based, it emphasizes the self-reliance and self-determination of people and structures at all levels investing maximum effort in solving problems with available and accessible resources, based on rights and tapping external resources as appropriate, as top-up. An asset-based approach is critical for all engagements highlighting respect, recognition, voice, necessary for community partnership/ownership, required in all situations. It includes practices, experience, skill and knowledge of what works in specific contexts.

This principle of engagement applies even in the context of individual patient care, as patients should be involved as partners in the caring process. The patient's rights and responsibilities are a good example of applying this principle at the patient level. Both communities and patients have areas of influence and control, and the health system needs them as partners in order to succeed. The system must recognize what they are already doing in order to build on those achievements: self-care is the first response to health issues, not the health system.

One must recognize that people are already in charge of their health situation and they are doing their best to remain healthy. In community engagement we need to recognize that and engage them in working together to help them improve their health in an even better fashion. One should be aware of the competing systems of care that exist in most communities as part of the local assets that communities bring to the engagement process.

2.4.3.3 Community engagement with accountability in tandem with health system to ensure ownership

All the three PHC declarations highlight the importance of community ownership with accountability in partnership with the health system to ensure that the common goal of improving health outcomes and saving lives are achieved. This will be attained through fostering mutual, respectful partnerships among all stakeholders — from community members, leaders and community health workers, on the one hand, and health service providers, managers and policy-makers and partners, on the other hand, based on communication, transparency, accountability and iterative learning throughout the programme.

This requires that the community is organized into cohesive solidarity units to enable effective partnership engagement. This highlights the necessity of another key concept that makes community ownership and partnership possible, namely the concept of social capital. Social capital is based on the fabric of trust, shared values and understanding that allows diverse participants to work together towards collective outcomes and common goals. Conceptualization of social capital includes elements of mutuality and reciprocity and elements, such as shared mental models, joint problem perceptions and relational skills, based on underlying principles of interdependence and cumulative feedback

processes that make up the daily engagements in the contexts in which people live their lives.

In partnership they ensure that people have access to social structures and vital resources that enable them to engage in partnership. Social capital represents the "shared norms" and values that promote social cooperation in actual social relationships, and can be described as "the stock of active connections among people: the trust, mutual understanding and shared values and behaviours that bind the members of human networks and communities and make cooperative action possible" to achieve common goals and collective outcomes. It implies investing in relationships to enable reciprocal support and solidarity within and between communities.

Another concept pertinent to community ownership/engagement/partnership is inclusive participation through representation and empowerment: Ensuring that every member of the community affected by decisions is equitably represented at all levels making those decisions; determining that actions, quality, entitlements are fair according to their needs, aspirations, and rights, enabled through formal and traditional networks and leadership systems and structures rooted in social capital.

Empowerment is enabling individuals, groups and communities to increase their knowledge, skills and resources to play their roles effectively in the PHC partnership enterprise. This enables individuals and groups to participate in decision-making and actions in the health system.

We should use coherent and inclusive approaches to expand PHC as a pillar of UHC, ensuring the continuum of care and the provision of essential health services are in line with humanitarian principles. We should support the involvement of individuals, families, communities and civil society through their participation in the development and implementation of policies and plans that have an impact on their health. We should support people in acquiring the knowledge, skills and resources needed to maintain their health, and contribute to the accountability of the public and private sectors for more people to live healthier lives in enabling and health-conducive environments.

2.4.3.4 Delivering a high-impact, high-quality, safe, integrated basic essential care package to meet all people's health needs across the life course is a key priority. It is achieved through integrated comprehensive preventive, promotive, curative, rehabilitative and palliative care. By providing a comprehensive range of services and care (including vaccinations; non-communicable diseases (NCD) screenings; prevention, control and management of non-communicable and communicable diseases; by providing sexual and reproductive maternal, newborn, child and adolescent health targeting cases of pre-pregnancy and adolescence, pregnancy, child birth, infancy and childhood, as well as mental health and curative services -- and making them accessible to all at every level of primary health care, while making referrals as needed.

We should focus on saving lives, particularly those of pregnant and post-natal women, newborns and children under five, by providing complimentary services as part of an overall health system, targeting the trapped households for maximum impact. Services should be provided with compassion, respect and dignity by health professionals who are well-trained, skilled, motivated and committed. We should strive to avoid

fragmentation and ensure a functional referral system between primary and other levels of care to maintain access to services across the continuum of care.

The affordability of care is undermined by the growing burden of non-communicable diseases, which lead to poor health and premature deaths due to tobacco, alcohol, drug abuse, unhealthy lifestyles, insufficient physical activity and unhealthy diets; and by wars, violence, natural disasters, climate change and other environmental factors.

2.4.3.5 Intersectoral partnership and collaboration

The importance of an intersectoral partnership and collaboration in PHC was highlighted in the 1978 Alma Ata Declaration on Primary Health Care and reiterated in the 2018 Astana Declaration on PHC. It is a known fact that the health sector cannot do it all by itself, and we need the support, partnership and collaboration from other sectors and agencies, more so when the health sector is usually challenged with funding shortfalls. An intersectoral/multisectoral approach also ensures cross-cutting PHC issues are included in the policies and strategic plans in other non-health sectors. The determinants of health, which are covered under other sectors, such as social welfare, education, water resources, works and environmental and food security, will have an impact on PHC service delivery.

2.4.3.6 Sustainability

Sustainability in PHC is ensuring that PHC services and projects are planned in such a way that they are sustained over the period. In order to ensure that this happens, proper budgeting and resource mobilization must be taken into consideration during the planning stage. Where PHC services/projects are funded mainly by partners (externally driven), MoHS, DHMTs, local councils, PHUs and communities should be in a position to mobilize resources that will ensure continuity of these PHC services/projects.

2.4.3.7 Ethical principles for PHC interventions

These have a social justice orientation and follow principles of public health ethics, including do not harm and use least restrictive or coercive means; attend to reciprocity and be transparent — in the justification of public health interventions aimed at improving human well-being by focusing on the needs of those who are the most disadvantaged. Persistent inequity, disparities in health outcomes, are ethically, politically, socially and economically unacceptable. The potential for harm can arise either from what is done, the substance of the intervention, or how it is done, the modality employed. Partners ought to be conscious of this.

2.4.3.8. Using appropriate technology

The methods and materials used should be acceptable to the community, relevant to the major health problems and within the economic resources of the country. Appropriate technology can broaden and extend access to a range of health-care services through the use of high quality, safe, effective and affordable medicines, including, as appropriate, traditional medicines, vaccines, diagnostics and other technologies. One should promote their accessibility, their rational and safe use and the protection of personal data. One should use a variety of technologies, knowledge- and information-sharing platforms to improve access to health care, enrich health-service delivery, improve the quality of service and patient safety and increase the efficiency and coordination of care.

2.4.3.9 The workforce

The following actions are proposed: To provide and allocate skilled human and other resources to strengthen PHC and improve the delivery of health services and care; to create decent work and appropriate compensation for health professionals and other health personnel working at the primary health care level to respond effectively to people's health needs in a multidisciplinary context; to invest in the education, training, recruitment, development, motivation and retention of the PHC workforce, with an appropriate skill mix; and to strive for the retention and availability of the PHC workforce in rural, remote and less developed areas.

2.4.3.10 Constant monitoring and evaluation and an iterative dialogue, backed by operations research

One should create an ongoing process of evidence-based learning, decisions and actions towards continuous improvement at nodal points: household, village and health facility/chiefdom. All programmes should constantly monitor all stakeholders to maintain and improve the level of their positive effects on the community. One should continue research and information management to inform decisions and actions at the PHC level.

Through advances in information systems, it is possible to collect appropriately disaggregated, high-quality data and to improve information continuity, disease surveillance, transparency, accountability and monitoring of the health system performance. Through digital and other technologies, one can enable individuals and communities to identify their health needs, participate in the planning and delivery of services and play an active role in maintaining their own health and well-being. One can apply knowledge, including scientific and traditional knowledge, to strengthen PHC, improve health outcomes and ensure access for all people to the right care at the right time and at the most appropriate level of care, respecting their rights, needs, dignity and autonomy.

The health care delivery system of Sierra Leone is organized into PHUs, district/secondary hospitals and regional and tertiary hospitals which are interconnected by a referral system.

Chapter 3

PRIMARY HEALTH CARE SERVICES IN SIERRA LEONE

3.1 Introduction

The PHC service delivery is divided into a community and facility-based system. Primary health care is delivered in four levels of increasing clinical skills and capacity to handle complications (three levels of health facilities and a community level). Primary health care facilities are referred to as peripheral health units (PHUs). There are three levels of PHUs that are recognized and standardized: Maternal and Child Health Post (MCHP) being the lowest, hence nearest, to the community, Community Health Post (CHP) and Community Health Centre (CHC) being the highest referral point of PHUs. Each level has clearly defined functions.

The buildings, equipment, drug and supplies and staffing are specified to meet the functions. PHUs have promotive, preventive, curative and rehabilitative functions. They are supposed to be open 24 hours or have a staff on-call for off-hour patient needs. MCHPs and CHPs have beds that are only used for observation. Patients requiring further supervised care are referred to the CHC or hospital. CHCs, where a wider range of more complex services are offered, admit cases referred from the lower levels.

A limited range of preventive and basic curative services are also available directly at community level (outside of health facilities, but with linkage to PHUs through supervision, reporting and supply chain management). Secondary care is delivered in district hospitals. District hospitals receive referrals from primary care facilities and accept walk-in patients directly.

3.2 Sierra Leone district health system

3.2.1 The District Health Management Team

The DHMT is the administrative wing of the district health system. It is responsible for planning, implementation, coordination, monitoring resource mobilization and networking of all health activities within the district. It is the apex managerial and decision-making entity of the DHS and represents the central level at its area of operation.

3.2.1.1 Composition of the DHMT team

The district medical officer is the administrative head and is responsible for convening regular meetings of the team. The DHMT comprises the PHC and hospital management teams respectively:
The medical superintendent in charge of the district hospital; district health sisters (DHS/s), or public health nurse(s); the district public health superintendent (DPHS); the hospital matron/s; District nutritionist; Monitoring and evaluation offices; District pharmacist; Hospital secretary; and Other technical head who can be appointed as and when necessary.

Other personnel may be co-opted into the team as and when their expertise is required. These include specialists, heads of health training schools, or persons from international agencies or missions, who work in the health field and in other relevant government departments (see figure 4).

3.2.1.2 Roles and functions

The District Health Management Team under the new era of the Astana Declaration calls for more engagement, collaboration and partnership to accommodate and to utilize new emerging skills and ideals. The DHMT plans to engage the local government, civil society, community representatives, among others, to ensure demand for quality health services that embrace inclusiveness and accountability.

The DHMT will meet at least weekly, as necessary. It will have subtechnical working groups to concentrate on specially identified priority areas. These subgroups will coopt expertise beyond the original members. The DHMT is responsible for the general management of the district health system and supports the health systems governing structures at the district level. The team is responsible for the overall priority setting based on available data, planning and implementation of the PHC at all levels of health service delivery.

It is tasked with coordinating all players within the district of operation. The team spearheads both quality assurance for all services delivered within the district and record keeping and accounting, infrastructure, logistics and communications management. They organize and carry out training for all levels of health care within the district. They manage health management information for monitoring, evaluation of performance; they write reports, give and receive feedback. In this way the health staff are empowered in evidence-based decision-making in tackling problems. They lead the health systems' operations research.

The team should meet at regular intervals to assess progress based on evidence, and plan, organize, implement and administer delivery of primary health care services, particularly the high impact interventions, focusing on priority issues such as the reproductive maternal neonatal child and adolescent health care, part of the basic package of essential health services. It ensures surveillance and prompt notification of all epidemic-prone diseases and other notifiable diseases, and the taking of prompt action to control the outbreaks of such diseases.

The DHMT will facilitate the formation and functioning of these community-based health structures. The DHMT will engage in rational budgeting and resource mobilization and monitor expenditure to ensure accountability for PHC services. Deployment of HRH will be based on the skill mix and workload, and ensure optimum performance through effective communication, teamwork and performance management. They will ensure and facilitate timely procurement of equipment drugs and other consumables for health facilities in the district. They ensure surveillance and prompt notification of all epidemic prone diseases and other notifiable diseases and take prompt action to control the outbreaks of such diseases_

3.2.2 The district health facilities network

3.2.2.1 The district hospitals

The Government of Sierra Leone should have at least one hospital in each district, staffed with doctors, nurses, midwives, a pharmacist, nutritionist and other cadres that provide referral support to PHUs with secondary health services. These secondary/district hospitals also receive referrals from faith-based and non-governmental health facilities, and they make referrals to the next level.

3.2.2.2 The peripheral health units

The Community Health Centres (CHCs): The CHCs are located at the chiefdom headquarter town, or cover a population ranging from 10,000 to 20,000 and staffed with a community health officer (CHO), midwives, SECHNs, MCH aides, an epidemiological disease control assistant, an environmental health assistant, a laboratory technician, pharmacy technicians and other support staff. The CHO is in charge of the CHC, assisted by the midwife.

In the quest to improve the quality of PHC services provided at the CHCs, CHOs and SECHNs have also gone into subspecialties such as obstetrics/gynaecologist, general surgery, paediatrics, mental health, rehabilitation, ophthalmology, midwifery, among other areas. These personnel will be providing advanced PHC services at specific CHCs that have been selected to deliver specialized services in each chiefdom and to that end appropriately equipped.

CHCs are the highest referral point at the PHC level, receiving cases from CHPs, MCHPs and CHWs, and they make referrals to the next level. They also provide promotive, preventive, curative and rehabilitative services, the highest quality, involving an expanded scope of interventions. In addition to its own catchment area, the C&d1 oversee all other health units/structures in the chiefdom that is, the CHP, MCHP and the community health workers. The CHC takes responsibility for the health of the whole chiefdom. It provides basic emergency obstetric and newborn care (BEmONC) services.

Community health posts serve populations of between 5,000 and 10,000 and are staffed by State-Enrolled Community Health Nurses (SECHNs), CHAs and MCHAs. They provide the same types of services that are provided at the MCHPs, but they also include prevention and control of communicable diseases and rehabilitation. They refer more complicated cases to the next level of health care, the Community Health Centres. These posts have similar functions to the CHC, but with fewer facilities and less skilled staff. Certain functions that are performed in CHC will not be possible at these posts. The number and distribution of these units are presented in table 1. The Community Health Posts refer clients/ patients to the Community Health Centre. However, more serious referrals and emergencies should go straight from the health posts to the district hospital to avoid delays.

Table 3: Number of health facilities by type and district

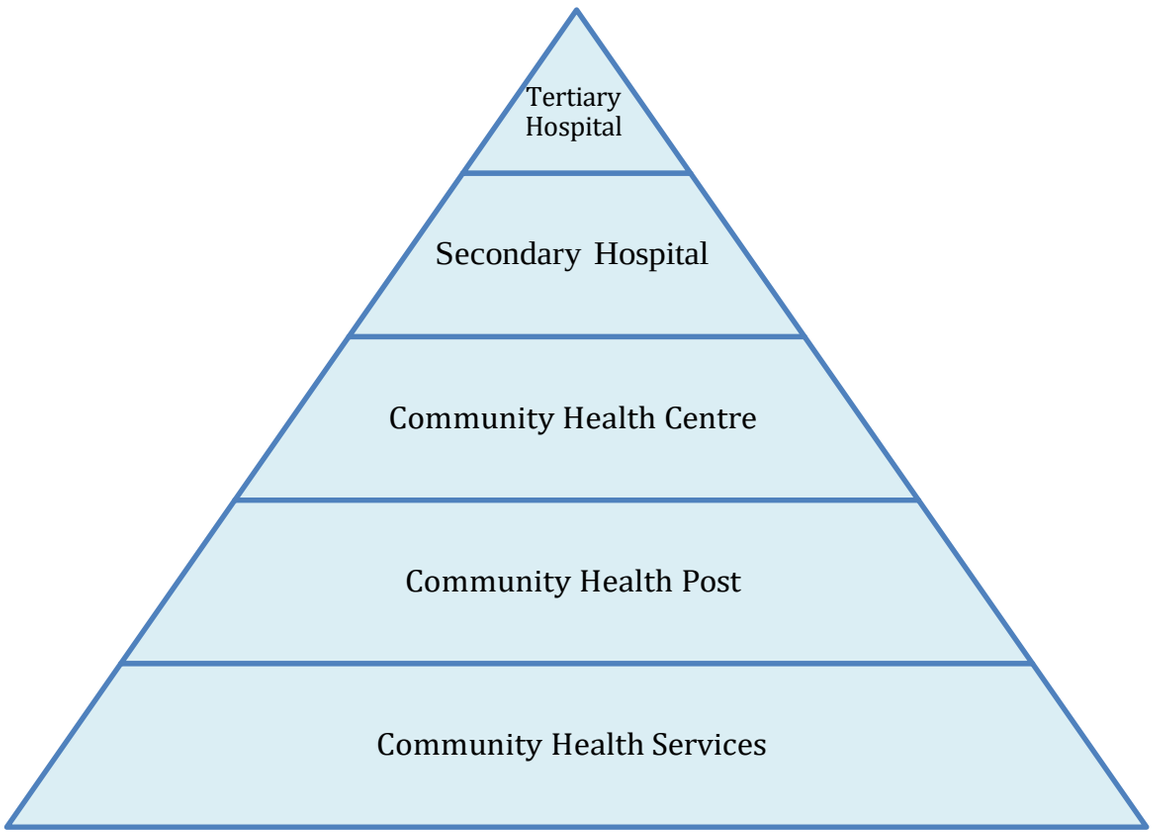
District	Hospital	CHC	CHP	MCHP	Clinic	Total
Bo	8	27	34	73	0	142
Bombali	1	13	25	39	10	88
Bonthe	3	15	35	13	28	94
Falaba	0	5	13	22	0	40
Kailahun	2	13	56	13	4	88

District	Hospital	CHC	CHP	MCHP	Clinic	Total
Kambia	1	13	15	34	4	67
Karene		10	12	34		56
Kenema	1	29	33	48	3	114
Koinadugu	1	6	20	20	3	50
Kono	1	19	28	45	3	96
Moyamba	1	18	31	54		104
Port Loko	5	18	35	41		99
Pujehun	1	16	14	54		85
Tonkolili	3	13	22	65	1	104
Western (R)	3	11	15	22	15	66
Western (U)	18	16	14	18	24	**90**
Total	49	242	402	595	95	**1,383**

Source: Directorate of Policy, Planning and Information (DPPI, 2020)

The MCHPs are situated at village level and cover a population of less than 5,000. Services usually provided by MCHAs are now supported by CHWs and reach every household. Services provided at this level include: antenatal care, supervised deliveries, postnatal care, family planning, growth monitoring and promotion for under-fives, immunization, health education, integrated community case management, IMNCI, management of minor ailments and referral of cases to the next level. They are the first level of contact of patients in the village and grassroots level. At these posts, one or more MCHAs live and perform their duties. Their residential accommodation is provided at the facility. MCHAs are supported by CHWs.

Figure 5: Tiers of the health service system



Chapter 4

THE PRIMARY HEALTH CARE PRIORITIES IN SIERRA LEONE

4.1 The disease burden

Sierra Leone has one of the highest mortality rates in Africa with marginal improvement in life expectancy for both sexes at 48.2 years at birth (SLDHS 2013). According to the Sierra Leone Demographic Health Survey (SLDHS 2013, almost all pregnant women (97 per cent) make at least one antenatal care (ANC) visit during their pregnancy, and 75 per cent make the recommended four or more ANC visits.

Late ANC visits, coupled with inadequate essential supplies at service delivery points, create a bottleneck in the provision of quality and comprehensive antenatal care (ANC) package. During 2008 to 2013, institutional delivery increased from 25 per cent in 2008 to 55 per cent in 2013. Skilled birth attendance witnessed a significant increase from 42 per cent to 60 per cent during the same period. While postnatal care (PNC) for the mother showed an increase from 55 per cent to 73 per cent, post-natal newborn care was still low at 39 per cent (SLDHS 2008 and 2013).

Postnatal care for newborns is critical for ensuring access to essential newborn interventions to improve survival during the newborn period, which is responsible for a third of under-five deaths. However, the provision of health care remains largely inadequate. The Ebola epidemic of 2014/15 reversed most of these gains in health service coverage improvement. The country remains under constant threat of outbreaks, such as Ebola, yellow fever, meningitis, Lassa fever and cholera. Primary health care strategies are articulated to handle these problems.

According to the WHO Global Burden of Disease Report (2008), approximately 64.7 per cent of the deaths in the region were due to communicable, maternal, prenatal and nutritional diseases; 27.6 per cent were from non-communicable diseases such as diabetes, cardiovascular diseases, cancers, respiratory diseases, digestive diseases, psychiatric conditions, congenital anomalies, among others. Finally, 7.8 per cent were from injuries and violence. Non-communicable diseases currently represent 50-70 per cent of all hospital admissions, and up to half of all inpatient mortality. Mortality in this category has been increasing over the years. Factors that worsen the already heavy burden of disease include pervasive poverty and poorly coordinated responses to public health challenges.

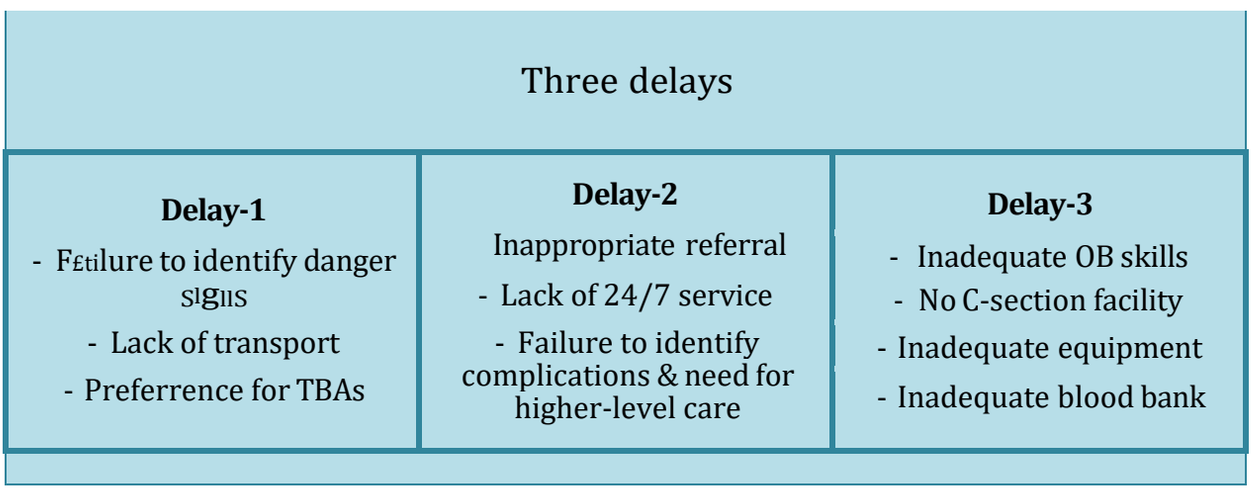
4.1.1 Maternal morbidity and mortality

The leading direct causes of maternal mortality in Sierra Leone are identified as follows: Obstetric haemorrhage (46 in-patient mortality), hypertension (22 per cent), obstructed labour (21 per cent) and sepsis (11 per cent) *[Review report. Reproductive, Newborn and Child Health Strategic Plan 2011-2015}* (see figure 5). These causes are largely preventable or can be easily managed when detected early. DHS, 2019, estimated the maternal mortality rate (MMR) at 717 per 100,000 live births. According to Sierra Leone's RMNCAH strategy, approximately 6 per cent of women will die from maternal causes

(RMNCAH 2017), with the leading causes being bleeding, pregnancy-induced hypertension, sepsis, abortions and other indirect causes.

Maternal Death Surveillance and Response (MDSR) reports indicate that most women die at health facilities (81.8 per cent) and at community level (14.1 per cent) (Maternal Death Surveillance and Response. Annual Report 2016) (see figure 6). The reasons for this are attributable to the three delays 1, 2 and 3 described by S. Thaddeus and D. Maine.[2]

Figure 6: The three delays contributing to maternal death



Maternal and under-five deaths in Sierra Leone are attributable to the three delays: Delay 1 in deciding to seek care caused by failure to identify danger signs and cultural inhibitions, lack of funds for transport and other costs, high economic opportunity costs, preference of TBAs at the household level; Delay 2 in reaching the appropriate health facility due to inadequate transport, poor roads and related infrastructure, inappropriate referral to facilities unable to handle the emergency; and Delay 3 relates to supply side challenges such as inadequate health workers, low skills, the poor attitude of health workers, inadequate equipment and supplies, such as blood, causing delay in receiving quality care once the patient is at the health facility. This may explain why the majority of maternal deaths occur in health facilities. Inadequate leadership and management may be an overarching problem.

Reducing the three delays to definitive care interventions that bypass the traditional pyramidal system should be emphasized, through registration of all pregnant women and linkage to the CHCs by the CHWs Emphasis on this strategy is important for the reduction of maternal deaths. By linking women with complicated obstetric conditions directly to the health facility with the human resources and the infrastructure, including drugs, medical supplies and equipment, can adequately provide life-saving interventions.

The leading causes of maternal deaths often require the presence of surgical services and a blood bank which are only available at the hospital level. It is anticipated that a significant increase in demand for maternal services at the hospital level will occur. To prepare for this increase, reinforcements in human resources and infrastructures are

[2] Too far to walk: maternal mortality in context", *Soc Sci Med.* 1994 Apr;38(8):1091—110. doi: http://dx.doi.org/10.1016/0277-9536(94)90226-7 PMID: 8042057

critical and should happen concurrently. At weekly dialogues between the CHW, PHUs and district hospitals, referrals and their appropriateness in terms of indication, timeliness and quality can be discussed. Furthermore, a dialogue between the CHW and the community should occur to determine the needs for preparedness and responsiveness.

Ambulances are available at district levels and above; however, referral and transport needs are greater at community and PHU levels. Attempts have been made to address this problem by establishing the National Emergency Medical Services (NEMS). This new system should be monitored and evaluated to ensure its effectiveness in reducing maternal and neonatal mortality. the data form (Community Health Information System (CHIS)) is already integrated into the district health information system (DHIS) and should be used to identify districts with higher neonatal and maternal mortality rates to inform targeting of interventions with greater precision.

Figure 7: Leading causes of maternal deaths in Sierra Leone

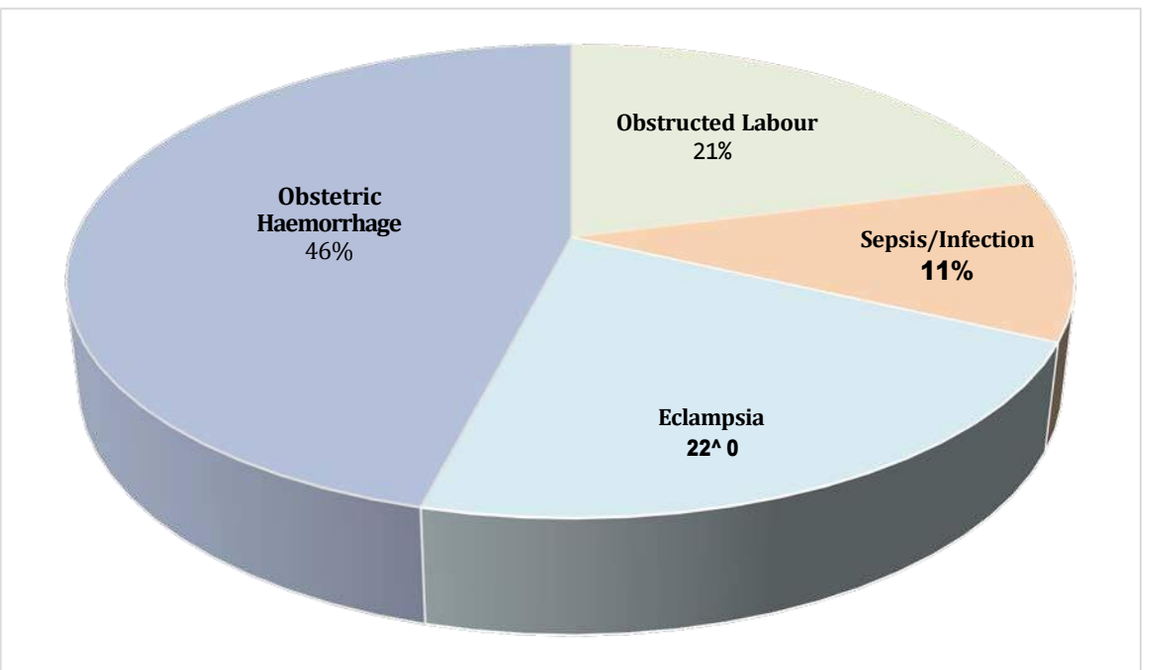
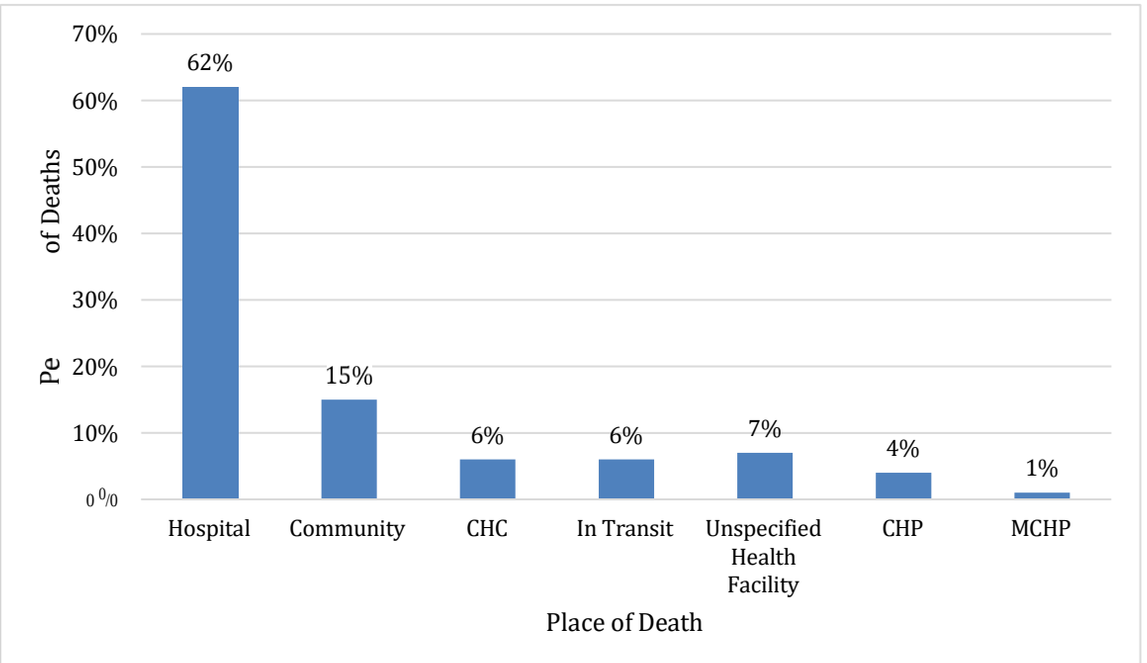


Figure 8: Where women die in Sierra Leone

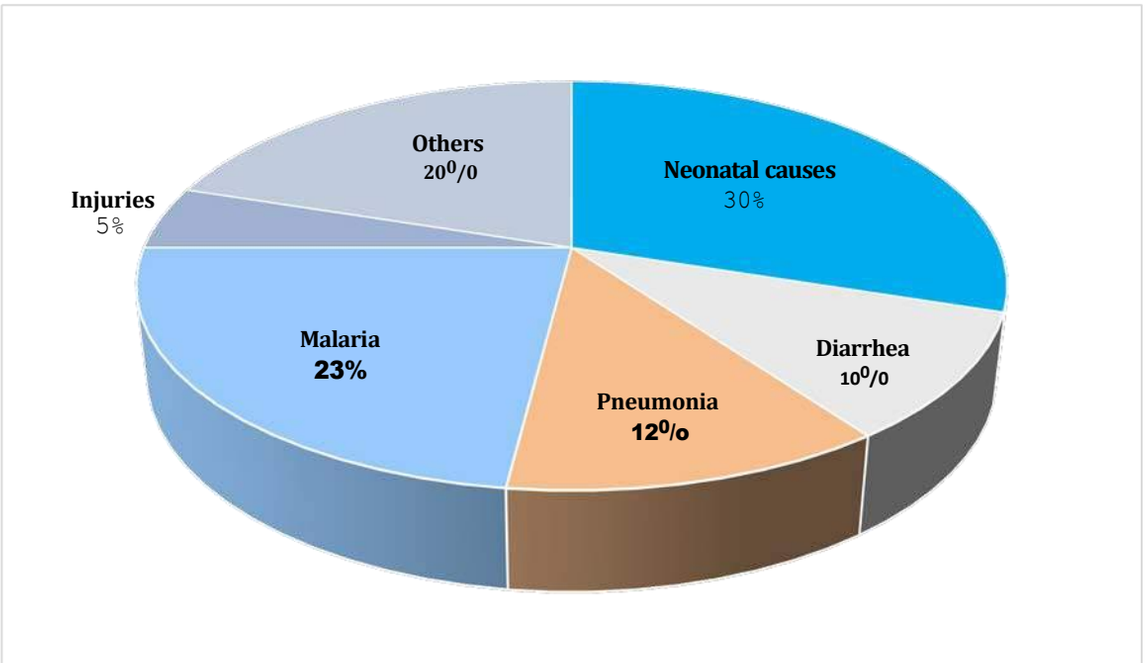


4.1.2 Neonatal and child morbidity and mortality

Neonatal deaths account for a big proportion of under-five mortality (29 per cent), malaria (20 per cent), pneumonia (12 per cent), diarrhea (10 per cent), injuries (5 per cent), others (24 per cent). Neonatal mortality rate showed no improvement in the last SLDHS 2013. Leading causes of neonatal deaths are: preterm - 30 per cent, asphyxia - 27 percent, sepsis - 23 per cent, pneumonia -7 per cent, congenital - 7 percent and others -7 per cent (RMNCAH 2017).

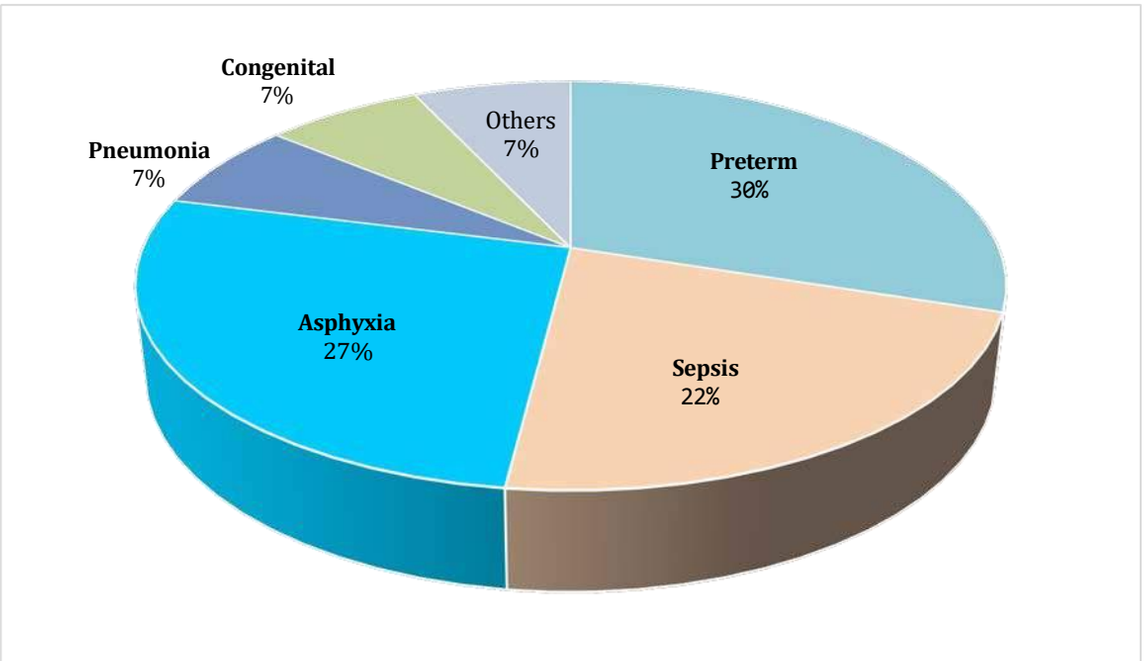
Figure 10 summarizes the causes of under-five and newborn deaths in Sierra Leone. Regarding neonatal and child health, the under-five mortality rate is estimated to be 156 deaths per 1,000 live births; and the neonatal mortality rate is estimated to be 39 deaths per 1,000 live births. Malaria, diarrhoea and acute respiratory infections remain leading causes of death.

Figure 9: Causes of under-five deaths in Sierra Leone



The supply side challenges range from inadequate numbers of critical cadres, lack of skills for provision of high-impact interventions to women, newborns, children and adolescents and low motivation, partly due to volunteer health workers. Other challenges include unstable commodities and medical equipment and other supplies, frequent stock outs of life-saving drugs, water and power supplies. These challenges can be improved by better leadership and informed management, by timely, quality data and effective collaboration and coordination by the government and all partners. The strong political will present at the national level needs to be translated to the district, chiefdoms and community levels.

Figure 10: Causes of neonatal deaths in Sierra Leone



Water, sanitation and hygiene (WASH) is a critical intervention for addressing diarrhea and other top killers of newborns and children under-five. Data from the 2015 Sierra Leone Population and Housing Census, conducted by Statistics Sierra Leone, indicates that 36.3 per cent of households use pipe-borne water as a main source of drinking water, while 35.7 per cent use other protected sources, such as boreholes, protected wells, or springs, and 28.0 per cent of households depend on unprotected water sources. On sanitation facilities, the same census report indicates that 73.8 per cent of households use pit latrines, followed by flush (8.6 per cent), communal bush and riverbed (12.9 per cent), and ventilated improved pit latrines (2.6 per cent). An estimated 94 per cent of PHUs do not meet the minimum national standards for water supply (WASH in PHUs survey 2015).

4.1.3 Barriers to service delivery

The BPEHS were defined for various levels of facilities, yet most health facilities have a limited ability to provide the services described in the document, due to the lack of skilled staff, medical products, health workers' attitude, staff movement and basic amenities at health facilities. Quality of services is a significant issue due to poor dissemination of, or compliance with, standards, guidelines and weak supervision, mentorship and monitoring systems in health facilities and absence of quality improvement mechanisms, including audits and regular reviews of performance in health facilities.

The Service Availability and Readiness Assessment (SARA) conducted by the Directorate of Policy, Planning and Information (DPPI) in 2017 suggests that the service readiness index (basic amenities, basic equipment, standard precautions, diagnostic capacity and essential medicines) is only 58 per cent across 1,328 facilities (SARA 2017). Only half of the health facilities in the country are ready to provide the services they are supposed to provide. Less than one third of all facilities offer sufficient diagnostic capacity (33 per cent) and essential medicines (31 per cent).

Often women will wait for many hours at the referral facility because of poor staffing, difficulties in obtaining blood supplies equipment and an operating theatre. In Sierra Leone PHUs could contribute to further delays, hence the majority of maternal deaths occur in hospitals where they may be arriving too late too sick! The present policy requires that all pregnant women should have access to skilled care throughout the pregnancy-delivery-postnatal continuum, yet many villages grapple with service availability gaps and must identify workable alternatives to meet the needs of pregnant women that can be achieved through birth planning, anticipation and recognition of life threatening complications, knowing when and where to refer cases, including emergency transport. Equally important is attention to attendance to antenatal clinics, sleeping under long-lasting insecticide-treated Nets (LLINs), receiving Tetanus Toxoid (TT) immunization and ensuring appropriate nutritional care.

Evidence from a number of studies globally has shown a reduction in maternal and perinatal mortality when women have skilled attendance present at every birth (United Nations Population Fund, 2005). This must be assured at the community level of service delivery through effective birth plans and efficient delivery processes at service delivery points. These require dissemination of information, leading to individuals, families and communities acting decisively on that information. Dialogue at individual family and community levels are important tools in facilitating/ensuring that appropriate action is taken.

4.1.4 List of high priority diseases and conditions in Sierra Leone <u>In childhood</u>

- Malaria
- Measles
- Neonatal tetanus
- Diarrhoea
- Acute respiratory infections/Pneumonia
- Anaemia
- malnutrition
- Worm infestation
- Whooping cough
- Tuberculosis
- HIV

<u>In pregnancy and childbirth</u>

- Anaemia
- Maternal malnutrition
- Antepartum haemorrhage (APH)
- Postpartum haemorrhage (PPH)
- Obstructed labour
- Sepsis
- Toxaemia
- STD/HIV infection
- Abortion (septic abortion)
- *In adults* Malaria

- Acute respiratory infections/pneumonia
- Cardiovascular diseases including hypertension
- Gastrointestinal conditions, including gastritis, peptic ulcer, diabetes
- Anaemia
- Diarrhoea
- Urinary tract infections
- Skin diseases, including leprosy
- Dental problems
- Tuberculosis
- Accidental and violent causes (e.g. wounds, fractures)
- Mental disorders
- STD/AIDS
- Yaws
- Anthrax
- Onchocerciasis
- Schistosomiasis
- Meningitis
- Lassa fever
- Yellow fever
- Cataract and refractive errors
- Conjunctivitis
- Hepatitis B

Epidemic-Prone Diseases (Notify immediately and try to contain. Refer to higher level)

- Ebola
- Lassa fever
- Measles
- Meningitis
- Cholera
- Shigellosis
- Yellow fever
- Anthrax
- COVID-19

Epidemic-prone diseases (and districts mostly affected)

- Cholera Countrywide
- Measles. Countrywide
- Typhoid Countrywide
- Ebola Countrywide
- Covid-19 Country wide,
- Anthrax Bombali, Koinadugu
- Lassa fever Bo, Kailahun, Kenema, Kono
- Meningitis Bombali, Koinadugu, Kono
- Yaws Bombali
- Yellow fever Bo, Kenema, Pujehun, Tonkolili
- Shigellosis Countrywide

Diseases targeted for eradication or elimination

- Polio
- Measles
- Guinea worm

All the diseases on the priority list are either preventable or treatable. The effect of an intervention on a specific disease in a population depends on the disease and the types of interventions used. An intervention will only be effective if applied on a large scale. For example, about 90 per cent of children should be immunized against measles to prevent an epidemic. Large-scale interventions are best organized through the peripheral health units, complemented by mobile teams, for isolated populations. A District Health Management Team has the responsibility to organize and supervise interventions throughout the district through the PHUs. Localleaders and community support groups provide oversight for service delivery and health governance at the PHU level.

Not all interventions in PHC are under the MoHS. For example, improved water supply is the responsibility of the Ministry of Energy and Power and improved food supplies of the Ministry of Agriculture, Forestry and the Environment, hence the importance of intersectoral collaboration, leading to direct effects on health, in reducing diarrheal disease and malnutrition. Some examples of interventions and their effects for the top priority diseases in Sierra Leone are shown in Table 5: The Logical Framework. Whatever interventions are used, it must be decided who will carry them out, when, where and with which equipment and logistics.

4.1.5 Mental health

Mental health has been a major health challenge and has been exacerbated after the decade-long war. The aftermath of war includes long-term effects on mental health. The sufferings of the people and their horrifying experiences led to their acquiring mental health problems and disorders such as depression, drug-abuse, psychosis, epilepsy, post-traumatic stress disorder and schizophrenia, among others. Mental health is an important implication of quality of life and overall public health. A WHO study conducted in the aftermath of the civil war suggested a significant burden coming out of the conflict period, with rates of 2 per cent (50,000) for psychosis; 4 per cent (100,000) for severe depression; 4 per cent (100,000) for severe substance abuse; 1 per cent (25,000) for mentally retarded and 1 per cent (25,000) for epilepsy.

More recently, research conducted in the aftermath of the Ebola outbreak on both survivors and front-line health care workers suggests a significant increase in the burden of mental illness among these populations and has greatly contributed to the increase in mental health cases in the country. As a result, mental health in Sierra Leone has become a priority and mental health services must be embedded in Sierra Leone's national primary health care strategy to promote access to mental health treatment, psychosocial support and prevention services for the public within PHC.

4.1.6 Physical and rehabilitation services

Physical and rehabilitation medicine services are extremely scarce in Sierra Leone. There is currently one national physical and rehabilitation centre in Freetown, one regional

physical and rehabilitation centre at the Bo Government Hospital and one regional physical and rehabilitation centre at the Koidu Government Hospital. There is also one physical and rehabilitation unit at the Connaught Hospital and one at the Makeni Government Hospital. To integrate these services into primary health care, skills training of personnel is required at PHUs and community levels to permit task-shifting and task-sharing to make these services more accessible and available.

4.2 Priority PHC Services/Interventions

Resources for addressing health challenges, especially those related to PHC services are limited, hence the need for conscious efforts to prioritize and reprioritize. The National Health Sector Strategic Plan (NHSSP) (2017-2021) describes interventions that are of highest priority for the Government of Sierra Leone, and are described in several policy and strategy documents, such as the BPEHS, RMNCAH, IMNCI, including the Integrated Community Case Management (iCCM).

4.2.1 Accelerating the reduction of preventable maternal, child and neonatal mortality

The importance of accelerating reduction of preventable maternal, child and neonatal mortality has been reflected in a number of national strategic documents, including the NHSRP, NHSSP, and RMNCAH. The national annual targets, as reflected in the RMNCAH Strategy goal, stated "Accelerating reduction of preventable deaths of women, children and adolescents and ensuring their health and well-being". The strategy presents the objectives and targets that all districts and all levels of care are expected to achieve, as indicated in Table 5: The Logical Framework.

Each district is expected to cascade their respective targets to chiefdom level so that service providers in each chiefdom appreciate and work towards the attainment of their targets of lives they save. Each Village Development Committee (VDC) with 2 CHWs are responsible for about 30 deliveries in a year (2 to 4 per month), based on the population under their care. If households are registered, as described in chapter 3, then the population of women, especially those expecting, should be known from the community registers. They would be targeted for home visits and linkage to health facilities for pregnancy and childbirth care activities would be established.

4.2.1.1 Focused antenatal care, skilled delivery, postnatal care and family planning

Focused antenatal care, skilled delivery, postnatal care, family planning and other sexual and reproductive health interventions properly addressed would lead to drastic reduction in maternal, neonatal and child morbidity and mortality. The care providers need to be appropriately trained and retrained to be skilful in lifesaving interventions, and be monitored and supervised regularly. There must always be the required equipment, supplies and medicines needed to implement the interventions. Similarly, the capacity of individuals, households and the community at large should be built to demand services at the appropriate place.

The role of the CHW in delivering life-saving preventive, promotive and treatment options to communities for diseases of high burden in maternal, newborn and child health (MNCH), and in the empowerment of the population for the uptake of the live-saving interventions is critical, hence the need for the CHW to be empowered through training and support.

4.2.1.2 Prevention of adolescent pregnancy

Adolescents account for 40.6 per cent of the maternal deaths in Sierra Leone. One of the major causes of the high adolescent maternal death is the high number of adolescent pregnancies, and the ensuing unsafe abortion practices which trigger the need to prioritize teenage pregnancy prevention through school health and family planning interventions. The full implementation of the government's flagship programme on free quality pre-primary, primary and secondary education will ensure that adolescent girls stay in school, thereby limiting the number of those who will be prone to early pregnancy.

Health education should be focused on adolescents, parents and the community to avert unwanted pregnancies and unsafe abortions. The establishment and functioning of adolescent responsive health services across all primary health care units should contribute to maternal mortality reduction since teenage pregnancies represent a sizeable proportion of maternal deaths. Knowledge of contraceptive methods is high (98 per cent), but its application is low although the contraceptive prevalence rate (CPR) has increased from 16 per cent in 2013 to 24 per cent in 2019 (2013 and 2019 DHS). Teenage pregnancy has a negative impact on education, the economy, health and the social status of girls and women and society at large.

4.2.2 Child health care

4.2.2.1 Integrated Management of Newborn and Childhood Illnesses (IMNCI)

Infant and child morbidity and mortality remain a major health problem, with 70 per cent deaths attributed to acute respiratory infections (ARI), measles, malnutrition and malaria. Malaria is responsible for 50 per cent of these deaths. Micronutrient deficiencies also play a role. A child deficient in vitamin A faces 25 per cent greater risk of dying. Even when it does not threaten life itself, malnutrition in early childhood can cause stunting or disability and hinder brain development and a child's capacity to learn thereby hampering their ability to acquire skills that are critical to their life chances.

The SLDHS 2013 found that 38 per cent of children suffer from undernutrition 9 per cent are wasted and 16 percent were underweight. Only one third were exclusively breastfed, 7 per cent of children age 6-23 months were fed appropriately, making nutrition a major priority that can be improved by better surveillance, educating mothers in infant and young child feeding practices and providing access to treatment services.

Lack of access to clean water and poor sanitation spreads disease and aggravates malnutrition, hence weakening the health of the child (UNICEF's *The State of the World's Children Report, 2005).* These conditions are responsible for about 83 per cent of outpatient consultations. Other factors contributing to high morbidity and mortality of children in Sierra Leone are poor quality of health services, poverty, ignorance, poor access and low utilization of services. The critical components include weak disease prevention, inadequate care of the sick child, poor care-seeking behaviour and limited compliance, and lack of promotion of early childhood growth and development.

4.2.2.2 Immunization

It has been proven and documented that achieving at least 95 per cent coverage of fully immunized children and 90 per cent coverage for TT2+ in pregnant women would reduce

measles mortality by 95 per cent, morbidity by 90 per cent and stop the transmission of wild poliovirus (WHO/UNICEF). Immunization coverage in Sierra Leone has been high with DPT3 at 84.9 per cent (MICS 2017). The goal of the health sector is to reach every child with coverage above 95 per cent. For this to be achieved, immunization has to be encouraged and ensured during antenatal and postnatal visits, and by raising continuous awareness at national and community levels.

The six monthly contact points (6mlycp), implemented by the Government (MoHS: Directorate of Food and Nutrition (DFN)/DHMTs), donors (Irish-aid and UNICEF) and Helen Keller International, with key nutrition partners at both national and community levels, encourages every child to be immunized at birth (0-30 mins) through infancy, that is at 0.6 weeks,10 weeks,14 weeks, 15 months, 6 months, 12 months and every other 6 months till the child is 59 months/5 years.

4.2.3 Communicable diseases of public health importance

4.2.3.1 HIV/AIDS prevention and care

HIV/AIDS prevention and care is one of the priorities for the government. Several cost-effective interventions are implemented by the health sector in conjunction with other stakeholders. These include education, HIV testing services (HTS), prevention of mother-to-child transmission (PMTCT) and provision of medicines.

Sierra Leone has made good progress in the containment of the disease by having a prevalence of 1.5% (DHS 2013). A major obstacle is lack of access to different services, e.g. VCTs, laboratory services and ARVs. Services are restricted to major hospitals and large urban health institutions. The standard care in ARV therapy requires laboratory monitoring of the response, yet these are expensive and available in only limited health facilities. PMTCT services are systematically being integrated into maternal and child health (MCH) and family planning services, and thus guided by standards of care that have been developed and include codes and ethics of practice, clinical guidelines and guidelines for operational procedures. The goal of the PMTCT programme is to increase access of its services to reach 80 per cent of health facilities, through developing the capacity of health workers, expanding facilities, encouraging utilization of services and strengthening information and reporting systems.

MCH/FP programmes are in a unique position to assist in HIV/AIDS control and in care. There is long experience within MCH/FP programmes dealing with such matters as sexuality, counselling, contraception methods, care during pregnancy and childbirth and breast-feeding, all of which are closely related to risk and prevention of HIV transmission. Greater impact of MCH/FP programmes on HIV/AIDS entail an expansion of services to include information, education and counselling on a variety of sexuality, fertility and relationship issues. Routine infection control procedures need to be strengthened and Information Education Communication (IEC) aimed at changing Knowledge, Attitudes and Practices (KAP) related to sexual behaviour.

4.2.3.2 Malaria

Malaria is a preventable disease that can have a serious negative impact on pregnant women and young children. Malaria is the number one killer among children. Mothers who contract malaria during pregnancy run the risk of having low birth weight babies,

maternal anaemia, impaired foetal growth, spontaneous abortions, stillbirths and premature babies. Malaria in pregnancy lends itself readily to control through community-level practices, including focused antenatal care (FANC), a comprehensive care approach for pregnant women that provides intermittent preventive therapy treatment (IPT) services in early detection and management of diseases such as malaria. The ultimate goal is to reach a coverage of at least 80 per cent. Effective malaria control can be achieved at the household and community level through dialogue driven by information generated through CHIS.

Sierra Leone has one of the highest burdens of malaria in the world, according to the Global Malaria Report, and the disease is estimated to be the number one cause of mortality in the country. Given this significant burden, malaria is estimated to account for approximately 2 million outpatient visits to health facilities every year for 20 per cent of child mortality. That PHC can make a huge contribution to reduce malaria morbidity and mortality. This could be through having access to confirmatory diagnosis for suspected malaria cases followed by effective treatment. Preventive measures, established for 100 per cent of the population at risk, protects at least 80 per cent of pregnant women and children under one year with Intermittent Preventive Treatment (IPT), and would lead to a drop in illness and deaths related to malaria (Sierra Leone Malaria Control Strategic Plan (2016-2020))

4.2.3.3 Tuberculosis

Sierra Leone is one of the world's 30 most affected countries that account for 87 per cent of the global TB burden. Every year, about 23 000 people develop TB; approximately 3, 000 of them are children and more than 12 per cent of the TB cases are co-infected with HIV. While 91 per cent of the diagnosed cases were successfully treated for TB in 2018, large gaps in case notification persist and about 30 per cent of the estimated TB cases remain undetected in the community. In addition, drug-resistant tuberculosis (DR-TB) is a serious threat to the national health security. In 2018, about 660 people were estimated to have developed drug resistant TB in Sierra Leone.

Access to TB services is the main obstacle. According to the 2017 SARA report, only 14 per cent of the existing facilities offer TB services nationally. Primary health cacan make a substantial contribution towards the goal of reaching 90 per cent of all people with TB and place all of them on appropriate therapy through active engagement of CHWs in case finding. Based on the National Lepros nd TB Strategic Plan (2016-2020), this would involve finding people with presumptive TB, linking them to diagnostic services and supporting them with directly observed treatment to maintain the treatment success rate at the required 90 per cent for all people diagnosed with TB.

Currently, laboratory capacity for bacteriological diagnosis of TB needs to increase in order to increase the number and proportion of new patients with TB (all forms) diagnosed, notified and referred. In addition, an integrated M&E system that can support accurately and efficiently the tracking of all identified indicators for measuring TB incidence and mortality needs to be strengthened.

4.2.4 Other priority interventions described in the basic package

4.2.4.1 Non-communicable diseases

Sierra Leone, like most other countries in Africa, has an increasing prevalence of NCDs

such as cancers, hypertension, diabetes and mental health disorders. NCDs are imposing an increasing burden on the health of the population, as is the high cost of treatment. The MoHS strategy in tackling NCDs includes implementation of cost-effective preventive and curative interventions (behavioural change, education, creation of awareness, screening for early diagnosis and provision of care). Empowerment of PHUs, including CHW and the community, in terms of capacity-building, information, materials such as equipment, supplies and medicines to diagnose, refer and manage NCDs, will positive impact the control of NCDs.

The most prioritized intervention includes prevention home- and community-based long-term care. This brings to the fore the critical role CHW and other community health workforce will be playing in the prevention and control of NCDs. Strengthening the capacity of Community Health Centres in terms of diagnostics, medicines and supplies to diagnose and manage NCDs is urgently needed. While improving on capacity to diagnose and treat, a heavy focus should be placed on prevention.

The WHO Package of Essential Non-Communicable Disease Interventions (WHO PEN) for primary care in low-resource settings is an innovative and action-oriented response to the above challenges. It is a prioritized set of cost-effective interventions that can be delivered to an acceptable quality of care, even in resource-poor settings. It will reinforce health system strengthening by contributing to the building blocks of the health system. Cost effectiveness of the selected interventions will help to make limited resources go further, and the user-friendly nature of the tools that are been developed, will empower primary care physicians and allied health workers to contribute to NCD care.

It should not be considered as yet another package of basic services but, rathas, an important first step for the integration of NCD into PHC and for reforms that need to cut across the established boundaries of the building blocks of national health systems. The WHO Package of Essential Noncommunicable Disease Interventions (WHO PEN) is the minimum standard for NCDs to strengthen national capacity to integrate and scale up care of heart disease, stroke, cardiovascular risk, diabetes, cancer, asthma arohronic obstructive pulmonary disease in primary health care in low-resource settings.

4.2.4.2 Nutrition

Sierra Leone is confronted with nutrition challenges which especially affects the health status of children and women. Poor nutrition is noted to have an impact on the long-term development of a child's ability to grow to achieve the necessary desirable brain development. A study conducted in 2017 indicated that the national prevalence of Global Acute Malnutrition (GAM) was 5.1 per cent, Moderate Acute Malnutrition (MAM) was 4.0 per cent and the Severe Acute Malnutrition (SAM) rate was 1.0 per cent. Boys were more acutely malnourished than girls and younger children (aged 6-29 months) were more malnourished than the older (aged 30-59 months) children.

The national prevalence of stunting was 31.3 per cent translating into 293,736 stunted children (based on the 2015 population census) with 21.3 per cent moderately stunted and 10.0 per cent severely stunted, with more boys than girls reportedly stunted. Although the levels of both wasting and stunting have shown an improving trend over the past 10 years, stunting rates remain high (>30 per cent) indicating a persistent serious chronic malnutrition situation according to WHO classification that needs to be

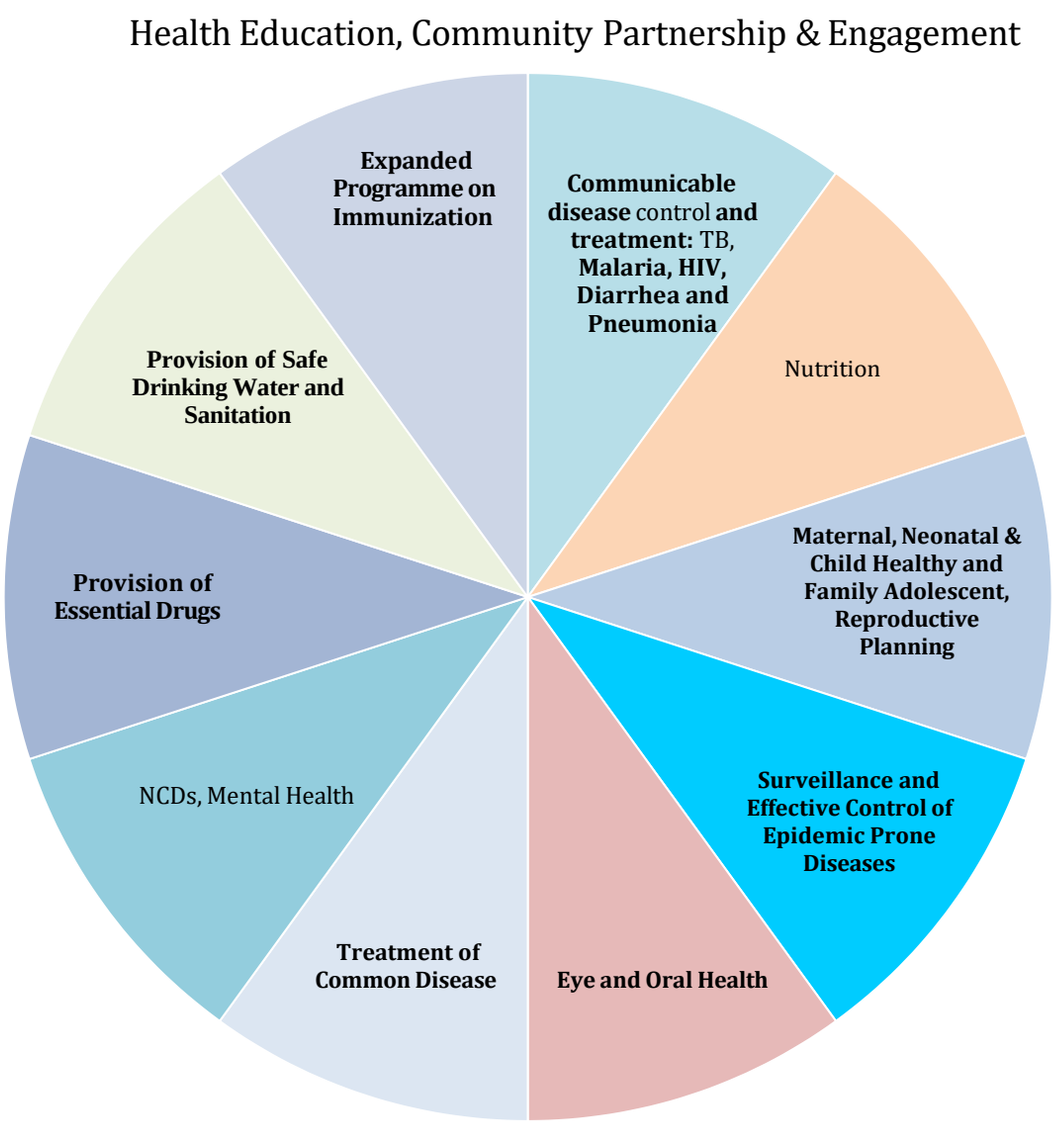
addressed comprehensively.

The occurrence of both undernutrition and overnutrition is an indication of the emerging double burden and complexity of malnutrition in Sierra Leone as almost 26 per cent of the women surveyed were overweight. The poor acute nutrition situation and serious chronic nutrition situation in Sierra Leone is attributed to multiple and interrelated factors that call for continued integrated intervention efforts to address both immediate needs, in addition to developing long-term strategies to enhance access to basic services, support to sustainable livelihood systems and social protection mechanisms (Sierra Leone National Nutrition Survey 2017).

There is a need to raise awareness among the population, especially health providers, of the importance of nutrition, nutrition surveillance, infant and young child feeding and optimum breastfeeding practices, and the management of moderate and severe acute malnutrition is paramount to address nutrition issues.

Primary Health Care involves improving, expanding and extending services to reach ALL without leaving any one behind the vulnerable, to save lives.

Figure 11: The priority elements of Primary Health Care



4.2.4.3 Mental health services

We should ensure that people can obtain mental health care by training healthcare and community-health workers on basic mental health interventions and psychosocial interventions in order to integrate mental health care into PHC services. The mental health training programme should focus on key areas: the WHO Mental Health Gap Action Programme and psychological first aid. The WHO Mental Health Gap Action Programme (mhGAP) builds the capacity of general health-care providers who interact with people seeking mental health care to use algorithms to assist them in clinical decision-making and detailed protocols to support the management of specific mental health conditions. Training courses should include an introduction to mhGAP, the importance of integrating

mental health care into PHC services, general principles of care and an overview of common mental health disorders.

Scaling-up psychological first aid (PFA) is a first step to create greater coverage for mental health and psychosocial support (MHPSS) across the country. The training in PFA should include a definition of PFA and the framework for PFA, the importance of self and team care, when and where PFA can be provided safely, the frequent needs of survivors, the basic PFA action principles of Prepare, Look, Listen and Link, key elements of the LINK action principle.

It should include clinical decision-making and protocols in the management of specific mental health conditions; provide humane and supportive psychological first aid to people exposed to traumatic events; it should recommend the adoption of self-care strategies to manage one's own stress; and apply PFA Action Principles.

4.2.4.4 Water, sanitation and hygiene (WASH)

Water, sanitation and hygiene are powerful interventions for averting deaths among the population, especially in children under five. The most cost-effective intervention targeting this group of health problems is health promotion, disease prevention and control and service delivery, in partnership with communities, to reach more people, particularly targeting the most vulnerable, identified from village registers.

4.2.5 Common conditions not in the basic package

4.2.5.1 Oral health services

Oral hygiene and its related problems are slowly becoming a cause for concern especially in rural communities where access to oral health-care services are inadequate, or completely absent. Efforts to provide health education through outreach for oral health and surveillance should be intensified at the primary health care level and mechanisms put in place for identified cases to be referred for proper management at secondary facilities. While the vast majority of the district/secondary hospitals do not have dental units, mobile clinics can be used to target districts or communities with a high burden of dental problems.

4.2.5.2 Ear, nose and throat (ENT) services

The drafted National Ear, Nose and Throat Health Strategic Plan provides a framework for the planning, delivery, and management of quality ENT health-care services at all levels of the ENT health delivery system in Sierra Leone. This plan is guided by five principles and approaches, as articulated in the WHO framework: universal access and equity, human rights, evidence-based practice, a life-course approach and empowerment of people with ENT conditions. The priority areas include ENT health promotion and disease prevention to reduce avoidable deafness through enhancing provision of ENT health at all levels of health care, provision of school ENT health services and enhanced outreach ENT health services backed up by quality data collection and research.

The aim is to provide comprehensive, effective and efficient ENT services that are accessible, equitable, safe, timely and centred on the patients' needs close to the people with a routine point of entry to the service network at the primary care level. ENT health services is a mandatory complement to primary care service delivery in offering health

promotion, disease prevention, cure, palliation and rehabilitation.

Key to primary ENT health care is ENT Health promotion which enables people to increase control of their own health and improve their ENT health seeking behaviour. Consistent community actions towards ENT health promotion and disease prevention are the most efficient and sustainable ways of ensuring better and equitable health outcomes. The focus is on individual behaviour towards a wide range of social and environmental interventions.

4.2.5.3 Eye health services

The population prevalence of blindness in Sierra Leone is estimated at 0.7 per cent affecting 43,842 people, while the prevalence of blindness in people over 50 years is estimated as 5.9 per cent, according to the most recently available national data. More than 90 per cent of all blindness in Sierra Leone is also avoidable and is significantly higher than the global average of 80 per cent.

In recent years, the number of people accessing eye care services in Sierra Leone has increased through a combination of enhanced awareness, improved service provision and reduced financial barriers through the Free Healthcare Initiative. But weaknesses in eye care service delivery in Sierra Leone have remained and were further compounded by the Ebola Viral Disease (EVD) outbreak, including insufficient coordination and monitoring of health-related interventions, low government support to eye are and insufficient staff numbers and capacity.

Cataract was the major cause of blindness followed by glaucoma. Refractive errors are the most important cause of moderate visual impairment. Other causes of ocular morbidity include allergies, dry eye, trauma and infections. Although most of these are not blinding, they occur commonly and have a significant effect on productivity. There is the need for comprehensive and quality eye health services within primary health care. This would promote access to comprehensive, integrated, affordable, quality, promotive, preventive, curative and rehabilitative eye care services at community, school, workplace and health facility levels of care. This would be facilitated by making available appropriate infrastructure, equipment, essential medicines, diagnostics, assistive devices and health technologies within primary health care.

Efforts have been made by both government and its partners to incorporate eye care services into the PHU services. This includes strengthening the health system and increase community access to eye care through outreach, improving community participation in preventive eye care activities, particularly in underserved and marginalized communities, focus on IEC activities and community dialogues, and comprehensive outreach screening services at both schools and in communities.

The capacity of PHUs have been raised across the country and eye care has been integrated into the new CHW curricula. Ophthalmic CH0s and State-Enrolled Community Health Nurses (SECHNs) have also been trained and placed in all districts across the country, thereby bringing ophthalmic specialists to all levels of the health system and ensuring their equitable distribution at the primary level for the delivery of community eye care services. According to the Rapid Assessment of Avoidable Blindness (RAAB) of 2010, the prevalence of blindness was 5.9 per cent in the population over 50 years old.

4.2.5.4 Physical and rehabilitation services

In 2012, the Ministry of Health and Sanitation took up the responsibility for the provision of rehabilitation services in Sierra Leone, which is in line with article 26 of the Convention on the Rights of Persons with Disabilities (CRPD). This law had a local counterpart, the Sierra Leone Persons with Disabilities Act 2011. It calls for taking appropriate measures to enable persons with disabilities to attain and maintain maximum independence, full physical, mental, social and vocational ability, and full inclusion and participation in all aspects of life through the provision of timely, comprehensive rehabilitation services to meet the needs of all individuals in need. The services include provision of assistive devices and technologies. It also contains a provision for physiotherapy, occupational therapy; prosthesis and orthotics; club foot correction; and psychosocial support.

Primary health care would incorporate the implementation of the physical and rehabilitation medicine (PRM) guidelines (2012) to ensure the provision of accessible, equitable and affordable physical and rehabilitation services for persons with disabilities and other people in need of such services. This is to ensure full community participation, to strengthen existing physical rehabilitation centres and to aim for national coverage. The basic package of essential health services should include rehabilitation services in order to promote community-based rehabilitation, and to mitigate prejudice and negative attitudes among health workers and the local community towards persons with disabilities in order to prevent exclusion and discrimination.

4.2.5.5 Neglected tropical diseases

Neglected tropical diseases (NTD) remain a major concern in Sierra Leone. The possibility of them causing permanent disability, death and becoming more widespread over the years make them diseases of major concern. However, because of their neglect, reliable data on the incidence and mortality from these diseases are scarce. Soil-transmitted helminths, onchocerciasis, lymphatic filariasis and yaws are the most important neglected tropical diseases in Sierra Leone. The NTD control programme is fully integrated into PHC with active community participation.

The NTD programme conducts three integrated mass drug administration (MDA) annually which are usually community-based with active participation of the community and CHWs being the main service providers. The first half of each year is for integrated MDA for the control of schistosomiasis often in 7 health districts; and the second half of the year is for integrated MDA for the control and/or elimination of onchocerciasis, lymphatic filariasis and soil-transmitted helminthiasis in 12 health districts.

Yaws has recently re-emerged as a significant disease in some districts of the Northern Region, requiring a public health intervention. There has been no survey done on yaws and so no data are available at present, but the Ministry of Health and Sanitation, in collaboration with WHO, is planning to conduct a survey in the known epidemic district of Bombali. Human African trypanosomiasis and leishmaniasis are yet to be investigated in Sierra Leone. Surveillance is continuing for Buruli ulcer, although this is not proven to be endemic at present. WHO granted eradication status for dracunculiasis (also known as guinea worm disease) to Sierra Leone in 2007 and active surveillance was started and is continuing. There has been no case detected since 2006. All suspected cases reported were incompatible with dracunculiasis on investigation.

The National Health Sector Strategic Plan (2017-2022) urges the scaling-up of access to interventions, treatment and services relating to neglected tropical diseases. Similarly, monitoring of morbidity control, case management, surveillance and operations should be enhanced. This requires resource mobilization and financial sustainability of the national NTD programme.

Table 4. Interventions, priority problems and level of care

Intervention	Priority health problem	Main level of care
Expanded Programme of Immunization	Measles, rubella, whooping cough, polio, neonatal tetanus, diphtheria, yellow fever, hepatitis, tuberculosis	Household, community, PHU, district hospital, DHMT, Tertiary Health Facility
Antimalarial Chemoprophylaxis, IPT, IPTi, insecticide-treated nets (ITN)	Malaria, anaemia	Household, community, PHU, district hospital, DHMT, Tertiary Health Facility
Simple treatment in PHUs & community, IMNCI, iCCM	Diarrhoea, pneumonia, malaria	Household, community, PHU, District Hospital, DHMT
Focused antenatal care and referrals	Anaemia, low birth weight, haemorrhage, pre-eclampsia, high risk labour	Household, community, PHU, district hospital, DHMT, Tertiary Hospital
Skilled delivery	Neonatal tetanus, post-partum haemorrhage	Household, community, PHU, district hospital, Tertiary Hospital
Environmental Sanitation	Diarrhoeal diseases, worms, malaria	Household, community
Improved quantity, quality of water	Diarrhoea, skin disease, worms	Household, community
Improved nutrition education, growth monitoring and promotion	Protein energy malnutrition	Household, community, PHU, district hospital, DHMT, Tertiary Hospital
Infant and young child feeding (exclusive breast feeding)	Malnutrition, pneumonia, anaemia, infantile diarrhoea,	Household, PHU and Community, district hospital, DHMT
Counselling of traumatized adults and children	Mental illness	Household, Community, PHU

4.3 Free Health Care Initiative

The Free Health Care Initiative (FHCI), introduced in 2010, provides pregnant women, lactating mothers and children under five can access free-of-charge medical care and services in all public health facilities. The aim of this initiative is to provide universal access to quality health care for vulnerable groups. The Sierra Leonean Chapter of the Campaign for the Accelerated Reduction of Maternal Mortality in Africa (CARMMA)

(2009-2019), launched in March 2010, enhanced the political commitment at the highest level to address reproductive health rights, and also set the stage for the launching of the FHCI.)

After the Ebola Viral Disease (EVD) outbreak in November 2015, Ebola survivors were added to the list of beneficiaries of the FHCI. Partners supported the government initiative in various ways, including by reinforcing health infrastructure, enhancing health-related human resource capacity and promoting demand for access to and use of reproductive health commodities, in order to improve the utilization of services and reproductive health outcomes. In 2018, the list of beneficiaries has expanded to include persons with disabilities (PWDs)/persons with special needs.

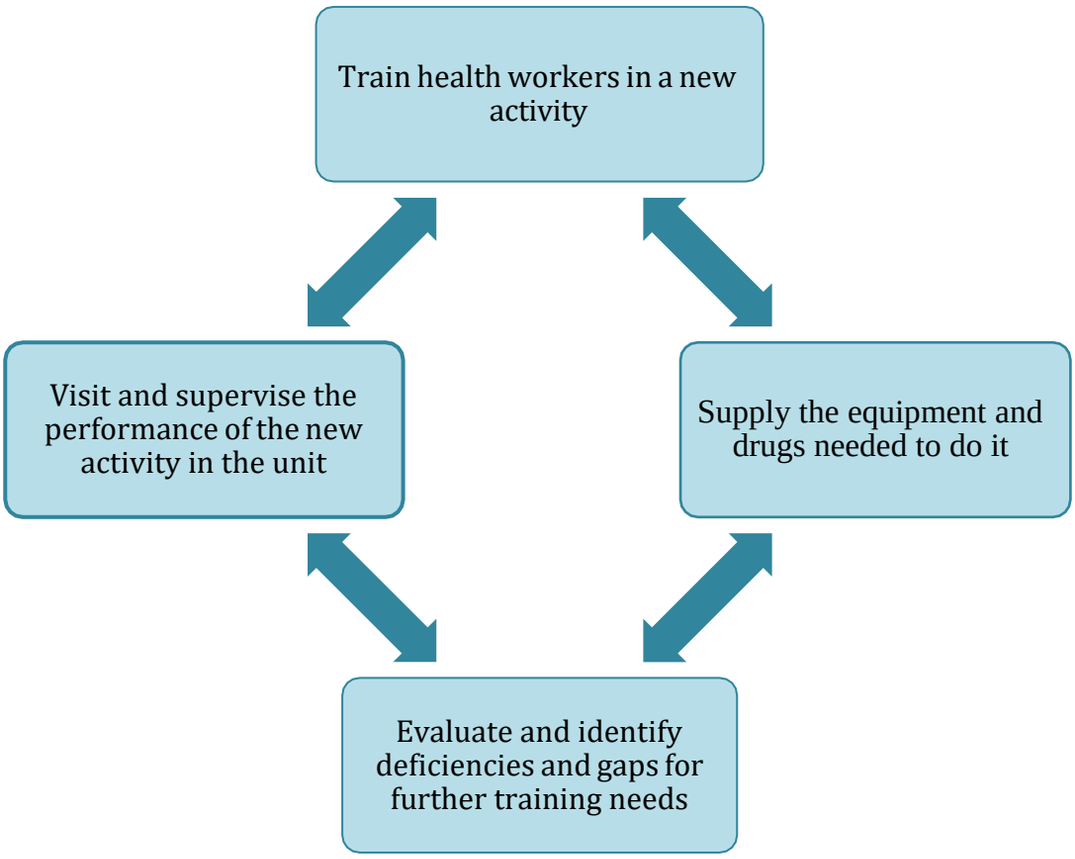
4.4 Peripheral health facility strengthening

The availability of emergency obstetric and newborn care is central to reducing maternal and neonatal mortality. This is due to the fact that major causes of maternal mortality, such as haemorrhage, sepsis, hypertensive disorders like preeclampsia and eclampsia, obstructed labour among other causes, can be treated with trained human resources at appropriate, well-equipped health facilities.

According to the *Guidelines for monitoring the availability and use of obstetric services* (1997), there should be four Basic Emergency Obstetric Care (BEmONC) facilities and one Comprehensive Emergency Obstetric and Neonatal Care (CEmONC) facility per 500,000 population. Putting this in the Sierra Leone context, at least all 16 districts should have a district hospital capable of providing CEmONC and 65 Peripheral Health Units (PHUs) should be upgraded to provide BEmONC, in order to effectively provide Em0NC to the people of Sierra Leone. This would help to ensure availability of the live-saving component of maternity care throughout the country.

Health systems strengthening, combined with a conscious process of quality improvement, are key pillars of PHC. To deliver core PHC, there needs to be targeting of specific high-volume, high-value health facilities for infrastructure improvements to have adequate space, water supply, waste management and power supply. Available information seems to suggest that the problem of poor mortality indicators is contributed to more by poor quality and poor availability of care rather than poor access to care. Establishing district and facility quality assurance and improvement mechanisms to deliver better health care services would be a step in the right direction.

Figure 12: Key actions to improve PHC network functioning



Chapter 5

COMMUNITY ENGAGEMENT IN PARTNERSHIP AND OWNERSHIP

5.1 Introduction and background

This chapter outlines the structures and mechanisms that link the community with the health system at all levels which are needed to support PHC. The specific committees and forums are described in terms of composition, formation, roles and responsibilities and the linking of service delivery to the household level. The structures provide an opportunity for informed dialogue between the health system and the community to create demand for quality services on the part of the community, and also an opportunity to enhance their responsibility for action in health. For this to happen, the committee structures must be inclusive in terms of administrative areas and interest groups. The chapter also describes the community-based workforce, the community health workers and traditional medicine practitioners.

The National Conference on Community Engagement and Convergence, organized by the Government of Sierra Leone in 2016, in collaboration with partners, defined community engagement as a process to organize individuals, groups and networks in a more sustainable community structure to enable them to enhance ownership and social accountability to take leadership in the following areas: making decisions on issues affecting their community, building accountability of decision-makers and monitoring the situation of children and the quality of services provided aimed at changing health behaviour.

One of the key pillars of the Health Sector Recovery Plan (HSRP) (2015-2020) centred on strengthening community ownership. To that end, several key areas were identified in the HSRP including the following ones: ensuring community groups of key stakeholders (including women and youth) and networks are established and systematically engaged in BPEHS implementation; key community groups and networks are engaged in community surveillance, case investigation and other key operational events; and key policies, strategies and guidelines on community engagement are developed to support the implementation of the BPEHS.

Community health interventions are effective mainly because of people's involvement in health actions relating to their capacities and needs. Health interventions are more effective when implemented and directed by the determinants of health, in addition to providing health services. The determinants of health underlie and significantly influence people's health status. The factors include personal (biological and behavioural) characteristics and environmental, institutional and socioeconomic features that impact people's living conditions, lifestyles and access to health and related services.

Communities are at the foundation of equitable and effective health care and are the core of the BPEHS that is reflected in the National Health Sector Strategic Plan (2017-2022). This aims to enhance access to health care through communities' full participation in decisions and actions for health that influence their possibility to live healthy lives in order to improve productivity and health outcomes. This goal is to be accomplished by establishing sustainable community-level services, aimed at promoting healthy

livelihoods across all the stages of the life cycle, throughout the country. Effective community engagement rests on four key interlinked principles: legitimacy of governance, inclusive participation, social capital and a capacity-based approach described in Chapter 1.

It is the application of these principles that enable households and communities to strengthen their role in health and health-related development initiatives as equal partners based on their capacities and assets such as their knowledge, experience, skills, resources and practices. The intention is to build on the capacity of communities to assess, analyse, plan, implement and manage health and health-related development initiatives, for them to contribute effectively to the country's socio-economic development.

Available data indicates that households are the majority financiers of the health sector, as more than two thirds of the total health expenditure (72 per cent) comes from out-of-pocket payments for services by households (BPEHS 2015), hence a rational basis for their inclusion in decision- making structures at all levels of the health system. Since households are such significant investors in the health sector, it is critical to work with them as partners.

There are multiple stakeholders involved in the health sector. It is therefore necessary to mobilize such stakeholders as individuals, households and communities to be partners in the improvement of health, particularly at community level. Critical to partnership is the need for partners to recognize the skills and contributions of each other as equal in value in order to establish relationships of mutual trust and confidence. This is possible only if the contributions and actions required of each partner are based on each partner's capacities and areas of comparative advantage. Partners may benefit in areas of their need to be in the partnership, but partnership building should not be based on needs but on the capacities and investments that each partner brings to the table.

Strengthening the relationship of the community and the health-care system requires mechanisms and structures that provide that linkage. Such structures enhance and enable effective participation of communities in decision-making processes related to matters that affect their lives, as well as being the interface between community level and the health system through the community and health facility committees. The linkage structures at village, chiefdoms and health facilities, are expected to provide citizens with sufficient representation, voice and feedback on issues affecting service provision in related areas.

The need for partnership with the households is underlined by the fact that between 70 per cent and 90 per cent of all sicknesses are taken care of at the household level (WHO 2000). It is at the household level that primary decisions and actions that influence the health outcomes of a community are made. This community-based aspect of the primary health care system is emphasized in all three Declarations, Alma Ata (WHO 1978), Ouagadougou (WHO 2008) and Astana (WHO 2018), therefore it is not an optional alternative, but an integral component of the health system.

Specific interventions include recruitment, training, supervision of the CHWs, who are the service providers at the community level. They assess and treat pneumonia, malaria

and diarrhea in children aged 2 to 59 months. They develop systems to ensure effective community referrals to facility referrals and vice versa. They ensure the linkage of the village health development committees to the relevant PHUs. They develop and implement context specific approaches in engaging with religious and traditional leaders to address harmful cultural practices, such as female genital mutilation/ Cutting (FGM/C) and early marriages, among others, while reinforcing positive practices.

5.2 Community engagement process

In this way the Handbook seeks to empower both communities and providers for health improvement at the frontlines, working as partners. The communities will also be able to exercise effective demand for quality care, with mutual accountability and responsibility for better health for all across the life cycle and the PHC levels of care. This will be achieved through the community — health systems linkage, enhanced ownership of facilities, enhanced community collaboration and responsibility for health. The Handbook describes the processes and structures that include communities in the governance of health facilities and related resources. This will increase people's self-esteem, informed dialogue, control and accountability.

5.2.1 Community entry

To develop partnership with a community the implementation process must involve careful participatory community entry to ensure ownership, accountability and effectiveness of interventions. The process includes participatory situation analysis and household registration which leads to participatory planning for joint health interventions, at village and chiefdom levels, eventually feeding into the district operational planning. A participatory methodology should be used to plan, implement, monitor, evaluate and feedback at all levels of PHC activities.

Partners with the community need to engage in an iterative process of dialogue, one based on available, current information. This approach works because it links action to available evidence, demonstrates progress towards the goals set by the partners and justifies continued action based on accountability and responsibility. The process involves joint assessment, dialogue, planning and action with each stakeholder concentrating on the elements of their core business that contribute to the common goal of health improvement.

5.2.2 Community organization for engagement

The health facility in-charge, supported by the DHMT, CHWs, community elders and chiefs, are the sinews that bind these structures and enable sustained community leadership in addressing health problems, through the formation of linkage committees at all these levels. Health care should facilitate an ongoing relationship between providers and consumers, making it possible for the clients to make full use of their own and their communities' resources for health. Partnership becomes the basis for any needed intervention in which the provider and consumer participate. The partnership approach should recognize that communities are not homogeneous, and processes of joint action which should not exclude the most vulnerable. It is because of this that the dialogue process must be continuous down to the household level, until the most vulnerable are included, with no one left behind.

5.3 Strengthening PHC governance, linkage and management structures

Governance is a structure of authority created and empowered by citizens to act on their behalf to ensure collective security, rule of law and basic service provision, based on social contracts, and establishing mechanisms for accountability by all. In PHC the following are the governing structures:

5.3.1 Village Development Committees

Definition from the Facility Management Committee (FMC) document. The lowest health governance structure is the VDC which comprises representatives of major stakeholders in the community. It is responsibility for leading community health action at the village level.

5.3.1.1 The formation and composition of the VDC

It is composed of up to 15 people selected from the community. For health functions the membership in the committee should be sensitive to gender balance and equal representation of interest groups in the community. The VDC has officials: a chairman (a respected community member), secretary and treasurer. The VDC has regular meetings that relate to the 100-day improvement cycle, community dialogue and action days. When they meet, they discuss community issues and review the progress of households, CHWs and MCHAs, based on planned action for health guided by available data. Village and activity-specific data are presented for dialogue and planning to ensure adequate targeting of areas and of specific interventions.

The selection of members to the VDC is led out by the village chief. The respective CHC Management Committee facilitates the process by sending representatives to attending meetings organised by the administrator for the purpose of selecting VDC members. They characteristics of people to be identified are explained, and then consenting nominees are identified for consideration by the meeting, paying attention to inclusive representation.

The following characteristics are considered in the selection: Residency in the village; Ability to read and write; Displaying leadership qualities; Being a role model in positive health practices; Serving as representatives of specific constituencies in the community (village, faith communities, youth, the disabled and women).

5.3.1.2 The role and functions of VDC in health

- Leading monthly dialogue sessions at the village level, based on data presented by villages and activities, leading to planning action
- Provide structures for community action for health, emphasizing key household health practices
- Provide a channel for external assistance to be continued where necessary
- Provide a channel of communication with the PHUs, management committees, chiefdom health committees and the district health forums
- Major facilitator of community change by actively advocating the CHWs work, backing them up in their tasks
- Monitor trends of key community health data and reporting to PHUs management committees for quarterly dialogue, planning and action

- Oversee CHWs activities; appraisals of CHWs in preparation for recognition during Community Health Days or forums at various levels
- Seek and mobilize local human and financial resources for health action, based on priorities identified by available data
- Identification of community health priorities through regular dialogue
- Planning for community health actions
- Participating in community health actions
- Effective monitoring and reporting on planned health actions
- Mobilizing resources for health action
- Proper coordination of CHWs activities
- Organization and implementation of Community Health Days
- Reporting to PHU levels on priority diseases and other health conditions
- Effective leading in community outreach and campaign initiatives
- Advocating for health services in the community

There is also the need to undertake the following actions: Strengthening community involvement in tracking availability of commodities, especially those under the FHCI, as they are responsible for ensuring uptake; and strengthening health facility committees to monitor provision of services at facility level and hold health service providers accountable. At the same time, they are accountable on the basis of their villages' performance, guided by household registration data.

Health facility registers should include identification of clients by village of origin to reinforce the two-way accountability. There should be strengthening of the linkage between households and the health system across the complex interface (figure 12: Key actions to improve PHC network functioning). VDCs should be strengthened and trained on their roles and responsibilities, including registering of all their households and identifying households needing care and monitoring of care provision.

5.3.2 PHU health facility management committees

Every health facility at the peripheral level (CHC, CHP and MCHP) must have a management committee.

5.3.2.1 The formation and composition

Every FMC is supposed to have certain critical positions, such as the chairperson, secretary, treasurer and other members. It should have up to 15 members with equal representation from villages/communities/catchment areas served. The chair and treasurer should be elected from among members while the secretary should be in charge of the facility. The peer supervisors should be included, and 8 other members appointed by VDCs. The election of committee chair and treasurer and monitoring of the group formation should be continuously supervised by the DHMT, and they should come from the different VDCs.

5.3.2.2 Roles and functions

PHU/facility management committees should meet at least monthly to review progress from the indicators generated through the CHIS, and to make decisions for continued actions for health, at facility, community, household, political and administrative levels. The facility in-charge should collate the data obtained from the peer supervisor and the

health facility in order to share the information with the other sectors by displaying it on boards, disseminating summaries and presenting the summaries at stakeholder forums. Specifically, the committee should undertake the following actions:

- Establish the linkage between the health system and the community, help market the health facility to enhance its credibility, based on quality of care, to promote people's confidence in services beyond the community level
- Planning, implementation, monitoring and evaluation of health actions at the facility and in the VDCs served
- Provide feedback on community-level activities
- Facilitate regular dialogue between the community and the health service providers based on available information
- Mobilize resources for development of the health facility and for supporting outreach and referral activities
- Participate in community health days, outreaches and campaigns
- Strengthen community involvement in decision-making
- Promote intersectoral collaboration
- Oversee the processing of Community-Based Information System (CBIS) data, displaying and discussing the data for action, addressing facility-based and community-based issues causing gaps indicated in the data by VDCs to ensure specificity of responsibility
- Facilitate budgeting, budget controls and accountability to ensure availability of resources needed for services
- Listen to and address complaints of clients sent through a suggestions box or clients' satisfaction questionnaires
- Coordinate the recruitment of peer supervisors
- Liaise with VDCs in convening monthly community health days for joint health action
- Supervise activities at PHU, the immediate catchment area and in the village(s)
- Organize quarterly performance review meetings for all facilities in the catchment area and facilitate corrective measures
- Spearhead resource mobilization
- Prepare and submit quarterly reports to DHMT
- Oversee the functioning of the PHU in support of community-level service provision.
- Ensure implementation of policy guidelines
- Train trainers and peer supervisors and oversee the training of CHWs
- Provide technical and professional guidance through supportive supervision
- Manage relationship with chiefdom-level stakeholders
- Mobilize resources for development of the health facility and for supporting outreach and referral activities

5.3.3 Chiefdom health committees

5.3.3.1 The formation and composition

The membership should include: the paramount chief as chair, the community health

officer as secretary, attended by representatives of VDCs, CBOs, faith-based organizations (FB0s), NGOs and other sectors such as agriculture, education, water, social services, roads and environmental services. Paramount chiefs are the conveners of the Chieftainship Primary Health Care Committee, with the CHC in charge serving as the secretary. The committee meets monthly to receive accountability reports on maternal, neonatal, child and adolescent health services, and on health-care utilization and mortalities that may have occurred. The reports will be discussed using the evidence-based accountability dialogue model, leading to decisions and refinement of action plans to improve performance, with each individual accounting for their roles and responsibilities. They are responsible for ensuring community ownership with accountability of community-level structures in which key service providers and users are represented.

5.3.3.2 Role and functions

This Handbook elaborates the accountability mechanisms in structures that are already in place, ensuring that the CHWs are accountable to their own communities through the VDC for evidence- based deliverables, as they complement the overall health workforce, providing the basic package of services at the community level to defined numbers of the population. The Community Implementation Team consists of the CHW and peer supervisor supported by the community structures (VDC and FMC) and linked to the PHU serving the community.

PHUs are linked through governing, accountability structures, handling referrals from CHWs to the appropriate health facilities. They are also linked through the Health Facility Committee (HFC), approving plans, receiving reports and discussing health events within their areas to determine direct causes and action to be taken. They facilitate discussion of annual work plans from each community health committee, provide oversight for all villages in the chiefdom according to established mechanisms and procedures.

The tasks include: Information-sharing and areas of coverage among partners; identification of gaps in divisional health interventions; mobilization of any additional resources to address the gaps; proposing areas of harmonization of VDC and PHU plans; submitting reports to DHMTs; and carrying out evidence-based dialogue, decisions, planning and actions.

5.3.4 The district council

The district councils are responsible for supporting implementation of PHC at the district level, including ensuring interaction with other local structures. They must also support with financing, linked to accountability of everyone in their assigned responsibilities.

Role and functions in health

- Review of chiefdom health committee reports
- Provide guidance on issues affecting operations at chiefdom HC
- Provides input into the district health planning process
- Facilitate collection, collation and deliberation on implementation progress reports by all stakeholders
- Resource mobilization and allocation

5.4 Community-level workforce

This section aims to provide information about the workforce charged with the responsibility of providing health care services in the community, their roles and responsibilities, how they link up with the rest of the formal health system and how the volunteer workforce is to be motivated and sustained. The chapter also describes their training in terms of objectives, content and organization. Essentially there are two categories of personnel promoting health at the community level. These are community health workers (CHWs) and traditional medicine practitioners. Creating a link with the CHWs and traditional leaders will help promote and strengthen health-seeking behaviours.

5.4.1 The community health workers

A community health worker is a mature, responsible and respected member of the community, a male or female, chosen by the community to provide basic health care. He or she should be a good communicator and leader who has shown signs of healthy practices as a parent or caregiver in her own household, selected and trained as prescribed by the CHW policy and strategy. They complement the roles of other health workers, particularly MCH aides and SECHNs, as they support household-based care providers that are the backbone of care at that level.

There is overwhelming evidence that effective engagement of CHWs improves access to primary health care, to health outcomes and to utilization of preventative and treatment services in a manner that is both respectful and acceptable to community members without compromising quality of care. Thy thus contribute to bridging the gap between communities and primary health care.

5.4.1.1 How a CHW is selected

New CHWs must be selected in a fair and transparent manner that gives equal opportunity to all qualified and interested candidates in a community. Qualifications are outlined in the CHW policy and strategy 2021. Selection is a joint effort between the community structure — the FMC, VDC and PHU staff to which the CHW will be attached. Local political structures (e.g. chiefs, councillors) may participate, but should not be in charge of the selection process. External observers, such as civil society organizations (CSOs) and IPs, should provide a watchdog role. To the extent possible the CHW should be accepted by the whole community as they are the lynchpin between the households and the health system.

It is therefore critical that the community is briefed on the functions of the CHW to enable them select one that can work effectively with them in promotion of the health of the households. Village leaders should organize meetings to inform the people about the CHWs' functions in the community. At a village meeting convened by the elders and attended by the PHU in charge as facilitator, consenting nominees are presented for consideration by the villagers.

In this forum the community committee selects the individual of their choice based on the following criteria:

- Must be educated to a high-school standard, minimum Basic Education Certificate Examination (BECE) or its equivalent

- Must be a permanent resident of the community to be served
- Should be able to perform specified CHW tasks, as outlined in the scope of work (SOW)
- Should be exemplary, honest, trustworthy, and respected
- Should be willing, capable, and motivated to serve his/her community and dedicated to helping others
- Should be interested in community health and development
- Should have experience in past community work with satisfactory records
- Should be a good mobilizer and communicator

PHC requires that all the people involved be trained so they acquire the necessary skills to initiate and manage the development of linkage structures. These skills are critical for the success of the strategy in delivering services at community level. The orientation of personnel in a cascade of training workshops from the district down to the chiefdom levels should be immediately followed by the launching of activities at the respective levels. Training for each batch at every level should be a continuous exercise applying the formal, informal and non-formal approaches to learning.

5.4.1.2 Role and functions of CHWs

The CHWs' SOW prioritizes high-impact, cost-effective, and evidence-based interventions that will reduce maternal and child morbidity and mortality and improve Reproductive, Maternal, Newborn, Child and Adolescent Health and Nutrition (RMNCAH-N) outcomes. It also addresses prevention and control of selected major infectious diseases and NCDs. The SOW aligns with the continuum of care in the Sierra Leone health systems. It complements the roles of other PHCworkers , while equally using a 'demand-driven' approach to meet the needs and preferences of the communities served.

The SOW gets reviewed periodically by the MoHS with the support of partners. The review of the SOW can be undertaken at any time asieeded, considering national and international evidence, experience with implementationpntry health priorities, disease burden, and the financial landscape.

The harmonized SOW of the National CHW Programme is as follows:

General service

- Conduct community mapping and community entry meetings to understand communities and the demographic structure, and to identify the CHW target populations. Enter the information into the community profile and household registers
- Actively participate and lead communitpiobilization and engagement for the health and nutrition of the populations. This includes participation key community and national campaigns and meetings of local community structures, such as the FMCs and VDCs
- Identify and promptly refer cases and conditions that are beyond his/her mandate to health facilities
- Conduct bimonthly (every two months) routine home visits to all households in

the catchment area to:

- Update the community mapping, including demography;
- Reinforce key healthy behaviours and practices for families and households, including early care seeking when one is sick, through effective interpersonal communication skills;
- Assess the social and health situation of households, including the availability of WASH facilities, use of health and nutrition services, and practice of health-promoting behaviours, and identify gaps;
- Conduct dialogue with families and communities, help identify solutions to fulfil health needs, monitor and support the implementation of such solutions; and
- Identify pregnant women, children, and women of childbearing age who are eligible for RMNCAH-N interventions, including the uptake of FP methods, tetanus toxoid vaccination and iCCM for sick children.

Reproductive, Maternal, Newborn, Child, Adolescent Health and Nutrition

- Provide pre-pregnancy counselling on the importance and availability of FP methods, including distribution of condoms and refills of oral contraceptive pills to all women of childbearing age. This includes teaching adolescent girls about the importance of deferring childbearing
- Identify pregnant women as early as possible
- Conduct monthly antenatal home visits up to 8 times during pregnancy:
  - Educate and counsel women and their spouse/family on:
    - The importance of antenatal care and delivery at PHUs by skilled health workers. The CHWs must ensure that pregnant women visit the PHU for antenatal care between the first and second trimesters;
    - ✓ Maternal nutrition;
    - ✓ Essential newborn care (exclusive breastfeeding, hygienic cord care, thermal care, immunization);
    - ✓ Promotion of early childhood development (ECD) through responsive stimulation (play, communication, and early learning) during the first 1,000 days of a child's life, starting from pregnancy;
    - ✓ Promotion of care, psychosocial, and emotional support to caregivers, mothers, fathers, and guardians to create an enabling environment for successful ECD;
    - ✓ Preventive and promotive behaviours for maternal, newborn, and child health, including WASH, infant and young child feeding, FP, and immunization;
    - ✓ The importance of the use of LLINs;
    - ✓ HIV testing and prevention of mother-to-child transmission of HIV, as needed;
    - ✓ Handwashing with soap at critical times and use of toilets;
    - ✓ Use of modern FP methods and referral to the closest facility.
  - Screen for danger signs (e.g. bleeding, oedema, fever, persistent headache) during pregnancy and refer to PHUs if one is identified.
  - Educate women on birth preparedness and planning for delivery at

the health facility
    - Provide intermittent preventive treatment in pregnancy for malaria, specifically Sulfadoxine-pyrimethamine, at each visit (at least three doses during pregnancy)
- Where possible, accompany labouring women to the nearest PHU for delivery and facilitate birth registration
- Conduct three postnatal home visits for both mother and baby on the first, third and seventh day after delivery to:
    - Educate and counsel the mother and her family/spouse on:
        Essential newborn care practices (including early initiation of breastfeeding, exclusive breastfeeding for up to six months, thermal care, skin-to-skin contact, delayed bathing, and hygienic cord care including application of chlorhexidine gel);
        - ✓ The importance of using modern FP methods (e.g. condoms, oral contraceptives, injectable contraceptives, implants, and intrauterine devices);
        - ✓ Maternal nutrition, including postnatal vitamin A supplementation;
        - ✓ Danger signs for mothers and newborns and the need for immediate PHU treatment if one occurs;
        Handwashing with soap at critical times and use of a toilet;
        Vaccination for the baby.
    - Educate and screen for danger signs in both the mother and the and refer to a PHU if identified.
    - Follow up to ensure the implementation of essential newborn care practices and adherence to vaccination schedules.
    - Supervise mothers in applying chlorhexidine gel to the cord for appropriate cord hygiene as needed.
- Conduct a fourth postnatal home visit for low birth weight (small) babies in order to provide the services listed above, including kangaroo mother care.
- Assess breastfeeding practices for young infants (0 to 2 months) and reinforce appropriate breastfeeding practices as needed.
- Screen children 6—59 months for acute malnutrition (SAM and MAM) using the mid-upper arm circumference (MUAC) measurement and detection of oedema in both feet and refer to the health facility there is one.
    - Provide support and follow-up for MAM and SAM referrals to the health facility.
    - Provide support for adherence to the supplementary feeding programme and ready-to-use therapeutic feeding.
    - Provide follow-up counselling and support after the supplementary feeding programme and after discharge from the treatment of MAM and SAM.
- Conduct five promotional young child home visits during the first 1,000 days (i.e., at 1, 5, 9J2, 15, 18, 20, and 24 months) to ensure optimal ECD and nurturing, emotional support and care for the caregiver, appropriate infant and young child feeding, and vaccination
- Provide Vitamin A supplementation for children 6—59 months inhard -to-reach communities, including tracing defaulters and supplementing or linking them to the PHU for supplementation

- Tracing zero-dose children and defaulters of vaccination, reporting and linking them to the PHU. In addition, the CHW receives thee rafme defaulters in his/her village from the PHU in-charge to trace and ensure vaccination of these children
- Work with Mothers' Support Groups (MSGs) for health promotion and prevention activities particularly for maternal, infant and young child feeding and screening children for acute malnutrition
- Conduct social mobilization for progr-amme specific, national, and subnational campaigns in the community (e.g. MCH Week, National Immunization Days, and LLIN distribution) and routine integrated outreach services by the PHUs

Integrated Community Case Management (iCCM 'Plus'}

- In hard-to-reach areas, identify and treat pneumonia with a first line oral antibiotic, diarrhoea with ORS-zinc, and malaria with a first 4ine antimalarial (following a positive rapid diagnostic test result) in children ages 2 to 59 months. Refer cases with danger signs with pre-referral treatment such as first line antibiotic or artesunate rectal supposi y detailed in the National CHW Protocol. Immediately refer diarrhoea cases to the PHU during an outbreak of acute watery diarrhoea diseases (Cholera). Identify (using RDTs) and treat malaria in older children and adults (all ages) as per the National CHW Protocol.
- Identify and provide oral rehydration salts for children over 5 years with diarrhoea and refer them to the PHU.
- In easy-to-reach areas, identify and refer sick children and older people for care to the next-level health facility (PHU).
- Provide follow-up care for patients who are on treatment, with a referral if necessary, through appropriately scheduled home visits as per the National CHW Protocol.

Disease surveillance, prevention, and control

- CHWs Conduct Community -Based Surveillance (CBS) of any event related to the following diseases and conditions:
    - acute flaccid paralysis (AFP)-Polio
    - acute watery diarrhoea
    - Guinea worm
    - measles
    - neonatal tetanus (NNT)
    - acute viral haemorrhagic fever (AVHF)
    - yellow fever
    - cluster of death

- Report any unusual events or rumodfs a ecting the health oémmunity members. CHWs will be expected to report immediately to their peer supervisors by phone (or other means if contact by phone is not available) when any of the above occur. They will also be required to document all events in a paper register to be kept at home. Additionally, CHWs will be expected to support community engagement activities in response to outbreaks, especially in areas of contact

tracing and social mobilization, among others.

Newborn and Maternal Death Surveillance

The death of a woman during pregnancy or labour or 42 days after delivery due to pregnancy related causes is a reportable event. The CHW should collaborate with communities to ensure the following events are reported immediately to the PHU:

- Maternal death
- Neonatal death

Tuberculosis (TB) and HIV/AIDS

The National CHW Hub should work very closely with the TB and HIV/AIDS Programmes in designing the Training Curriculum and SOW for CHWs, and in conducting pre service and refresher training.

CHWs are expected to fulfil the following:

- Conduct community sensitization to increase the level of awareness and create demand for TB and HIV prevention and care services
- Conduct dialogue with families of TB and HIV patients and communities to address the stigma and discrimination related to the diseases
- Screen household contacts of confirmed TB patients; identify and refer presumptive TB cases to the health facility for diagnosis and management
- Educate and counsel TB patients and their family members on basic TB infection control practices at the household and community level
- Follow up patients in their respective homes through home visits, and ensure that patient education is given on side effects, TB and HIV issues, adherence counselling, and prevention
- Identify presumptive TB cases in the community and refer them to the nearest health facility for further investigation and diagnosis
- Educate the community on HIV prevention measures
- Identify and trace patients who have interrupted treatment and defaulters and bring them back into care, in collaboration with the in charges at the DOT/antiretroviral therapy (ART) sites
- Refer TB and HIV patients on treatment for follow-up medical appointments, including for sputum smears, collection of medicines, viral load téing, CD4 count tests, and adverse side effects
- Complete the follow-up register for patients on anti-TB medicines and ART in the catchment area
- Complete the integrated TB/HIV monthly summary form and report to the facility in-charge
- Participate in periodic review meetings organized by the CHW and TB/HIV District Focal Persons, or lead facilities

School and adolescent health

- Map all schools in the CHW catchment area.
- In collaboration with the PHU staff, support the establishment of school health clubs at the community level, especially in primary and junior secondary schools (JSS).

- Provide outreach to primary anJfiS and communities to prevent teenage pregnancy, sexual and gender-based violence (SGBV), and child marriage.
- Conduct focus group discussions in school and communities on the use of adolescent-friendly health services, especially for FP, and TP and SGBV prevention.
- Provide support and feedback to traditional leaders, tribal heads, and religious leaders in communities ohet use of school clinics, and TP and SGBV prevention.

Expanded Programme on Immunization (EPI} services

- Promote uptake of immunization services through community sensitization
- Educate pregnant and nursing mothers on the importance of immunization
- Support mothers to remember the dates their children are due for vaccination
- Trace zero-dose and started but defaulted children and link them to the PHU for immunization (at outreach or facility-based sites)
- Report to the PHUs on any vaccine related complications including that of COVID 19 vaccine

Non-communicable Diseases

With the increased burden of NCDs, CHWs' tasks have evolved from mainly focusing on the prevention and promotion of communicable diseases to fulfilling more supportive roles for chronic lifelong conditions at the family and community level. 3 As the country faces a shortage of health staff at all levels of service delivery, CHWs will have to expand their work to support the management of NCDs, mainly hypertension, diabetes, and cancers, in addition to their prevention and promotion efforts for communicable diseases. CHWs provide the following services:

- Use simple clinical signs to identify hypertension and diabetes in the community.
- Identify high-risk individuals using simplifiedprotocols and refer them to the PHU.
- Promote a healthy lifestyle, physical exercise,and avoidance of alcohol and smoking.
- Ensure adherence to the treatment advice of health workers.
- Provide counselling services to enhance care-seeking from a health facility provider.
- Provide support for the management of mental health patients in the community
- Facilitate support groups for the prevention and management of chronic conditions.

5.4.1.3 The training and deployment of CHWs

This is well described in the National Community Health Workers Policy and strategy. One should emphasize that a committee consisting of PHU in-charge (facilitator), when

^ L.P.Tsolekile et al., "The roles of community health workers in management of non communicable diseases in an urban township", *Afr J Prrn Health Care Fam Med.* 2014;6(1). doi: 10.4102/ phcfm.v6i1.693.

possible, DHMT focal persons, local council representative, paramount chief, women's representative (members), where available, CSO or implementing partner (IP) (watchdog). The decision on peer supervisors should be made by the DHMT on the recommendation of the PHU, based on data supporting their recommendation.

The DHMTs conduct annual performance appraisal of the CHWs, based on allocated targets leading to output-based rewards to sustain motivation for effective performance. Robust pre-service training is necessary with subsequent regular refresher training (every two years based on gap analysis). High-quality, regular, on the job mentoring and coaching is a key motivator for CHWs, since well-trained CHWs feel empowered to do their jobs well. Representatives from the MoHS, DHMT, chiefdom supervisors, PHU staff and the CHW Hub must attend all CHW trainings.

The National CHW Training Curriculum is competency- and skills-based, and focuses extensively on providing hands-on and practical experience. Training is not effective without frequent, high-quality supportive supervision during and immediately following training, when CHWs are most likely to make mistakes and can most easily correct them. All peer supervisors must go through the same trainings as CHWs so that they understand the roles and competencies required of the people they supervise.

5.4.1.4 How a CHW is supervised and motivated

Supervision is the backbone of any successful CHW programme, regular supportive supervision to provide high-quality services and report on time. It is also key in CHWs' motivation, in addition to giving feedback, supervision links CHWs with the PHUs, IPs, and DHMTs. PHU staff are ultimately responsible for conducting and ensuring proper supervision of CHWs, additionally supported by chiefdom supervisors, IP staff, DHMT CHW focal persons, and regional CHW coordinators from the National CHW Hub. Additionally, supervision undertaken by other MoHS programmes, such as the National Malaria Control Programme (NMCP), EPI, DFN and the HIV/TB programme, should work with the CHW Hub to harmonize and coordinate the supervision.

Factors that appear to influence the motivation and work behaviour of CHWs include:

- Hopes for better life through continuous development of life skills and opportunities, provided through continuous lifelong training
- Religious commitment, giving meaning to the service of others
- Regular supportive supervision and coaching
- Logistical support, regularly providing working materials (transport, basic kit)
- Well defined work schedule and expected outputs
- Recognition in daily activities as well occasional assignments
- Reimbursement for non-regular assignments (e.g. surveys, campaigns) falling outside the regular routine and the village of responsibility
- Occasional but predictable output linked rewards to recognize excellent achievement

Years of experience working with CHWs has revealed the following motivating mechanisms:

- Regular refresher training focusing on skill and knowledge gaps
- Organizing their work into fixed number of hours per day and week
- Giving them priority when there are paid jobs, they are fit for e.g. for campaigns and mass treatments, or distribution among communities
- Supportive supervision of individuals or groups based on need
- Effective peer supervision, including giving them regular feedback on performance and the improvement being made
- Evidence-based output linked rewards at regular celebrations
- Organizing them into a saving and credit associations to enhance their own income- earning capacity.
- Training them in productive skills according to their own interests and capacities, beyond health issues
- Attending relevant national or external forums

Encouragement to pursue career pathways in the health system for those who meet the minimum training requirements for other cadres, such as MCHA and SECHNs. High-performing peer supervisors may be encouraged to pursue career pathways into MoHS civil service positions. CHWs will have access to a promotion pathway into the peer supervisor role, and possibly into the MoHS after that. Community leaders may encourage communities to support CHWs, or exempt CHWs from communal work. This will be negotiated on a community basis. CHWs must be financially motivated for their work, both in recognition of their importance and in compensation for time lost for other income-generating activities, and this should ideally be output based. Supplies greatly affect CHW motivation, knowledge and skills retention.

The CHW Register is the primary source for recording the consumption of the essential drugs and informs the quantification of these drugs and supplies required. CHWs may receive reimbursement to cover transport, phone top-up and other logistical support. Peer supervisors may also receive reimbursements to cover transport and top-up. When campaigns or other activities require more time than that of the routine work the programme responsible for the activity should provide adequate compensation. The amount is to be agreed upon with the DHMT and the National CHW Programme.

Supervision **is a** key aspect of all community-based programmes. Strong, high-quality supervision from central to district level and from district level to PHUs and community level may improve programme outcomes. However, supervision may have significant resource demands, both human and financial. In order to make efficient use of limited resources and to integrate management and oversight of community-based programmes, programmes should conduct joint supportive supervision at all levels whenever possible.

5.4.2 Traditional medicine practitioners

5.4.2.1 How traditional medicine practitioners (TMPs) are identified

TMPs have been working in their own communities over the years in rural and urban settings and are sometimes first point of contacts for certain ailment as they can be the preferred choice. The TMPs have made a significant contribution in surveillance, where they were trained to recognize, refer and report acute flaccid paralysis in children. They were also trained in infection prevention and control and particularly on dignified burial practices during the EVD outbreak. They are identified through their own national association. For them to be involved in PHC delivery system, they must be registered members of a recognized national traditional medicine association.

5.4.2.2 Their roles and functions

It is critical to support TMPs as this sphere offers an alternative approach to health care using local knowledge and resources, such as traditional herbs, spiritual realignment, smoking treatment and peacebuilding that can be intergenerational. Herbal medicines are used to treat certain ailments hence its acceptance and popularity, the more so as they are closer to the community. The primary health care approach believes TMPs can play a vital part in the effort to bring tradition medicine into the mainstream of evidence-based traditional practice and to close the gap in health outcomes among people.

5.4.2.3 Training and orientation of TMPs

Some training and orientation regarding primary health care practices for TMPs is necessary.

5.4.2.4 How TMPs are recognized and regulated

TMPs have a professional association which has norms and standards for recognition of members and for regulation of their practice, based on the national traditional medicine practitioner's policy. The DHMT should be aware of these regulatory processes.

5.5 Community health information system

This section defines and outlines the importance and functions of a CHIS in improving the provision of basic health services to communities. CHIS provides information for regular dialogue, monitoring and evaluation and for informed decisions for action to continuously improve the health situation in the community. Measurement of the effectiveness of service delivery at the community level is based on the essential care package, organized by the life-cycle stages. To be successful CHIS must include all stakeholders in designing and implementing it. The indicators for assessment must relate to outcomes that people care about. These are indicators that are likely to trigger a strong response from the community and the health system, while paying attention to the assessment of progress towards the SDGs.

5.5.1 Components of a CHIS

A community health information system is comprehensive because it has the possibility to cover everyone in the village, under the responsibility of a CHW, according to their need for care. It generates information through sources at the community level. It is able to collect information about illnesses that are stigmatized, like disability and various chronic conditions, because the people who collect the information are from within the community. More importantly this system captures information from both those who visit and those who do not visit health facilities.

The critical elements of care include focused antenatal care, newborn care, nutrition, skilled delivery, family planning, family and community support, water and sanitation, integrated community-case management, education, and screening of HIV and TB. All these elements are reflected in the CHIS. At individual and community levels, information is needed for assessing the extent to which services are meeting the needs and demands of the communities. Better availability and use of information has been shown to deliver cost savings, reduce systems inefficiencies and improve health outcomes. Selection of indicators should include issues that are of priority concern to the consumers.

5.5.2 Setting up a CHIS

The system collects information to help the VDC plan and manage health activities at the community level. The VDC should decide on the scope of their CHIS, guided by the peer supervisor/MCH aid. Based on their experience and available information from the community, they prioritize the problems that determine the indicators to be included. After prioritization and agreement on possible actions, the VDC, with the support of the CHW, CHW supervisor or MCHA, plans action to improve their health situation.

To monitor and evaluate action and the level of improvement achieved, the VDC must decide on the type of information to be collected, who collects it and what tools are necessary. In addition, they have to describe how the information will be collected, analysed, disseminated, utilized and stored for future use.

In order to have an effective CHIS the community must be involved in its design, implementation and evaluation. This increases the acceptance and use of the system's output. Ideally, the system collects data based on the activities of CHWs, the VDC and on general information on community development issues, socio-economic, demographic indices of households, community resources, diseases, inter alia. Typically, the following normally apply as indicators:

- Children with child health card
- Children who have completed immunization
- Number of pregnant women attending antenatal clinics from cards
- Number of pregnant women with individual birth plans
- Mothers using oral rehydration salts for diarrhoea in their children
- Children under five sleeping under insecticide treated mosquito nets
- Households having latrines
- Households treating drinking water
- Households with food items in stock
- Deaths by age, sex, cause and date

The information is collected mostly by the CHWs, supported by the peer supervisors and VDC members.

5.5.3 **Data collection** and analysis

The information is collected through simple formats that the VDC and CHWs agree on, such as tally sheets or simple questionnaires. The VDC agrees on the frequency of data collection linked to their health plan. The VDC collaborates with CHWs to monitors data

collection, compilation and analysis. They also participate in the decision-making on how the information is presented for dissemination and utilization within the community i.e. reports, posters or chalk boards placed in strategic places within the community like schools, dispensaries, chiefs offices or worship houses.

- The system should use simple data collection tools
- The system should be inexpensive, requiring limited resources for it to function
- The information available should be referred to frequently
- All are updated twice a year and check that monitoring and evaluation is undertaken

CHIS: CHIS entails gathering, storing analysis and usage of information collected on specific indicator in the community. CHIS ensures that no one is left behind, everyone is accounted for, and provides a denominator to enable assessment of coverage from population data. This is a strong basis for M&E with competency to collect, analyse, and use data for reflective, deliberative dialogue leading to planning and action.

5.5.4 Iterative bidirectional informed dialogue

Based on the information from the household register, teams at each level in the structure from the DHMT down to the household (see figure 3: DHMT Organization Chart), take responsibility for their contribution to continuous improvement in reducing mortality rates, driven by the iterative evidence-based accountability dialogue sessions, with targets calculated based on populations under their care. The national community health worker programme provides the mechanism for achieving the targets, as they bear the primary responsibility for registering the targeted population at risk, and thus clearly identifying the individuals they are responsible for and whose lives they seek to save.

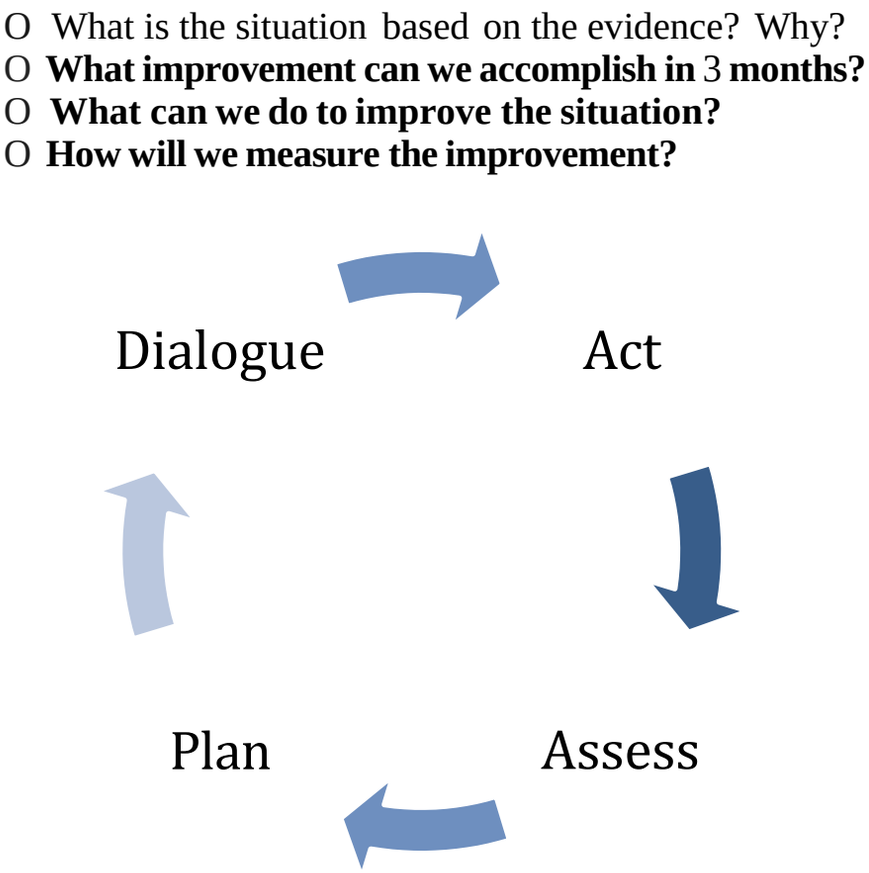
Each CHW should be able to demonstrate that they prevented at least two deaths from a population of 15 pregnant women in a year (ensuring 15 safe deliveries a year, one to two a month!), and accounting for them to the VDC and reporting the information to the PHU. Every quarter each CHW should report on the 3-6 women who will have delivered during that quarter by names, and report on what happened to them. If any of them were the women, or their newborns died, then the CHW and the VDC, supported by the service providers CHP and the CHC should dialogue on why death(s) occurred, and decide on what needs to be done, by whom, to address the reason death occurred in order to prevent deaths in the next quarter.

While doing that the CHW also ensures that all individuals needing care, especially postnatal mothers and their children, receive the care they need, or are linked to the health facility for the greatest killers through iCCM. Thus CHWs bridge the gap between the health facilities, linking them with every household assigned to them and accounting for every mother, neonate, under five, and the chronically ill under their care. This ensures that the CHWs are accountable for measurable deliverables, such as registered households, pregnant women and adolescents, accounting for their welfare, monthly, quarterly and annually, based on CHIS.

Demonstrated measurable success should be rewarded by or through the VDC, a committee that is responsible for leading and governing the village. Each VDCs should be

linked, through representation, to the CHC Committees, responsible for the governance of the PHU committees, ensuring a two-way accountability function, i.e. of service providers, while taking responsibility for the required improvement at the community level. This two-way mechanism makes accountability and responsibility key elements of community ownership to address both demand and supply-related barriers causing delays 1, 2 and 3.

Figure 13: Regular evidence-based dialogue model



The goal is accelerated reduction in preventable deaths of women, newborns, children and adolescents by increasing the utilization of high-impact interventions and/or referrals to levels of greater competence, as well as targeting the vulnerable households entrapped in the vicious cycle of poverty and ill-health.

Another goal is to achieve the stated overall objective of increased access to and utilization of quality evidence-based interventions by addressing supply- and demand-side barriers to ensure effective access to high-impact interventions by women, newborns, children and adolescents and the chronically ill.

Other requirements include the following: prioritized intervention packages of skilled birth attendance, essential newborn care, FP, IMNCI and iCCM, immunization, nutrition, prevention of teenage pregnancy, WASH, tuberculosis and non-communicable diseases.

Chapter 6

PLANNING DISTRICT PRIMARY HEALTH CARE SERVICES

6.1 Planning concept

Why is planning necessary? There are many things to do and there are many different ways to set about doing them. We have to choose the most important things that we have to do, where and when, what to do first, who will do it, what is the best way to get things done and what will make the most efficient use of resources. It forces managers to think deeply about issues, leading to prioritization of the many competing demands that face organizations:

TO PLAN IS TO CHOOSE

Planning is about choosing and making decisions. In order to avoid frustration of unfulfilled plans, the DHMT should follow some simple rules:

A plan for a health programme is necessary for effective implementation and results within the limits of the annual budget. The management and further development of a district operation is larger and more complex than the management of a district hospital

The introduction of training and interventions against priority diseases requires careful planning within the framework of the limited resources. There are certain areas that need planning by the District Health Management Team. These are: Adequate housing (office space and residential); Improving the functioning of the PHC network; Advocacy for prompt salaries and an entitlements administration; Health workforce planning and management; Monitoring and supportive supervision; Capacity enhancement and mentoring; Continuing education at all levels; Evaluation and feedback; Quality improvement; Conflict resolution among staff /community; and Medical and non-medical supplies.

These activities need to be effectively planned regularly and ideally reviewed quarterly. The interrelations of these processes should be coordinated in such a manner that the desirable results are attained. For example, training is given and is followed through into the field situation, and that supervision of field activities becomes goal-directed. Evaluation is necessary to measure impact in order to enhance future planning.

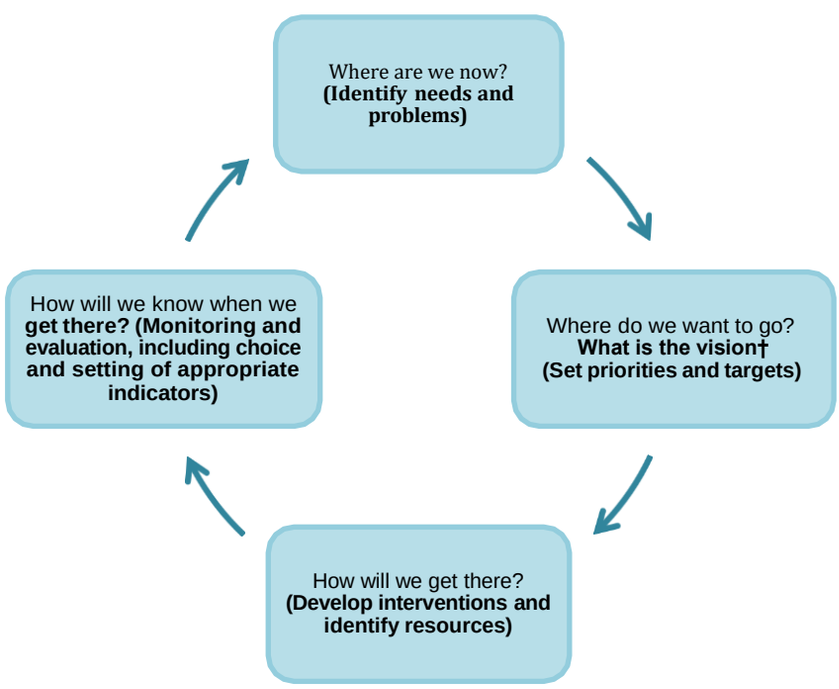
An example
To improve the standard of sterilization in the PHUs:

- Hold training workshops on when, why and how to sterilize
- Supply all PHUs with equipment needed for sterilization
- Follow up to see whether sterilization is being done regularly and correctly
- Evaluate the performance, determine weaknesses and plan retraining

6.2 The planning cycle

The cycle seeks to answer the following questions:
Where are we now? This requires a situational analysis to identify current health and health-related needs, problems, capacities and resources. The plan will include a description of resources required for its implementation, which becomes a basis for costing, budgeting, investing, financing and as mechanisms of accountability. There are several steps in the planning process, which form a continuous interrelated cycle.

Figure 14: The planning cycle



6.2.1 Situation analysis

The situation analysis may answer the key questions -- 'Where are we now?' 'Where do we want to go'? which involve setting priorities and targets. What do we need to get to goal/target x? The identification of resources and capacities, among others. Use must be made of available local data, including research information, as much as possible.

In this planning step the DHMT can use the district operationality tool. This is a tool for assessing the operationality of the district health system. Assessment of the operationality of a district health system can be described as the review of the organization and management of a health system in terms of its structures, managerial processes, priority health activities, community participation and the availability and

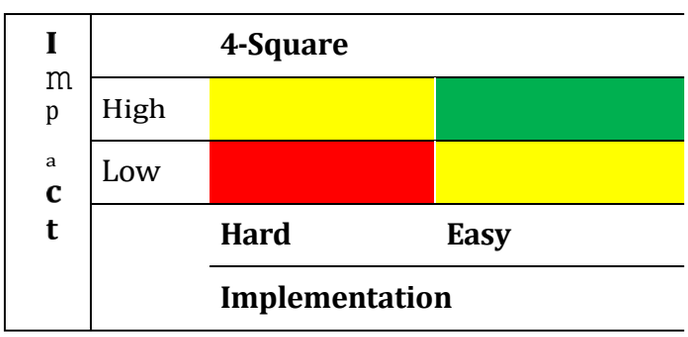
management of resources. It is a self-assessment methodology meant to assist the DHMTs in strengthening the operationality of their health systems.

It examines the state of existing and functional structures and managerial processes in the district that enable the provision of essential health care to the population. The methodology can be used to establish the evidence base for health development. The assessment of operationality should be integrated with other district management functions, particularly planning. A comparison of results with those from neighbouring districts could be the basis for a structured exchange of experiences and solutions between them.

6.2.2. Problem analysis and transformation of priorities to actions

During problem identification consideration should be given to health and health-related problems based on available data, but also the most cost-effective interventions. Through evidence informed dialogue all stakeholders negotiate and agree on the priorities they should focus on, this should be a natural outcome of the evidence-based dialogue.

Figure 15: The 4-square priority model



One should review previous plan (s) and relevant policies in order to adapt to current trends and changes in health care delivery services. This is followed by the selection of cost-effective, high quality and evidence-based interventions that can be achievable with available resource, for example, by using the 4-square model in selecting doable interventions within available resources.

6.2.3. Setting objectives and targets using the logical framework

The two frameworks, the logical and action planning frameworks, can be used for translating priorities into implementation actions. The first framework is the logical framework, which summarizes an operational plan. This starts with the objective to be achieved and logically determines the level and type of activities and outputs needed to achieve the stated objective.

Asking the question, *'Where do we want to go?* is the first step and requires the selection of priorities and the identification of objectives and targets to be met in order to improve the health situation and/or service delivery in the country. The next question is, *'How **will we get there?*** This organizes the tasks or interventions to be carried out, by whom, during what period, at what costs and using what resources in order to achieve the set objectives and targets.

The level of activities and outputs determine the level and type of inputs needed in terms of human, logistic and financial resources, among others, needed. All these items are in the first column of a logical framework matrix.

In the second column of the matrix are the objectively verifiable indicators for each of the items listed in the first column can be found. These are indicators to measure and monitor inputs, activities and outputs, and to evaluate achievement of the stated objective. The third column indicates how the measurement would be done.

The final column deals with assumptions which usually describes things that may affect or influence the achievement of the goals/objectives. Thus, this logical framework enables us to translate the national health sector strategic plan objective into lower level tasks /outputs, including *specific objectives, outcome and activities.*

Table 5: The Logical Framework

Summary Description	Objective verifiable indicators	Means of verification	Assumptions
Strategic Objective:	Measures of the extent to which the strategic objective is achieved,	Sources of information and methods use to collect and report it, survey data	
Specific objectives and outcome: measurable, achievable, realistic and time- bound	Measures of the extent of which objectives have been achieved (change) used during review and evaluation, e.g. percentage achievement of specific objective (quarterly, yearly)	Sources of information and methods use to collect and report it, (Routine/periodic data coverage)	
Output: the direct measurable result of the efforts that are largely under management control	Measures of the quantity of output used during monitoring and reviewing number of clients served.	Sources of information and methods use to collect and report it, Routine data	
Activities: the actions carried out to implement the strategy and deliver the identified output.	Implementation/work programme to produce the expected output used during monitoring, e.g. number of sessions	Sources of information and methods use to collect and report it, Routine data	

IMPLEMENTATION PLAN SUMMARY

Understanding key terms in the logical framework

A specific objective-a statement describing the intended outcome of a plan and the time frame that an organization wishes to achieve it i.e. what should be achieved and by when. It directly supports the strategic objective. A strategic objective can have several specific objectives. A good objective should be SMART:

Specific-clearly states what needs to be accomplished

Measurable-it must have at least one indicator to measure progress towards results

fulfilling the objective

Applicable - it must be consistent with the vision and mission contained in the strategic plan.

Realistic - it must be achievable given existing capacity, opportunities, resources and the context. It must be doable.

Time-bound - there needs to be a time frame for accomplishing the objective, stated as part of the objective statement.

Setting target - an outcome target is usually stated as part of the specific objective. It should be supported by output targets that logically lead to the stated outcome objective target. A target is a specific commitment we make to achieve a specific level of service, in terms of volume (outputs), or change (outcome) level of outcome. Setting them enables service delivery to be focused and measured, to inform continuous improvement. Targets can be both long- and short-term.

Long-term targets - statements of where we want to be in, for example, three to five years' time.

Short-term targets (100 days) - underpin these and represent the steps we take to achieve the long-term targets e.g. every three months. In order to define clear outputs, the following questions should be answered: Do the outputs respond to the identified priorities? Are the outputs realistic, i.e. can they be achieved within the given time frame and resources? Are the outputs under the control of the planning entity?

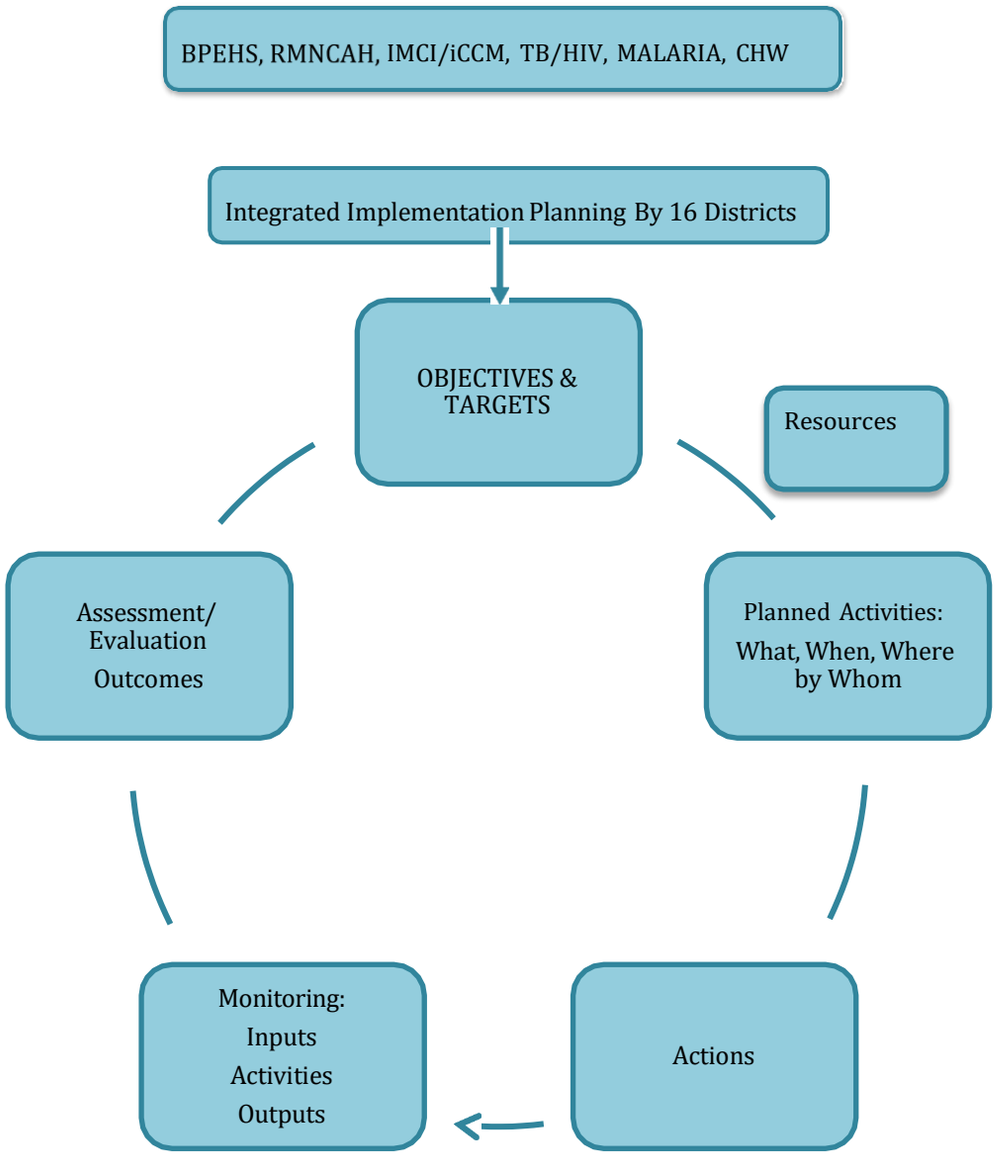
ACTIVITY PLAN

6.2.4. Determining resource requirements and costing them

- Define activities involved in an intervention
- Identify and define inputs required to carry out the activities (include indicators)
- Cost the inputs
- Assign responsible person

6.2.5. Preparing an action plan and budget. The plan should be in a logical framework containing the following items: the problem, objective(s)/interventions, activities, inputs, key responsible actor/implementer, important assumptions and risks, activity monitoring indicator, planned output, activity cost and implementation time frame.

Figure 16: The planning framework



6.2.6 Activities planning: Identifying actions needed to bring about the stated outputs required to achieve the stated specific objective. The Action Plan identifies the specific steps that will be taken to achieve the specific objectives. Action Plans are geared toward operations, procedures, and processes. It describes what will be done, by whom, and when it will be completed. Action Plans provide a basis for monitoring of progress towards objectives, providing details about processes that may not be specified in a logical framework. A plan of action is also prepared in a matrix containing: the strategic objective, specific objective(s), outputs, activities, inputs, key responsible actor, monitoring indicator, and implementation time frame. To determine activities, the following questions need to be considered:

- Are the activities adequately derived from the outputs?
- Can the activities be accomplished within the timeframe and resources?
- Do the interventions provide the means with which to address/achieve the

priorities/ outputs/ objectives?

Key assumptions: Identifying potential constraints and limitations to planned actions. This may lead to modifying proposed actions in line with context (e.g. lack of political support). These constraints when identified may lead to greater resource mobilization, social mobilization, modifying job responsibilities and tasks, shifting available resources from one activity to another and obtaining additional resources; improving management and administration in line with identified agreed actions.

Table 6: Implementation plan summary

Strategic Objective	Specific Objective	Output	Activities	Activity Timeline											
				S	O	N	D	J	F	M	A	M	J	J	A
Service delivery															
Financing															
Networking															

Table 7: Activity plan

Activity Community, Organization and registration	Responsible person Name	**Time:** Q 1 x	**Time:** Q 2 x	**Time:** Q 3 x	**Time:** Q 4 x
Screening of households **for priority disease**	Name	x	x		
BCC health education			xxxxxxx	xxJCxxx	xxxIxxx
Service provision	Name	xxxxxxx	xxxxxxx	xxxxxxx	xxxxxxx

6.3 Relationship between DHMT and the central MoHS level

The two levels are linked through the NHSSP which is the responsibility of the national MoHS. The NHSSP provides a framework to the DHMTs to develop annual operational plans derived from it. The district plans are then submitted to the national level to be collated into the national annual operational health plan for financing.

6.4. Integrated supportive supervision

6.4.1 What is an integrated supportive supervision visit?

An integrated supportive supervision visit is a primary function of the DHMT. It is the mutual interaction between supervisors and supervisees. The objective is to identify the health issues, proffer appropriate recommendations and take actions to resolve the issues identified. DHMTs can engage health partners in the district to mobilize resources to support in addressing the issues as and when necessary. It means that senior and skilled personnel visit less skilled personnel at health facilities in order to help, support and guide them into correct ways of doing their tasks. Integrated Supportive Supervision is NOT an inspection or policing process, but a dialogue-oriented process which gives room for interaction among junior and senior health staff.

6.4.2 Who should provide integrated supportive supervision?

The health system should be able to provide supportive supervision to the frontline personnel. A supervisory team should have an appropriate skill mix and should therefore be multidisciplinary so as to ensure standards in terms of quantity and quality of work. Effective supervision requires multi-sector coordination and collaboration at various levels in creating a supervisory system made up of staff with technical and management skills working as a team.

Other components of effective supervision are setting of key performance indicators (KPIs), regular performance appraisals using the approved checklist; effective communication; and appropriate rewards to all health workers and CHWs. During supervisory visits, the team should:

- Discuss the aim of supervision with peer supervisors and CHWs
- Discuss with committees and beneficiaries to identify issues which need attention by respective bodies.
- Observe performance-based job descriptions; guide, direct and encourage the supervisee
- Check recording and data systems
- Check stocks of supplies, note gaps
- At end of mission, provide feedback and wind up with and agreed plan of action

The team would then prepare a field report and send it to the VDC/ADC, health care facilities and the DHMT for follow-up and needed action. Such actions may include in-service training, continuing education and improvements in the supply of materials provided by the health centre or district health office.

6.4.3. Planning "integrated supportive" supervision

By "integrated supportive" supervision, we mean supervision that will lead to an improved functioning of the PHU. Certain basic procedures help to make supervision "productive":

- Supervision should be planned on a regular basis — this might be a visit to each centre every two to three months. More frequent visits are impractical, given limited transport facilities and the condition of roads during the wet season.
- Sufficient time needs to be spent at each health centre. A minimal time of four hours per centre and preferably at least two days and a night in each chiefdom/area. Brief visits can achieve little and waste time, money and transport.
- Supervisors need to use the supervisory protocol. This is a series of forms, which help the supervisor to check the supplies and equipment and to observe the activities of the staff.
- Supervision can be delegated to the chiefdom/area level so that community health posts will receive more frequent visits from CHC staff.
- In addition to the detailed protocol, it is useful to carry a list of appraisal

criteria to assess the quality of functioning.

- At the end of the supervisory visit, the supervisor(s) should give a summary report to the staff.

This should encourage better output by praising what is well done and should point out what actions are necessary to effect improvement. In addition to the above routine procedures, supervisors will also spend time discussing with staff the implementation of the activity learned in the most recent training workshop and will give additional training as necessary. After visiting the community health centre or community health post, supervisors meet the community leaders and listen to their comments on the health service. Thereafter the supervisors should organize a joint meeting for ironing out difficulties and/or planning for the future.

6.4.4 The three levels of integrated supportive supervision visits (ISSV)

- National to district (ISSV secretariat, ISSV supervisors, national ISSV facilitators, district advisors and regional coordinators)
- District health management team to peripheral health units (DHMT ISSV supervisors, district council, and partners)
- Community health centre (CHC) to community health post and maternal and child health post (CHC staff/chiefdom supervisors).

Chapter 7

SERVICE DELIVERY

This chapter elaborates the expected services the health sector delivers by lifecycle stages and service delivery level. It helps to provide a rational framework to guide investment in health sector inputs across the country and ensure equity in availability of investments needed for service delivery.

7.1 Defining levels of service delivery in PHC norms and standards

There are four levels of health-care service delivery focusing on primary health care: the CHC situated at chiefdom level, the CHP in small towns, maternal and child health post (MCHP), the closest health facility to the community and the community health worker (CHW) at community Level.

The Peripheral Health Units are supported by the district hospitals which provide mainly secondary care and also some components of PHC services. The specific activities and populations served are defined on the basis of equity and efficiency in carrying out PHC services at each level. Effective implementation of PHC services at district levels requires buildings, equipment, drug supplies and appropriately trained and qualified staff to meet these functions. The health personnel employed in PHUs depends on the type of PHU.

7.1.1 What are norms and standards?

Norms and standards refer to the ***minimum*** and •*Reropriate* mix of **human resources** and **infrastructure** needed to provide PHC services for expected populations at the different levels of the system within the defined catchment area. The expected **standards** for PHC services to be delivered at different levels of the health system to ensure comprehensive health service delivery require minimum human resources and infrastructure.

The basic package is a unique combination of integrated activities that are provided to all the citizens of the country to enable the achievement of the desired health results required an appropriate mix of inputs (human resources, infrastructure and commodities). Additionally, the health sector is working towards maximum efficiency and equity in service delivery through a rights-based approach aimed at ensuring that all clients have an equal access to quality services. (See BPEHS 2015)

7.1.2 Principles in establishing norms and standards

Equity in access and utilization: All inhabitants of the country and its respective districts have not only equal right to access health services, but also to use them equally for equal need. Important determinants are geographical, demographic (age and gender), sociocultural and economic factors.

Relevance and acceptability: PHC must take account of the demand for care and respond to the real and priority needs of the population. PHC needs to be rooted in the cultural, social and economic realities of the communities and should include user safety and satisfaction in the health-care delivery provided.

Continuity of care: **A** person who seeks assistance for a health problem (whether to cure or to prevent illness when at risk) is taken care of from the start of the illness or the risk episode until its resolution. This means that a functional referral and counter-referral system should exist to make sure that services are availed to the sick person or person at risk. Continuity also includes the active follow-up of certain patients/persons at risk in order to protect the patient/person and/or the community at large.

A comprehensive/holistic approach: Every contact with individuals, households and communities is used to ensure that a comprehensive set of defined basic package is made available. The health problems of individuals are taken care of, while considering all the dimensions of the persons and their environment, namely the household and the community and their social, cultural, economic and geographic characteristics. In order to do so, the health providers in direct contact with the community have to 'know' the population. They will maintain a permanent interaction and dialogue with individuals, households and the community at large.

The involvement of individuals, households and communities: Involvement is expressed by recognizing that people have responsibility for their own health. This should be expanded to include a sense of ownership of all they undertake relating to their health in the formal health system. Such involvement includes individual participation in health activities, and collective participation through management of health facilities. The establishment of a functioning health committee, constituted of interested and informed community members, is an example of how this collective involvement can take shape.

The principle of functional coherence: By functional coherence we mean that an accurate correlation has been established between the skills of the staff, the equipment and facilities available and the main health problems to be tackled. The principal of functional coherence means that the three types of PHU should be variously equipped according to the level of skill of the staff. The standard equipment list and the essential drugs list have been designed to relate directly to the expected function of the PHUs. A major work of the district health team is to give support, supervision and training in order to bring each unit up to its full functional potential. The standard requirements for buildings, equipment, drugs and staff levels represent goals to be achieved for each unit and chiefdom in the district.

7.1.3 Criteria for choosing a PHU location

The selection of a PHU location is the joint responsibility of the following bodies:

- The community (the Chiefdom Development Committee, the VDC/ADC and the Paramount Chief/Community Leader).
- The District Health Management Team
- The District Hospital Board
- The DPHC and the DPPI

The criteria include: It should have a central location; the community itself should want a health unit; there should be political and administrative support within government; the nearest other PHU should be at least two hours walking distance (approximately

three miles); and the site should be accessible, preferably by road or by sea, as appropriate, year round.

7.2 Service delivery functional levels and requirements

7.2.1 Household level

Based on the information given by the trained health worker or CHW the household heads have important responsibilities in ensuring members of the households practice health behaviours at all stages in the life cycle. They include the following:

- *Health promotion-related behaviours:*
  - Healthy diet for people at all stages in life in order to meet nutritional needs
  - Building social capital to ensure mutual support in meeting daily needs as well as coping with shocks in life
  - Demanding health and social entitlements as citizens
  - Monitoring health status for early detection of problems for timely action
  - Regular exercise
  - Clean environment
  - Ensuring gender equality

- ***Disease prevention-related behaviours:***
  - Completion of scheduled immunizations of infants before first birthday
  - Good personal hygiene in terms of washing hands, using latrines and environmental sanitation.
  - Treating drinking water to make it safe
  - Sleeping under ITN and vector source reduction
  - Prevention of accidents, abuse and taking appropriate action when they occur
  - Dialogue on sexual behaviour to prevent transmission of sexually transmitted infections/HIV

- ***Care seeking and compliance with treatment and advice*** *from a* ***trained*** *provider:*
  - Providing home care for the sick members
  - Recognizing and acting on the need for referral or seeking care outside the home
  - Compliance with recommendations given by health workers in relation to treatment, follow-up and referral
  - Ensuring that every pregnant woman receives antenatal and maternity care services from a trained provider

- ***Governance and management of health services:***
  - Attending and taking an active part in meetings to discuss trends in coverage, morbidity, resources and client satisfaction, and giving feedback to the service system, either directly or through representation, using the available community structures, such as the VDC and the FMC

7.2.2 Service delivery by community health workers

The CHW programme with its trained cadres is a critical component of the community component of the Primary Health Care system. The CHWs are supervised, supplied and monitored by the PHU in-charge. The programme prioritizes on delivering high-impact, cost-effective and evidence-based interventions that will reduce maternal and child morbidity and mortality and improve RMNCAH+N outcomes. It also addresses selected prominent infectious disease concerns. The CHW activities align with the continuum of care in the Sierra Leone health system and complements the roles of other health workers working in the PHU, while equally using a 'demand-driven' approach to meet the needs and the preferences of the communities served. Each CHW takes care of about 50 to 170 households, which is essentially a village.

7.2.3 Community Health Workers "Service Package"

The CHWs provide a package of RMNCAH and nutrition promotion, disease prevention and basic curative services, as per the scope of work stated in the current national CHW policy and training protocols. They are summarized below:

- Household registration-census of population focusing on vital family information in their catchment community. In addition, CHWs conduct mapping and recording of population statistics, water and sanitation facilities, infrastructure and emergency management plan in the catchment community. Following the profiling, CHW conduct household visits every two months to promote birth spacing (FP), sanitation and hygiene, malaria prevention, identify pregnant women and family members in need, identify and support people with NCD.
- Health promotion and disease prevention activities through social mobilization and counselling through job aide scheduled home visits.
- Community-based surveillance: detecting and prompt reporting of epidemic prone diseases and events of national concern if one occurs.
- Integrated Community Case Management with treatment for malaria, pneumonia and diarrhoea with first line antimalarial, antibiotic and 0RS-zinc respectively while referring patients with severe conditions and those with problems outside of the scope of CHWs. Screening of all sick children. The iCCM service also includes screening the under-five children for acute malnutrition using MUAC strap and clinical detection of oedema of both feet.
- Conduct promotional home visits for antenatal care monthly, institutional delivery and postnatal care (four times) followed by scheduled young child home visits at 1st month, 5th month, 9th month, 12th and 15th month to make sure, the child's nutrition, development immunization needs are being taken care as per the guideline for the CHW. In addition, they conduct tracing of defaulter and zero-dose children for immunization, defaulters of vitamin A and deworming and linking them to the PHU.
- In coordination with MSGs counsel women/families on maternal, infant and young child feeding (MIYCF); regular active screening of under-five

children for acute malnutrition and referral of those who have moderate or acute
- Support mobile and integrated outreach sessions through social mobilization and facilitation,
- Conduct community sensitization to increase the level of awareness and create demand for TB and HIV prevention and care services; conduct screening and case detection, follow up those on treatment and care for adherence to the treatment, follow up and home care as per the CHW protocol
- Provide promotional school and adolescent health services in coordination with the PHU focal person

7.2.4 Service delivery at MCHP level and the requirements

MCHP is the lowest level of PHUs. An MCHP should ideally serve a population of 500 to 5,000 within a 5 km (3 miles) radius of the facility. Staffed by Maternal and Child Health Aides (MCHAs), MCHPs are often the first facility level of contact for patients.

7.2.4.1 Functions

As the title suggests, services in the MCHP focus primarily on the following areas:

- Antenatal care services
- Routine deliveries
- Postnatal care including neonatal care
- Child health services, including EPI, nutrition and IMNCI
- Basic first aid
- Family planning/reproductive services
- Outreach services
- IDSR
- Lead in health mass campaigns
- Referrals to higher levels
- Follow-ups on discharged cases
- Health education/promotion
- School and adolescent health services

MCHPs serve as the lowest link to community health services; as a meeting place for CHWs; and as a distribution hub for their drugs and supplies. They do some data reporting, training and mentorship, as well as monitoring and supportive supervision. They are trained to dispense some free health-care drugs and other basic medicines.

7.2.4.2 Staffing

Technical staff: An MCHA is in charge and would be having another such aide.
Support staff: A labourer/cleaner and security (preferably provided and supported by the community)

7.2.4.3 Physical facilities

The main building: Part of the health facility structure/building should be used for maternal and child health care. The health facility should be closer to the resident of the in-charge. The following amenities should be present:

- A large waiting area for clinic
- One room for deliveries and one for consultations
- A lockable cupboard for equipment and an area for sterilization
- A store for drugs, equipment and food supplies
- A solarized system
- A protected water well with an immersion pump
- There should be overhead tank to supply pipe-borne water

One needs to ensure there is a flush toilet inbuilt (inside the building); a ventilated improved pit latrine (for outside); an incinerator; and a placenta pit.

Detailed advice on the building structure and materials can be obtained from the DPPI or the office of the architect of the MoHS criteria regarding the distribution centres.

7.2.5 The service delivery at the CHP level and the requirements

CHPs are usually situated in a smaller town or village and serve a population of 5,000 to 10,000 inhabitants within an 8 km (5 miles) radius of the facility, or to be accessed within 30-60 minutes. TheCHA or a SECHN is in-charge of the CHP. In the absence of refrigerator for immunization, the CHP will store its vaccines at the nearest health facility. For effective service delivery at that level, an assistant environmental health officer posted to a CHP is needed.

7.2.5.1 Functions

- The CHP have similar functions to the MCHP plus general care with more advance clinical management, supervise MCHPs and serve as the immediate level of referrals from the MCHPs
- For complicated cases, patients should be referred from the CHPs to the CHCs where improved services can be offered
- Urgent and/or more serious referrals and emergencies on the other hand should go straight from the health posts to the district hospital to avoid delays

Curative activities:

- Routine management of common illnesses and conditions
- Identification and case management of chronic illnesses (TB, hypertension, diabetes)
- Dressing of wounds
- Surveillance and treatment of epidemic-prone diseases

Rehabilitative care:

- Identification of cases needing application of assistive devices and rehabilitation
- Palliative therapies through curative and preventive health activities and

visits to villages and roper information on referrals for those needing them

***Health* in/ormation:**

- Record-keeping and reporting on activities
- Keeping and utilizing household/family files
- Follow-up of registration of births and deaths to guide planning
- Follow-up of services, information on the activities carried out
- Information on the management of resources
- Conduct evidence based micro-planning to ensure that all communities in the catchment area are receiving the integrated services

7.2.5.2 Staffing

Technical staff: CHA, SECHN, eHealth Africa and MCH Aide. The CHA/SECHN serves as the lead staff of the CHP.
Support staff: A labourer/cleaner and security (preferably provided and supported by the community)

7.2.5.3 Physical facilities:
The main building

Part of the health facility structure/building should be used for maternal and child health care
The health facility should be closer to the staff residence

There should be the following equipment: a large waiting area for clinic, one room for deliveries and one for consultations, a lockable cupboard for equipment and an area for sterilization, a store for drugs, equipment and food supplies, a solarized system and a protected water well with emersion pump. There should be an overhead tank to supply pipe-borne water; one must ensure there is aflush toilet inbuilt (inside the building); a ventilated improved pit latrine (for outside); an incinerator; and a placenta pit.

Detailed advice on the building structure, materials and criteria regarding the distribution of centres can be obtained from the Directorate of Support Services or the Office of the Architect of MoHS.

7.2.6 Service delivery at CHC level and the requirements
CHCs are usually situated in the chiefdom headquarter town, or in a well-populated area, with a catchment population of 10,000 rural to 30,000 or more in an urban area, within a 15 km- (10 miles) radius of the facility. The CHC has preventive and curative functions. CHC offers the most complex and skilled services within the primary care level of the health system. The National Action Plan for PHC specifies that there must be at least one per chiefdom. This means that the average district will have a minimum of 7-16 CHCs according to the number of chiefdoms.

In addition to its own catchment area, the CHC should oversee all the other units in the chiefdom that is, the CHPs, the MCH posts and the community health workers. The CHC takes responsibility for the health of the entire chiefdom. The CHC has a laboratory and

pharmacy and 10 beds for observation. All CHCs are supposed to provide a full BEmONC package. Improvement towards this goal is an objective of the NHSSP (2017-2021).

7.2.6.1 Functions

The CHC is the first level of health facility that has both a laboratory and a pharmacy, and thus has much higher diagnostic and treatment capacity than MCHPs and CHPs. Some CHCs are upgraded to have an X-ray unit and operating theatre. These CHCs have preventive, promotive and curative functions which include the following:

- All functions of CHPs plus
- Activities including basic emergency obstetric care
- Additional outpatient care, largely limited to minor surgery on outpatient basis
- Limited emergency inpatient services (emergency inpatients, awaiting referral, 12-hour observation)
- Limited oral health services
- Primary eye care
- Specific laboratory tests (routine lab, including malaria; smear test for TB; HIV testing)
- Identify people who need referrals and facilitate referrals to the appropriate level of care
- Providing technical and logistical support to the lower levels in the catchment area
- Cold chain with the fridge and vaccines that are kept there to cover the immunization needs of the catchment area
- Coordinating information flow from facilities in catchment area
- Screening of non-communicable diseases

General clinical care:

- The diagnosis and treatment of patients presenting themselves at the health centre
- Referral of patients to the district hospital, when necessary
- holding outreach clinics in remote villages at regular intervals
- planning for and ensure health care services to remote sections in the chiefdom by mobile clinics if necessary, or by arrangement with the CHCs. The aim is to ensure comprehensive coverage of the chiefdom
- Supervision and assistance to MCH posts
- Supervision, mentoring support and provision of supplies to CHWs and peers supervisors under it

NotiJcations *and* prompt action *against epidemic prone diseases*

- Send notification of these diseases promptly to DHMT
- Take immediate containment and response measures
- Collect, prepare and send specimen to laboratory as per the national laboratory guideline
- Mobilize all CHWs for social mobilization of the community for public health action to contain the epidemic

- Support the efforts of epidemic response team from district, headquarters and/or Freetown
- Collect and study statistics of incidence, prevalence and case fatality of the disease within the district
- Be alive to information on the prevalence of the disease in other parts of Sierra Leone, especially within the district

Environmental improvement: These are the responsibility of the environmental health officer, assisted by all members of the CHC Team.

- Health education (including food hygiene practices) in villages, schools and clubs
- Health education at the CHC
- Advice and assist the villagers on buildings and latrine construction
- Protection of wells and other sources of water supply
- Building of compost fences
- Assisting villagers to deal with environmental nuisances including vector control, damage to food stores, storm water control, inter alia
- Encouraging the farming of nutritious foods, including poultry

***Collecting and using* in/ormation:**
Keeping accurate records, collating reports and using the information for decision-making and action is the responsibility of all members of the CHC Team. The CHO should submit such information routinely to the district monitoring and evaluation office. Ad-hoc data may need to be collected and transmitted to the district or the Directorate of Planning and Information (DPI). The CHO should regard this as part of his/her responsibility.

The community

- The CHC team should encourage the initiation of village development committees and attend their meetings and train MCHA or the CHW
- Encourage community involvement and active participation in health-care activities
- Hold meetings with other sectors working at field level
- Encourage the community to keep and maintain a village register

Administration:
To undertake all the above functions a community health centre needs to undertake the following:

- Hold regular staff meetings and keep records
- Allocate responsibilities clearly
- Maintain high standards of the IPC in the centre and community
- Ensure accurate record-keeping and analysis
- Undertake small repairs to maintain the centre

Make regular plans for:

- Outreach clinic

- Home visits and follows-up
- Assistance to CH Posts and MCH Post
- Training of CHWs
- Health education
- Improvement and maintenance of supply chain management

7.2.6.2 Staffing

The person in-charge in a CHC is a community health officer, supported by technical team members and the support staff listed below. The CHC supervises the lower levels of care, including CHWs, MCHPs and CHPs within its catchment area.

Technical Staff

- CHO in charge
- Midwife
- Community health assistant
- Environmental health officer
- State-enrolled community health nurse
- Lab technician
- Lab assistant
- Community aide
- Pharmacy technician
- Assistant nutritionist
- Public health aide
- MCH aide
- Any other position to be determined by MoHS

Support Staff

- Porter/cleaner
- Security

7.2.6.3 Required physical facilities

In building a new PHU, it is important that the minimum MoHS-recommended standards are incorporated in the design and should include the following:

- The main building-clinic
- The staff quarters
- Protected water well with emersion pump
- Overhead tank to supply pipe-borne water. Ensure flush toilet inbuilt (inside the building) with ventilated improved pit latrine (for outside), an incinerator and placenta pit.

Main Building

- One consulting room
- A large waiting area for clinics and health talks
- A dispensary
- A very secure thief-proof store for drugs.
- Major and minor theatre for wound dressing and surgeries interventions

- An arrangement which ensures "patients flow" — (that is persons entering and leaving the building at different points to avoid cross current and obstructions)
- Open veranda to ensure good airflow and shade
- Admission room to accommodate 2 to 10 beds
- A special room for sterilizing equipment (may also be used as vaccination room)

The* materniJ *block should be separated from the main building.

- MCH clinic room
- Antenatal room
- Delivery room
- Postnatal room
- Office and store for environmental office
- Cold room for vaccine storage
- The laboratories should be equipped with a washroom and placed near to both the maternity block and the ward area of the centre
- Staff quarters for at least four technical staff officers

The VIP latrine should be outside

Details of Essential Care Package offered by PHUs by level are summarized in Annex I, as presented in the Sierra Leone Basic Care Package of Essential Health Services (2015).

7.2.7 School health services

The school health package consists of child health services, including routine immunization, deworming and vitamin A supplements, IMNCI, oral/ENT /sight screening, physical rehabilitation and basic first aid. It also consists of progressively age-appropriate sexual and reproductive health education and services, and dialogue with communities around adolescent health issues. This package is delivered directly in pre-primary, primary and secondary schools by school personnel (teachers and administrators) and as an outreach service by health workers (PHU staff). It is managed and supervised by the MoHS, in collaboration with the Ministry of Education, Science and Technology (MEST).

7.3 Referral mechanisms

7.3.1 Introduction to a comprehensive referral system

The elements of comprehensive care include clinical, nursing, psychological and social support that should be available for every client in need. This requires a strong referral network. The referral process is a system by which an immediate client needs for comprehensive care and support services are assessed, and clients are helped to gain access to services from various providers. It includes follow-up efforts by service providers to solicit feedback from clients on the services they have received, strengthening the links between the different providers, an evaluation of client progress and ensuring quality of care.

A referral system is a network of service providers and facilities that link to provide a continuum of care for acute and chronic conditions. It includes individuals and organizations working to provide care and support to the sick, their families and

caregivers. There are typically four levels to a health referral network: the community, primary, secondary and tertiary levels.

Due to inadequate resources in the health care system and the limited capacity of health-care providers at various levels, referral networks are necessary to address clients' needs that cannot be addressed by one PHC provider. The objective of a referral network is to improve the access of clients to services, reduce the time it takes for them to receive required care and avoid unnecessary delays. In order to strengthen access to existing services and enhance linkages between the providers, formal referral arrangements, proper communication and the use of standard tools must be in place. Effective communication and transport arrangements are crucial for an effective referral.

Effective referrals depend on many factors, key of these include a good communication network, roads and availability of effective means of transport.

7.3.2 Elements of a well-functioning referral network

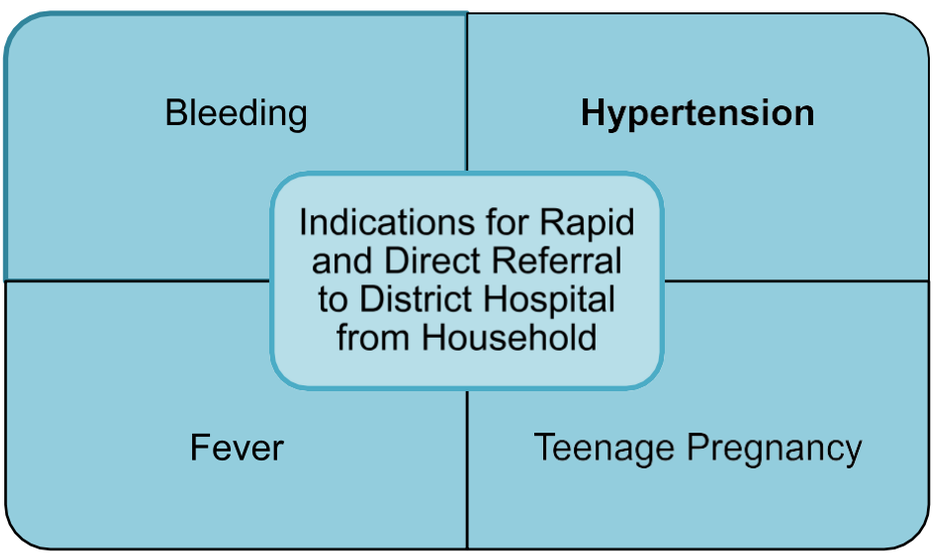
The following elements need to be put in place to enhance the effectiveness of the referral system and ensure positive outcomes for clients, their families and the entire community.
Availability: The availability of various organizations and institutions providing services based on the prevailing local health problems is vital. Services should be accessible and affordable to the general community.
Coordination of referral activities: Well established referral coordination mechanisms within organizations and between different service providers should be ensured. Organizations should designate a team or specific individual to coordinate the referral activities and provide feedback where necessary
Relationships: Higher-level health facility providers, particularly hospitals, should take the lead in establishing and maintaining referrals by supporting other lower-level providers and clients. Both providers and clients should work as partners in the network with a common goal.
Communication and transport: Effective communication and transport arrangements are crucial for the completion of effective referrals. Identification of the cheapest means of transport should be done and, if possible, discussed with opinion leaders. One possible solution would be to choose a member of the community with a vehicle to assist other community members with transport during referrals.
Feedback mechanism: A feedback system should be established to help with the tracking of referrals from the point of initiation to the point of delivery. This will provide evidence that the client completed the referral process and whether or not the client was satisfied with the services they received.
Monitoring and evaluation: The referral networks should establish monitoring and evaluation mechanisms for the continuous assessment and improvement of the referral system, process and outcomes.

The existence of a referral plan and ensuring adherence to it is key. The availability of qualified staff to accompany the patients on referral may be vital. Gaps within the referral system include the lack of a referral policy/strategy, late recognition of the need to refer, inadequate ambulances, challenges with availability of fuel and maintenances (vehicles, medical equipment, bikes) and inadequate staff. Some island areas are inaccessible resulting in delay

Financial barriers also play a key role in causing delays in accessing care resulting from the inability to hire emergency transport services from community to the nearest health facility. Inclusion of a bypass strategy to reduce the 3 delays and ensure commitment to free health care for pregnant women to eliminate financial barriers to accessing lifesaving **obstetric care are important.**

A functional referral system from community to facility and from facility to facility is critical. Every service delivery point must explore innovative transport systems from community to facility, especially in hard to reach areas including use of motor bikes and **taxi service providers.**

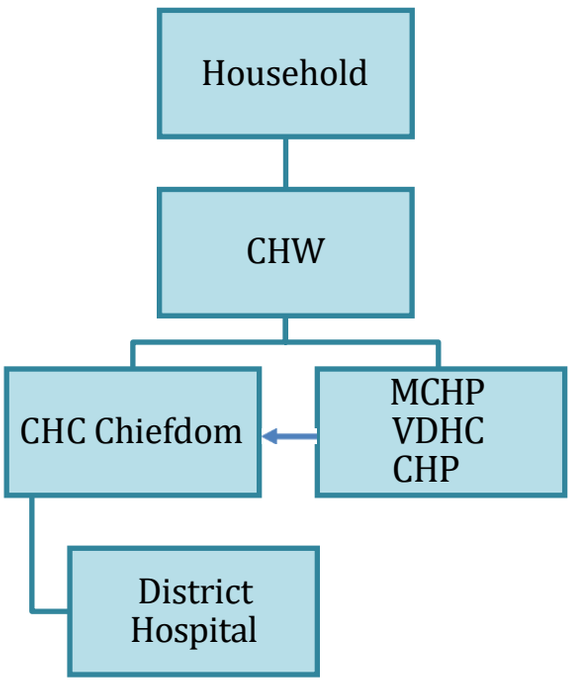
Figure 17: Indications for direct referral to hospital/PHU levels



Thus, households and communities must be responsible for addressing demand-side barriers, such **as financial,** transport, geographical and sociocultural challenges. **Most of** these can be improved by birth preparedness planning at household and community levels. Planning reduces crises. Failure to recognize danger signs in pregnancy, newborns **and in** sick children **that results** in delays 1 and 2 **to access lifesaving services can** be addressed by trained CHWs who in turn educate caregivers through evidence-based interactive engagements at household and community levels, based on household **registers.**

A CHW, taking care of 170 households (maximum number per CHW), i.e. 1,000 people, has a total of 44 births a year (at the crude birth rate of 44 per 1,000), which is about four expected deliveries and hence newborns in any month. This is a manageable workload if registered women near-term are targeted for home visits, each pregnant woman should receive up to 8 home visits during pregnancy. This information should also be at the MCHP and CHC for the purposes of supervision and service delivery.

Figure 18: Organizational and referral structure



The referral process should be carried out through a dialogue between the provider and the client, with a goal to address the perceived needs of the client and their caregivers. The provider and the client develop a partnership relationship. The provider receives and assesses a client, classify illnesses, fill in a referral form and the referral register.

7.3.2.1 Levels of referral

Community health workers often identify clients through home visits and mobile clinics. CHWs should plan and implement care services and make referrals according to guidelines and establish a follow-up process with the client. Clients may present themselves to the health facilities on their own or accompanied by relatives, friends or CHWs. Upon the presentation of the client to the health facility, health facility personnel should plan and implement a care programme, refer to guidelines and establish a follow-up process with the client.

The referral network should provide for an effective flow of clients from different referral systems. At the community level, the community health workers should organize themselves into teams that coordinate the referral activities within their location and provide the required linkage with the health facilities and other service providers. At the facility level the person in-charge or PHU staff takes responsibility for the referral of patients. The person in-charge should participate actively in the review of the referral processes and conduct quality assurance activities. Other organizations that are part of the network should make their services known and participate in the referral processes and reviews.

7.3.2.2 National emergency medical services: This is a service with a fleet of ambulances deployed nationwide for transport of medical emergency cases referred by PHU/ communities and is under the MoHS directorate of hospital and ambulance services. However, there is a hot phone line for communicating referrals.

7.3.2.3 Monitoring the referral system

Monitoring and evaluation should be carried out to assess whether the referral network is functioning effectively. This examines the extent to which the patients' objectives are met. Feedback on evaluation provides information for continuous planning, design and implementation of services, hence improvement of the referral process. Community and facility-based providers should work as partners in patient care. To ensure a strong partnership, patients must be involved in the evaluation process. Regular meetings should be held between the different stakeholders to assess and evaluate the progress of referrals, identify constraints and find solutions.

The providers need to establish structures to conduct quality assurance of the activities performed by the referral network. The team should also organize periodic reviews or referral processes and tools, if possible quarterly. Issues identified should be addressed by the appropriate organizations during planning processes. Regular stakeholder meetings, sharing of information and re-planning will assist with promoting best practices and addressing any gaps in the referral system.

7.4 Public-private partnership

A public-private partnership (PPP) is an arrangement between a contracting authority, the Government of Sierra Leone and a private party (mission, religious entity, private practitioners or NGOs) where the private party undertakes to perform a public function or provide a service on behalf of the contracting authority. In exchange for providing that service or function, the private party receives a benefit by way of compensation from a public fund, charges or fees from users or consumers of the service or a function is provided to them, or a combination of such compensation and charges or fees. The PPP Act (2014) allocates specific roles and responsibilities to various entities.

These specific roles and responsibilities for PPP development and how the various entities work together in the PPP process are referred to as the institutional framework for PPP development. The main players are: contracting authorities, the PPP committee, the PPP unit, private parties and transaction advisors. The PPP act has laid down a straightforward process for implementing PPP projects to ensure quick execution of projects, coordination, collaboration, joint monitoring and supervision and a standardized reporting system that includes tools for data collection.

7.5 Laboratory services

In accordance with the BPEH 2015, functional laboratory services were available in only 257 out of 1,369 (18.7 per cent) health facilities. There are four tiers in the network of laboratories with defined functions and a test menu, as per the basic package of essential health care. The criteria are based on population needs, geopolitical zones and practical factors related to the system as follows:

7.5.1 Primary level

A laboratory service at chiefdom level is mainly provided at the community health centre, which is one of the three primary levels of the peripheral health units. The test menu is limited to microscopic detection of parasites, basic clinical chemistry and serology using point of care and a rapid testing device.

Test menu per laboratory level
Level 1 (PHU)
Test
Haematology
Hb
Blood grouping
Microbiology /disease screening
Urine rapid diagnostic pregnancy test
Urine analysis
HIV **rapid diagnostic test**
Hepatitis B virus
Hepatitis C virus
TPHA
Blood glucose, with test strips
Malaria
Urine rapid diagnostic pregnancy test
Stool analysis
Skin snip
TB **direct smear microscopy-binocular light**
Biochemistry
Urine rapid diagnostic pregnancy test
Blood glucose, with test strips
Disease screening RDT
Hepatitis B virus
Hepatitis C virus
HIV
TPHA
Malaria

7.5.2 Secondary level

Laboratory services at district hospitals of over 100-bed capacity provide an extensive range of tests, including blood service screening for safe blood transfusion. The service is more comprehensive as it aims to support secondary medical care with a higher staff calibre and also support primary-level diagnosis

Level 2 (District hospital)
Test
Haematology
Full Blood Count **(RBC,** WBC, PCV, **ESR, Sickling,** Blood differential, Platelet)
Blood grouping and Cross-matching
Microbiology
Urine analysis, Microscopy
TB direct smear microscopy; Binocular light microscopy, **LED** microscopy, Fluorescent microscopy
Biochemistry
Urine pregnancy rapid test
Hepatitis B Virus
Hepatitis C Virus
HIV
TPHA
Malaria
Cytology
Dermatological tests **including skin** smears/snips

Staffing level: 2
Laboratory technician — 1
Laboratory assistant — 1

7.6 Integrated outreach PHC services

The CHCs with the support of the DHMT should conduct regular outreach services in hard-to-
reach communities in their catchment and in areas outside the geographical location of the PHU. Services should include curative, preventive, rehabilitative and promotive services, based on the services rendered at the PHU and by PHU personnel. Outreach services can be carried out by a single or team of personnel from the PHU.

7.6.1 Planning for integrated outreach PHC services

Recommendations:

- Plan for more than one service (integrated)
- Desk analysis that reviews PHU data to identify problems in accessing and utilizing PHU services
- Prioritize area (village/communities) for integrated outreach services
- Assemble the required logistics, the supplies, data tools, HR, transportation, inter alia, for outreach services
- Timely communication with the outreach community for the proposed visit
- Engagement of the CHWs for mobilization of the community
- Conduct of outreach activity

7.6.2 Role of DHMT in outreach services

- Review PHU data to identify PHUs needing more support.

- Review PHUs outreach plan
- Support the PHU with adequate supplies.
- Monitor PHU outreach activities and performance
- Provide mobile outreach services at PHUs, based on identified service gaps

Chapter 8

QUALITYASSURANCE/QUALITY IMPROVEMENT

8.1 Introduction to quality assurance/quality improvement (QA/QI)

High quality health care is an important component of efforts to reach SDG 3, to ensure healthy lives and promote well-being for all. Improving the quality of services is critical for continued reduction in preventable morbidity and mortality. Poor quality is increasingly being linked to failure to attain health targets, incorrect treatment, inaccurate care to patients and failure to comply with diagnostic standards. Worldwide, low-quality facilities have been implicated in higher mortality, including/especially after surgery.

8.2 Definitions

lVfiat *is quality?* Quality is defined as the extent to which health-care services provided to individuals and populations improve desired health outcomes. The 'degree of excellence' in health care. Quality is the characteristics of a product or service that bear on its ability to satisfy stated or implied needs, a product or service that is free of deficiencies.

what *is quality assurance?* It is the process of meeting the needs and expectations of patients and health service staff. It is also defined as "the degree to which care/services influence the probability of optimal patient processes on an ongoing basis to achieve a better outcome. Improvement in systems and processes is dependent on effective decision-making and action at all levels. The basic idea is that the health facilities must convince all stakeholders, including their consumers that they are doing their best in providing health care that is effective and safe, to prevent ill health, restore good health, promote well-being and rehabilitate those that have been impacted by ill-health.

Quality health service is one that meets or exceeds expectations. Expectations can change, so quality must be continuously improved. Quality = STEEP: S= Safe; T= Timely; E= Effective; E= Efficient; P=Prompt.

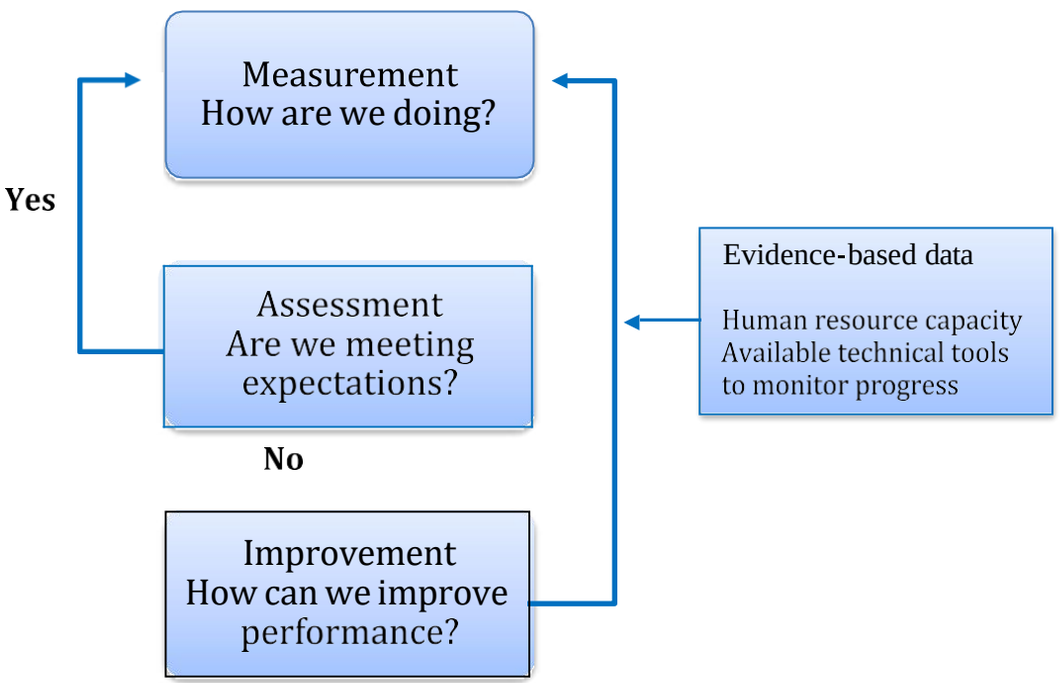
Quality is measured in terms of issues that impact on the experience of the clients. It is the degree to which services achieve optimal patient care on an ongoing basis for better outcomes. PHUs must value quality services to be achieved by having friendly, motivated and competent staff, providing holistic high-quality services. The key tasks for quality measurement are to assess the performance of services and to quantify the gap between reality and expectations in reference to standards and guidelines.

What is quality improvement? This is about critically reviewing services and making changes for continuous improvement. There is recognition of small gains towards the goal of quality, emphasizing team-spirit and cross-functional work groups within the health facility. It is a systematic and continuous actions that lead to measurable improvement in health care services and the health status of a targeted patient groups, consistent with current professional knowledge. It is to continuously find better ways to provide patient care and service. It can be applied to each of the building blocks of health

systems, and not just the clinical aspects.

To manage quality, one must be able to define it. Then one must be able to measure it. The measurement results are then evaluated to determine performance. Finally, a decision can be made to improve performance (see figure 21: The internal audit process). These are the key pillars of quality.

Figure 19: Quality improvement: decision-making algorithm



8.3 Characteristics of quality health care

The following table outlines these attributes:

Characteristics of quality health care:

- Safety — Delivering health care which minimizes risk and harm to patients and service providers from health care interventions
- Effectiveness — Delivering health care that is evidence based with improved health outcomes
- Patient-centred — Delivering health care that is respectful, acceptable and responsive to needs and values
- Timely — Reducing waits and harmful delays.
- **Accessibility** — Delivering health care that is timely, geographically reasonable and provided in a setting where skills and resources are appropriate to health care needs.
- **Efficient** — Avoiding waste.
- **Equitable** — Does not vary in quality because of a person's characteristics.

8.4 The attributes and principles of continuous QI

The principles critical to quality assurance and improvement include effective leadership,

a comprehensiveness of approach, a systems approach to management, teamwork, the involvement of all stakeholders including clients, being value-based and being process- and customer-oriented. It is a continuous never-ending improvement process, based on assessments and evidence that guide decisions for improvement.

The components of quality improvement are outlined in the box below:

The principles of continuous quality improvement:

1. ***Exceptional leadership***
2. ***Systems approach to management***
3. ***Developing a distinctive continuous quality improvement culture***
4. ***Customer orientation and partnership***
5. *Involvement of people and stakeholders*
6. ***Building knowledge and skills for new practice***
7. *Process* ***orientation***
8. *Improvement is a permanent process*

1. Exceptional leadership: Continuous quality improvement (CQI) requires exceptional leadership to provide guidance and motivation for quality improvement. The leader must create unity in directing the DHMT towards a continuous quality improvement culture and maintain a team environment in which staff can become fully involved. The leader should help overcome some workers' natural resistance to change by convincing them of the importance of quality, inspiring mutual confidence and determination to reach the set goals of continuous quality improvement.

To be effective in this, the leader must be perceived as a highly skilled service professional with exceptional competence and knowledge in their field. Values of quality portrayed by the leader should thus be held strongly at all levels in an organization: leading by example, supporting the work of everyone, ensuring open and frequent communication so that people talk to each other about their work and celebrate each other's achievements, and ensuring that all are committed to closing the gap between best and current practice.

2. Systems approach to management: This involves the integration of all resources, identifying, understanding and managing interrelated steps and processes as a system, eventually contributing to the organization's effectiveness and efficiency in achieving its objectives.

It is important to emphasize internal motivators such as professionalism, skills development and organizational development, alongside external ones, such as regulation, economic incentives and performance management.

Good leadership is critical to achieving the right blend of drivers, and in particular appealing to the internal motivators of staff and peers. Aligning quality at every level to make sure that all levels of the system relate to each other in supporting achievement of high quality care for every person, every time. This includes one-to-one interactions between people who use services and clinicians, clinical micro systems, delivery systems and specific interventions designed to achieve change.

3. Developing a distinctive continuous quality improvement culture: A culture that everyone within the district understands, shares and values CQI, *"Everyone is on the same boat and everybody knows where the boat is headed".* CQI needs an identity and a safe home base in which to experiment, and thereby be productive in the spirit of innovation and dedication to work. CQI needs to create a space in which new ideas are given consideration, promoting cooperation, mutual respect, stimulation and encouragement by all.

4. Customer (staff and patient} orientation and partnership: The DHMT and PHUs should understand current and future customer needs in order to meet them. Redefine the nature of the relationship between people who use services and those who provide them. The interaction between people who use services and their clinical team is a critical determinant of quality of care. Strive to exceed customer expectations by building up a relationship with and demonstrating commitment to them, keeping feedback loops open at all times. This will be ensured by displaying and communicating patients' rights. Therefore, in order to achieve the best outcomes, people need to be equipped to play an active role in their care, and their care needs to be personalized.

5. Involvement of *peoRle* ***and stakeholders:*** Staff, professionals, managers, service users, relatives and communities at all levels. Theiriifudlvement enables their abilities to be used for the organization's benefit.

6. Building knowledge and skills for new practice: Knowledge, in the form of performance data, such as clinical measures and patient reported outcomes, can identify gaps between best and current practice. Developing new skills is essential for testing and analysing what is known about effective care, making changes across the system and supporting self-management. Bringing about new practices requires recognizing the essential organizational and human factors.

7. Process orientation: This involves addressing all steps required to achieve a desired result and managing activities and related resources as a process to ensure that the desires of people who use services are taken into account. We need to create a work environment where the little we have is valued and handled with care and respect. We need to create a well-designed and planned workforce and teams that patients will be satisfied with.

8. Improvement is a permanent process: Quality improvement performance should be a permanent objective of the DHMT, focusing on problem-solving in work processes and service contents at all work front lines.

8.5. Framework for continuous QA/QI

A framework for the different ways to measure quality is based on three dimensions of quality of care that need to be tracked and linked: **'structure', 'process', 'outcome'** for assessment of quality of care. This is the framework used for assessment of quality of care.

Measuring **structure** (inputs, resources and infrastructure), assessing **processes** of delivery and of **results,** is vital in ensuring quality health service delivery.

- Structure refers to facility infrastructure, governance, management and staffing
- Process refers to technical, clinical, patient experience and care practices)
- **Outcomes** refer to patient satisfaction, return visits and health outcomes

The model identifies structures and processes that health providers need to establish, implement and maintain to produce results and outcomes. Each component has a direct influence on the next element. Health outcomes are the direct result of a patient's health status following contact with the health care system.

8.6 Assessment of structures, processes and outcomes

8.6.1 Assessment of structures

The first step in the quality analysis of a health facility is to look at its structure i.e. organization, leadership/governance, policies, management, information system, resources, personnel (number and training), equipment, financing, infrastructure, range of services and referral facilities. These structural components are usually measured using the SARA. After self-examination of the structure, the results should be compared with MoHS guidelines of norms and standards to reveal areas of weaknesses.

Indicators: Checklist can be made from routine tools to score facility infrastructure for delivery of each of the services in the basic package: ANC, Emergency Obstetric and Newborn Care (Em0NC) with capacities for caesarean section, case management, postpartum haemorrhage, eclampsia, newborn complications, pediatric care, laboratory service, infection protection, patient safety, staffing and clinical trainingAlso included are medicines, health information systems, financing fami anning, school and adolescent youth friendly health services, IMNCI and Emergency Triage Assessment and Treatment.

Sources of data: Routine health-facility records and SARA assessment surveys, regulatory records, national health accounts.

8.6.2 Assessment of processes

A process involves the transformation of inputs into results, measuring the client-provider interaction. The appropriateness of a case management is based on clinical guidelines, such as implementing the Integrated Management of Childhood Illnesses (IMCI) strategy developed by WHO/ UNICEF.

Indicators: Measures of process quality of health care include both its technical quality and the experience of the patients receiving the care. Unnecessary hospitalization increased iatrogenic risk and unnecessary painful procedures, performance of unnecessary invasive procedures, non-adherence to WHO guidelines on hospital care for children, overdiagnosis and overtreatment.

Other factors include failure to assess growth or identify malnutrition, and to compare with growth standards); and failure to identify a child with acute or chronic malnutrition according to WHO criteria. Other factors also include patient experience, provider communication, service convenience, waiting time, privacy and confidentiality;

respectful care, patient satisfaction and return visits.

Data collection methods/sources: The tools available for assessing the provision of clinical care include:

- Standardized patients, patients who are trained actors who make an unannounced visit to a healthcare facility and present symptoms of a simulated condition; they complete an assessment checklist on the clinical actions of the provider after the visit.
- Medical records; case notes
- Using structured checklists in the assessment tool, based on standards derived from relevant guidelines
- Observation of process, e.g. the admission procedure, management/planning of beds, standards for all departments (medical and nursing), discharge planning and communication, cooperation with other disciplines, theatre management, among others
- Direct clinical observations of a real-life patient
- Face-to-face exit interviews with patients and written surveys

8.6.3 Assessment of health outcomes

An analysis is done to see if your work is having the effect you want and that your patients are effectively treated. Results are achievements and include users/client's satisfaction, performance of the facility and staff and society satisfaction.

Indicators: Some measurements are mortality, morbidity and patient and staff satisfaction surveys, Return visits, rates of maternal deaths, stillbirths and early newborn deaths, as well as drug reactions.

Data collection methods and sources: Output data routine health information systems, patient follow-up, population surveys, national census, vital statistics, civil registration, facility surveys; follow-up of patients after facility visits, or systematic collection of population data; and collection of in-facility health outcomes and of routine health information systems. Population-based health information sources, such as household surveys, censuses and civil registration or vital statistics, age- and sex-disaggregated population data, permit calculation of effective coverage.

8.7 Methods used in quality assurance/improvement

Measurement techniques consist of:

- Direct observation
- Medical records review
- Mystery clients
- Patients/clients exit surveys
- Peer reviews/case audits form of mortality and morbidity committees comprising all medical and nursing disciplines to audit selected cases of concerns in terms of management and treatment through the steps outlined in the box below:

1. Plan, include CQI in the annual plan
2. Obtain and disseminate guides
3. Establish CQI structures
4. Carry out self-assessment quarterly
5.Expand through regular discussion and feedback
6. Sustain

1. Develop a continuous performance and quality improvement plan in your annual implementation plan: Start with the important issues that affect the facility the most, e.g. improving the waiting time in the outpatient department from four hours to one hour. Ensure that the health facility meets the norms and standards to provide the basic package of health services required for accreditation.

2. Obtain and disseminate key government service delivery guidelines: Departments and units to develop and implement standard operating procedures (S0Ps) *specific to their services,* in accordance with national standard guidelines. The S0Ps are displayed in the rooms at services areas to ensure access to every staff, and to ensure that procedures are done following the right protocols, and they should be regularly updated. This step should be accompanied with relevant training on the relevant guidelines and SOPs.

3. Establish a continuous quality improvement system and structure: Have a CQI department reporting to the DMO, on the organization chart, supported by an inclusive CQI committee. Appoint a health facility quality improvement officer, who is the head of the quality improvement department, hence a member of the health facility management team. The quality officer works together with the CQI committee, whose membership is from all departments representing all disciplines. The officer should be well trained in CQI and have an M&E professional background, because reading data and being able to interpret it is a major part of quality management. All members of staff from all disciplines must be involved in the management process.

Set up a continuous quality improvement team in each department or unit which should include a team leader to ensure that quality issues are presented directly to the management for fast action. The teams meet monthly and report to the CQI officer monthly and to the CQI committee that meets quarterly. The goal is to continuously improve the systems and processes in the health facility, so as to attain the optimum quality of care and services for the patients and clients. There should be written terms of reference (TOR) for the officer, the committee and teams which should regulate the tasks and responsibilities of CQI. The TOR should contain both the tasks of the officer and structures and how members are nominated, how often they meet and who is reporting to whom. Members of the CQI team must have training in quality improvement.

The clinical quality improvement committee normally includes a clinical lead, nurse leads, data manager and the QI designated officer. A patient representative is included periodically for an independent customer critique of interventions. At its core, CQI is a team process at all levels. Teams harness the knowledge, skills, experience and

perspectives of different individuals to make lasting improvements. These teams undergo basic training on clinical care using national guidelines, principles of quality improvement and performance measurement. They are also trained in CQI. They also receive mentorship and support from the technical assistance team led by the CQI officer.

4. Carry out initial assessment to be followed by periodic self-assessments: This should be done using appropriate guidelines with areas identified needing urgent improvement. Start with adherence to the national guidelines, improving patient satisfaction and the delivery of clinical services. Develop tools, checklists for self-assessment and components of hospital performance management framework. In the self-assessment the CQI committee members go around the units with departmental heads to identify areas needing improvement. The officer then writes problem statements with specific actions for improvement and assigns them to responsible staff to act on them within a given time frame. The officer will then follow up through the heads of departments to ensure that planned actions are carried out. The CQI committee gives feedback to the DHMT following each cycle of self-assessment and action to solve quality problems, with enhanced teamwork and a conducive environment.

At each of the assessment sessions the structure, process and outcome framework is used to determine indicators and methods of data collection, such as patients' quarterly exit surveys. Following analysis, the CQI committee may convene general sessions quarterly to drive continuous improvement.

5. Expanding: Modify original plan based on lessons learnt, expand to other units, provide refresher training. Communicate success of the initial and continuing cycles. Measure, review and inspect customer and employee satisfaction surveys and disseminate to all stakeholders. It is possible for CQI to address quality and performance improvement as data collected will measure both.

6. **Sustaining:** Success has *no magic source* - it is merely a result of passion *(love what you're doing)* and hard work so get started, get going and keep going and build up a momentum towards the highest possible level of performance and quality. Identify and involve champions, positive colleagues (positive energy).

Make the best use of what you have (e.g. time, money). Plan to overcome your barriers. Positive attitudes are built by self-management and collaboration with colleagues. Use the knowledge that you have to your advantage. Sustaining CQI is an integrative philosophy of management for continuously improving the quality of products, processes, functions and services on the premise that the quality of products and processes is the responsibility of everyone involved with the creation or consumption of services. It is a management approach centred on quality and based on the participation of an organization's staff and aiming at long-term success.

8.8 The tools used for QA

Tools usually provide a framework to score the level of quality assessed on a scale of 0 to 5, which indicates the appropriate level of quality of the item assessed.

Chapter 9

INFECTION PREVENTION AND CONTROL

9.1 Background, concepts and principles of infection prevention and control

The Ebola outbreak in Sierra Leone highlighted the critical need to strengthen IPC in health-care settings, and IPC remains a priority to improve hygiene and safety and reduce the risk of epidemics. The growing emergence of antimicrobial resistance, with the threat of the spread of resistant infections in health care, has further underscored the urgency for comprehensive implementation of IPC Programmes in coherence with other public health services and interventions. The Ministry of Health and Sanitation of Sierra Leone developed its National IPC guidelines (2016), National Policy (2015) and National Action Plan (2016-2019) with support from stakeholders and partners, including the World Health Organization.

Patient safety refers to processes or structures which, when applied, reduce the probability of adverse events resulting from exposure to the health care system across a range of diseases and procedures. The patient and health worker safety (PHWS) strategy emerged strongly from the recognition of the high number of lives of both patients and health workers lost as a result of the EVD outbreak.

Patient safety is a fundamental element of health care that requires special attention due to alarming evidence on the increasing rates of adverse events and patient harm. For effective primary health care and sustainable UHC, evidence-based patient safety systems and practices have to be established as one of the critical health care standards. IPC is a discipline that aims to prevent or control the spread of infections in health-care facilities and the community. IPC is a universal discipline with relevance to all aspects of health

IPC is part of a comprehensive approach to improve health outcomes. The evolving landscape of emerging infectious diseases necessitates increased awareness and attention to IPC. A strong health system, which includes a culture and infrastructure of IPC, will equip governments and communities to prevent the spread of and manage infectious diseases, by avoiding occupational and environmental hazards associated with microbes for all inpatient and outpatient, health-care workers and visitors in all the health-care institutions. The concepts of quality improvement in health facilities to reduce health care-related adverse events are key elements of patient safety practices

9.2 Patient and health worker safety

One should design interventions that have demonstrated the ability to prevent or mitigate patient harm stemming from the processes of health care. There are areas around which patient safety solutions are defined. They include the following ones: Ensuring correct medication names, patient identification, communication during patient handovers, performance of correct procedure at correct body sites, control of concentrated electrolyte solutions, assuring medication accuracy at transitions in care, avoiding catheter and tubing misconnections, single-use of injection devices, improved hand hygiene to prevent health care-associated infection. The IPC Programme must ensure a safe environment for healthcare workers and provide them with the entire necessary technical platform to perform their duty, including vaccines, managing post-exposure prophylaxis, setting up surveillance for exposure at work such as sharps

injuries.

9.3 Health care-associated infections in Sierra Leone

Health care-associated infection (HAI) is an infection that occurs in a patient 48 hours after admission as a result of care in a health-care facility and that was not present at the time of arrival at the facility. To be considered a HAI, the infection must begin on or after the third day of admission to the health-care facility (the day of admission is day 1), or on the day of, or the day after discharge, from the facility. The term "health-care-associated infection" (HAI) replaces the formerly used "nosocomial" or "hospital" infection because evidence has shown that these infections can affect patients in any setting where they receive health care.

MoHS is committed to ensuring that the patients, healthcare workforce and the community are protected from HAIs by establishing IPC at all health facilities using IPC guidelines and standard operating procedures (SOPs).

HAI surveillance is essential to understanding the impact of the IPC Programme. The goal of HAI surveillance is to systematically collect data on the incidence of HAI in order to recognize problems and implement appropriate changes. MoHS will set the priorities for surveillance of infections and pathogens to be included in S0Ps. Standardized case definitions for active methods of surveillance will be developed so that consistent data is collected across health-care facilities. Sierra Leone is piloting surgical site infection surveillance in four hospitals.

9.4 IPC programme and guidelines

The National IPC programme includes activities, procedures and policies designed to reduce the spread of infections, usually within health-care facilities. The primary goals of an IPC programme are to prevent susceptible patients acquiring pathogenic (disease-causing) micro-organisms and to limit the spread of antimicrobial resistant infections.

The National IPC Programme develops and disseminates technical guidelines and SOPs for IPC practices, reviewed and updated regularly, but not less than every three years to ensure that interval changes in risks, best practices and available resources are reflected therein. The guidelines are used by all health-care facilities as the reference document for IPC standards.

9.5 Core IPC practices/ indicators

Key elements of an infection prevention and control programme to reduce and prevent infections in health facilities should include three key indicators that can be used to report on the impact of an IPC programme:

1. Compliance indicators: these ratmeasure how well national IPC guidelines are being followed, e.g. the percentage of hand wash basins in a facility with soap and water.
2. Process indicators: they rate how well individuals follow facility-based guidelines but may also include how many individuals were trained on local IPC policy implementation, e.g. the percentage of persons practicing hand hygiene.

3. Outcome indicators: these measure the outcome that the national/facility IPC programme is trying to prevent, e.g. the facility's infection rate from surgical site infections, urinary tract infections in catheterized patients and rates of antibiotic-resistant infections.

9.6 PHC workforce: training in IPC

All health-care workers, prior to commencing employment, must receive IPC trainings. The National IPC Unit will be responsible for planning and coordinating in-service training. including continuing professional development of IPC personnel at all levels. The National IPC Unit will develop refresher training courses and other activities and deliver them as needed.

IPC refresher training would be organized in collaboration with the respective regulatory bodies and training institutions. These may be followed by on-site supportive supervision and evaluation via performance review.

There must be IPC focal persons at each health facility and at the district level. District IPC focal person activities include:

- Overseeing the district implementation of IPC policy, strategy, SOPs and IPC training curricula
- Coordinate with other district partners to ensure that IPC activities are coordinated across groups
- Advise district medical stores (DMS) on the quality and quantity of IPC supplies available in districts health units
- Evaluate progress of IPC implementation activities at district and facility level

This activity includes assessment visits to individual facilities biannually, quarterly and as needed:

- Ensure facility IPC focal persons and facility healthcare staff are adequately trained in IPC
- Ensures knowledge and practice gaps are addressed with further training and provision of necessary supplies and tools
- Review reports and action plans submitted by facility IPC focal persons

The reports and plans include the incidence of hospital acquired infections:

- Health-care worker injuries and other indicators as required e.g. availability of water, frequency of cleaning, availability of soap and PPE in PHU's
- Generate district IPC progress reports and presents findings to the District IPC Committee monthly
- Distribute IPC documents and updates provided by the National IPC Coordinator to all facilities
- Meet quarterly with nursing supervisor and/or facility IPC focal persons to discuss facility-level IPC progress and challenges.

PHU IPC focal person activities include:

- Responsible for implementing the national IPC policy and procedures at a designated cluster of PHUs
- Report progress and issues to the district medical officer (DMO) through the district IPC focal person at standing meetings every month.
- Meet quarterly with the district IPC focal person for supervision
- Instruct, remind PHU staff on all aspects of IPC to maintain a safe and hygienic environment for patients, visitors, and staff
- Monitor staff adherence to IPC practices (e.g. hand hygiene, sharps safety, disinfection, sterilization)
- Ensures compliance with IPC Guideline and SOPs, and initiate immediate corrective actions when lapses in IPC are noticed
- Collaborate with IPC and district IPC supervisor to ensure the recommended IPC practices are implemented and conducted within the PHU
- Conduct ongoing training programmes to ensure that PHU staff are knowledgeable and are implementing recommended IPC practices
- Ensure the necessary and recommended IPC equipment and supplies are identified, available and used appropriately
- Monitor and document on a daily basis, IPC incident within the PHU, health-care worker injuries and other indicators, as required by the IPC programme
- Conduct IPC assessments, as per IPC Programme requirements, and generate and present reports for the monthly district IPC committee meeting.
- In IPC reports include incidence of healthcare associated infections, healthcare worker injuries and other indicators, as required

The national/facility focal point/officer also coordinates obtaining the necessary information for the district IPC focal person to support the district medical officer in development of the IPC component of the district medical budget; develops a yearly PHU IPC Programme risk assessment and action plan which includes performance measures to meet the above activities; participate in district IPC activities as required; and reconciles reports of consumptions of soaps, PPEs, and supplies from PHU's with reports of stocks received from district-level medical stores.

9.7 Microbiology laboratory support to IPC

Improve microbiology laboratory capacity in all health-care facilities so that HAI/antimicrobial surveillance can be conducted when appropriate.

9.8 Rational use of appropriate antimicrobial drugs

Promote rational appropriate use of antimicrobial drugs using clinical practice guidelines developed by MoHS, with WHO support. The pharmacy board will monitor multi-drug resistance and educate health-care workers in the appropriate use of antimicrobials to reduce the burden of resistance. Operationalize the Drugs and Therapeutic Committee (DTC)in various facilities.

9.9 Health-care facility infrastructure for standard IPC practices

Each health care facility will ensure screening and triaging of all patient entering the facility and maintain a clean and safe environment by implementing the IPC guidelines that involve providing and strengthening the infrastructure needed for IPC compliance. For example, provision of clean water, sinks, soap for all health-care workers, patients and visitors to facilitate appropriate and effective hand hygiene, including alcohol-based hand rub to staff, patients and visitors, PPE, sharps safety management, safe hospital laundry, environmental cleaning and waste management, according to IPC guidelines.

9.10 Monitoring, evaluation and supportive supervision in IPC

This is a system for monitoring, evaluating and reporting key IPC indicators. One also needs to ensure that ongoing monitoring and evaluation of the national IPC programme captures, records and reports indicators to ensure quality improvement at all facilities levels. IPC focal persons will perform periodic routine assessment and reporting of IPC practices and systems. The performance of facility IPC focal persons will be reviewed at least annually by their respective supervisors. The M&E strategy is included in a separate SOP.

During outbreaks the National IPC Unit may dictate more frequent assessments to initiate rapid corrective action to respond to the current emergency. Data captured will be discussed at monthly meetings at every level and in progress reports.

9.11 Community IPC

- Ensure IPC facilities, especially hand-washing facilities, are available in schools, places of worship and other public institutions
- Embark on community sensitization to improve IPC best practices

Chapter 10

SURVEILLANCE IN PRIMARY HEALTH CARE

10.1 Introduction

This chapter will introduce the concepts of disease surveillance and Integrated Disease Surveillance and Response (IDSR). The aims and objectives of IDSR and the relationship between International Health Regulations (IHR) and IDSR will be discussed, and how IHR can be implemented through IDSR. An explanation of how surveillance functions are described in the primary health care system, and how districts can use this document in the implementation of active surveillance in Sierra Leone within the context of the African region.

10.2 What is disease surveillance?

It is an ongoing, systematic collection, analysis and interpretation of health-related data essential to the planning, implementation, and evaluation of public health practice, closely integrated with the timely dissemination of these data to those responsible for prevention and control. Several types of surveillance are used in national programmes. The choice of method depends on the purpose of the surveillance action. In general, the following types of surveillance methods are described:

- Health facility-based surveillance
- Case-based surveillance
- Community based surveillance
- Sentinel surveillance.
- Laboratory-based surveillance.
- Disease-specific surveillance, involving surveillance activities aimed at targeted health data for a specific disease or condition
- IDSR

Notwithstanding such type of surveillance, it is key that the health data be used for public health action.

10.3 What is IDSR?

Experiences with some disease eradication and elimination programmes show that disease control and prevention objectives were successfully met when resources were dedicated to detecting targeted diseases or conditions, obtaining laboratory confirmation and using thresholds to initiate action at the district level. Accordingly, the WHO Regional Office for Africa proposed an IDSR approach for improving public health surveillance and response in the African region linking community, the health facility, district and national levels and feedback to all levels.

IDSR promotes the rational use of resources by integrating and streamlining common surveillance activities. Surveillance activities for different diseases involve similar functions (detection, processes and personnel. Additionally, IDSR takes into account the One World-One Health perspective, which is a strategy that addresses events at the intersection of human, domestic animal, wildlife and ecosystem health. For example, 75 per cent of recently emerging and re-emerging diseases affecting human health, such as

HIV/AIDS, viral haemorrhagic fevers, yellow fever and avian influenza are of animal origin.

10.4 What takes place in IDSR in PHC?

All surveillance activities are coordinated and streamlined rather than using scarce resources to maintain separate vertical activities. Resources are combined to collect information from a single focal point at each level. Several activities are combined into one integrated activity and take advantage of similar surveillance functions, skills, resources and target populations. For example, surveillance activities for acute flaccid paralysis (AFP) often address surveillance for neonatal tetanus, measles and other diseases or unusual events.

Thus, health workers who routinely visit health facilities to supervise AFP cases also review district and health facility records for information about other priority diseases in the area. The district level is the focus for integrating surveillance functions. This is because the district is the first level in the health system with staff dedicated to all aspects of public health, such as monitoring health events in the community, mobilizing community action, encouraging national assistance and accessing regional resources to protect the district's health.

Surveillance focal points at the district, regional and national levels collaborate with epidemic response committees at each level to plan relevant public health response actions and actively seek opportunities for combining resources. The focus is on the creation of an overall public health surveillance system with sufficient capacity for detecting, confirming and responding to communicable and non-communicable disease threats.

Integration refers to harmonizing different methods, software, data collection forms, standard case definitions in order to prevent inconsistent information and maximize efforts among all disease prevention and control programmes and stakeholders.

Where possible, countries use a common reporting form, a single data entry system for multiple diseases and common communication channels. Training and supervision are integrated, a common feedback bulletin is used and other resources, such as computers and vehicles, are shared. IDSR involves nearly full-time coordination of surveillance activities and joint action (planning, implementation, monitoring and evaluation) whenever it is possible and useful.

Coordination refers to working or acting together effectively for the rational and efficient use of available but limited resources, such as the HMIS and various disease programmes. Coordination involves information sharing, joint planning, monitoring and evaluation in order to provide accurate, consistent and relevant data and information to policymakers and stakeholders at regional, intercountry and national levels.

To facilitate coordination and collaboration, a national, provincial and district multisectoral, multidisciplinary co-ordination body or committee is constituted by members under the DHSE responsible for coordination of surveillance activities in close collaboration or synergy with the committee set up for epidemic response.

10.4.1 Objectives of integrated disease surveillance and response

The specific objectives of IDSR are to undertake the following:

- Strengthen the capacity of countries to conduct effective surveillance activities: train personnel at all levels; develop and carry out plans of action; and advocate and mobilize resources
- Integrate multiple surveillance systems so that forms, personnel and resources can be used more efficiently
- Improve the use of information to detect timely changes in trends and pattern of diseases in order to conduct a rapid response to suspected epidemics and outbreaks; monitor the impact of interventions, for example, the declining incidence, spread, and case fatality; and facilitate an evidence-based response to public health events, health policy design, planning and management.
- Improve the flow of surveillance information between and within levels of the health system.
- Strengthen laboratory capacity and involvement in confirmation of pathogens and monitoring of drug sensitivity
- Increase involvement of clinicians in the surveillance system
- Emphasize community participation in detection and response to public health problems, including event-based surveillance and response in line with IHR
- Trigger epidemiological investigations in detection, investigation and reporting of public health problems, and in the implementation of effective public health interventions
- Generate hypothesis and stimulate research

10.4.2 IDSR and IHR (2005)

The purpose of the IHR is to prevent, protect against, control and provide public health response to the international spread of disease in ways that are relevant and restricted to public health risks, and that avoid unnecessary interference with international traffic and trade. The scope of IHR has been expanded from cholera, plague and yellow fever to all public health emergencies of international concern.

They include those caused by infectious diseases, chemical agents, radioactive materials and contaminated food and water. The goal of IDSR is to strengthen the overall national system for the surveillance of diseases, particularly at district level, and aims to ensure a continuous and timely provision and use of information for public health decision-making. IDSR supports the implementation of IHR and includes:

- Infrastructure and resources for surveillance, investigation, confirmation, reporting and response
- Experienced human resources
- Defined implementation process (assessment, plan of action including sensitization, implementation, monitoring, evaluation, reporting and feedback)
- Generic guides for assessment

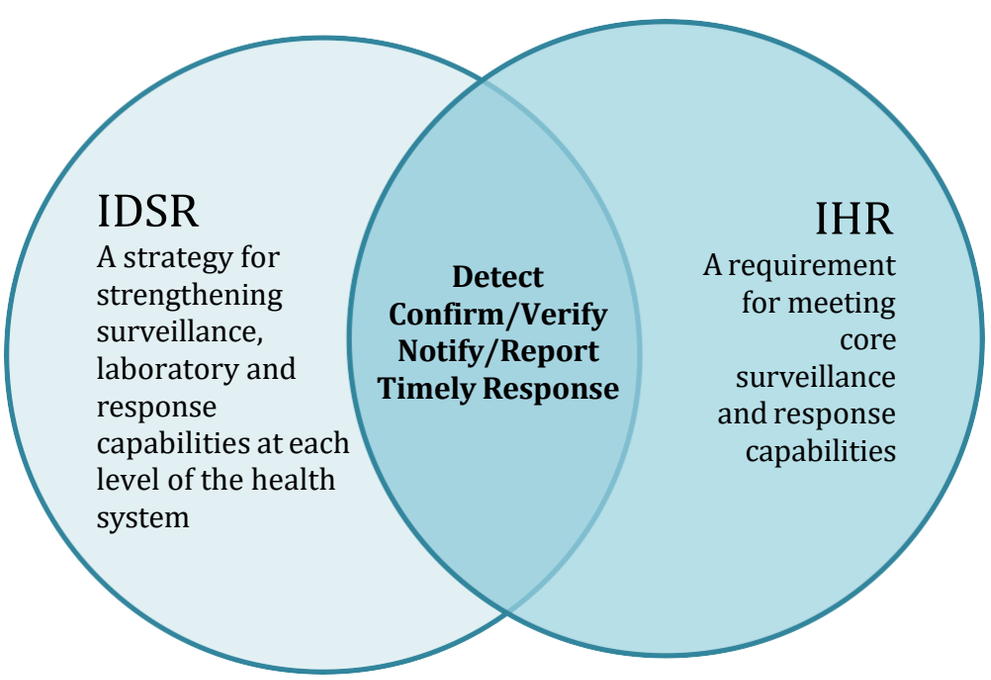
- Plan of action development
- Technical guidelines
- Training materials and tools and S0Ps that incorporate IHR components

Thus, IDSR is a system with the potential to ensure a reliable supply of information to the national level in order to fulfil IHR requirements. The IHR provides an opportunity to address the threat to international public health security and trade caused by re-emerging and emerging infectious diseases, including public health emergencies of international concern (PHEIC). They also provide an excellent opportunity to strengthen surveillance and response systems, and to act as a potent driver for IDSR implementation.

In Sierra Leone, IHR (2005) is and will continue to be implemented in the context of IDSR. Through IDSR, Sierra Leone is developing capacities for surveillance, laboratory confirmation, notification and response to outbreaks. It calls for strengthening of national capacity for surveillance and control, including sites such as points of entry (i.e. ports, airports and ground crossings); prevention, alert and response to international public health emergencies; global partnerships and international collaboration; and highlights rights, obligations, procedures and monitoring of progress.

IHR (2005) is not a separate surveillance system but requires a sensitive and flexible surveillance system that meets international standards. IHR (2005) affects cross-border collaboration for particular key events and can easily be achieved when IDSR works. IHR (2005) has introduced the notion of "event-based" surveillance to IDSR in order to address rumours of "unexplained illness or clusters" as an event category for reporting from lower levels up to the national level. IDSR and IHR share common functions, as described in the diagrams (see figure 20) below (detection, reporting, investigation, confirmation and verification, notification and reporting and timely response).

Figure 20: Implementation of international health regulations through Integrated Disease Surveillance and Response



The IHR have practical implications for IDSR. In the IHR (2005), all PHEIC should be detected, assessed and responded to in a timely manner, using an adapted response rather than present measures. The IHR (2005) includes the control of borders (ports, ground crossing points of entry) and containment at source of public health events. Since the major role IHR plays for timely detection and verification of suspected public health emergencies, event-based surveillance is now part of IDSR.

10.4.3 What are the priority diseases and conditions for IDSR?

MoHS suggests the following communicable and non-communicable diseases and conditions or events as priorities for integrated disease surveillance in Sierra Leone. The priority diseases are selected based on the following criteria:

- Principal causes of morbidity and mortality in the African region (for example, malaria, pneumonia, diarrhoeal diseases, tuberculosis, HIV/AIDS, maternal deaths and injuries)
- Diseases with highly epidemic potential to cause serious public health impact due to their ability to spread rapidly internationally (for example, cholera, plague, yellow fever, viral haemorrhagic fever)
- Non-communicable priorities in the region (high blood pressure, diabetes mellitus, mental health and malnutrition) Required internationally under IHR (for example, smallpox, poliomyelitis due to wild-type poliovirus, human influenza caused by a new subtype, SARS)
- Effective control and prevention interventions are available for addressing the public health problems they pose (for example onchocerciasis, trypanosomiasis)

The list of priority diseases has been discussed and agreed upon by all major stakeholders in view of the local epidemiological situation, needs and current health system challenges. The table below shows the priority list of diseases and conditions under IDSR.

Table 8: Priority diseases, conditions and events for Integrated Disease Surveillance and Response, 2015

Epidemic prone diseases	Diseases targeted for eradication or eliminations	Other major diseases, events or conditions of public health importance
Acute haemorrhagic fever syndrome Anthrax Chikungunya Cholera Dengue Diarrhoea with blood (Shigella) Measles Meningococcal meningitis	Buruli ulcer Dracunculiasis Leprosy Lymphatic filariasis Neonatal tetanus Noma Onchocerciasis Poliomyelitis Yaws	Acute viral hepatitis Acute Jaundice Syndrome Adverse Drug Reaction (ADR) Adverse events following immunization (AEFI) Asthma Diabetes Mellitus

Plague SARI** Typhoid fever Yellow fever *Ebola, Marburg, Rift Valley, Lassa, Crimean Congo, West Nile Fever s**National programmes may wish to add Influenza-like illnesses to their priority disease list	' Disease specified by IHR (2006) for immediate notification	Diarrhoea with dehydration less than 5 years of age Epilepsy HIV/AIDS (new cases) Human Rabies Hypertension Injuries (Road traffic accidents) Malaria Malnutrition in children under 5 years of age Maternal deaths Monkeypox Severe pneumonia less than 5 years of age Sickle Cell Disease (SCD) Soil Transmitted Helminthiasis STIs Trachoma Trypanosomiasis Tuberculosis
	Diseases or events of international interest	
	Human influenza due to a new subtype[l] SARS[1] Smallpox[l] Any public health even of international or national concern (infectious, zoonotic, food borne, chemical, radio nuclear, or due to unknown condition). [1] Disease specified by IHR (2005) for immediate notification	

10.4.4 Identifying priority diseases, conditions and events

Use standard case definition (SCF) to detect, confirm and record priority diseases conditions and events. An SCF is an agreed-upon set of criteria used to decide if a person has a particular disease or condition. Standard case definitions should be adhered to. The definition specifies clinical criteria and limitations on time, place and person.

Using standard case definitions ensures that every case is diagnosed in the same way, regardless of where or when it occurred, or who identified it. This allows for comparing the number of cases of the disease or condition that occurred in one time or place with the number occurring in another time or place.

Sierra Leone used an assessment tool developed by WHO Regional Office for Africa (AFRO) to assess the national surveillance, epidemic preparedness and response systems

and identified gaps, which required improvement.

The assessment provides results that can be used to solve problems with resources, the quality and timeliness of surveillance data and how the information is used. To determine availability and health worker knowledge of standard case definitions for reporting suspected priority diseases and conditions including events of public health concern: Define the sources of information about health events in the district, including points of contact the community has with health services. For example, a list of information sources and of district reporting sites, such as the following ones:

- Health facilities and hospitals (public and private)
- Point of entry
- Community health workers
- Traditional birth attendants (TBAs)
- Traditional medicine practitioners
- Rural community leaders with knowledge of community health events (for example, village elders, a traditional healer, schoolteacher, leaders of faith-based communities,)
- Public health officers
- Private sector practitioners
- Private pharmacies
- Public safety officers such as fire, rescue or police departments
- Animal health and veterinary structures and services
- Industry, food safety and environmental health laboratories
- Mass media, web sites, social media and health news search applications
- Others, including NGOs

10.5 How can districts strengthen IDSR activities?

10.5.1 The five-year strategic plan

Sierra Leone conducted a comprehensive assessment of the surveillance system and used the findings and recommendations to develop a five-year strategic plan of action (2012-2017). This plan prioritized the district as the level for implementing IDSR. Henceforth, district surveillance activities have been fully integrated into district action plans. Districts have been provided with a matrix of surveillance functions and skills to describe their role in the surveillance system.

This matrix describes a complete system in which all the skills and activities are in place. Each level supports activities at other levels and reinforces the opportunity for successful decision-making at corresponding levels and functions. In an IDSR system under development, the matrix provides a systematic framework for improving and strengthening the system. There is a role for each surveillance function at each level of the health system. The levels are defined as follows:

Community: Represented by basic village-level service providers, such as trained CHWs and MSGs, traditional medicine practitioners, supported by village leaders (religious, traditional or political), schoolteachers and health workers.

Health facility: For surveillance purposes, all institutions (public, private, NGOs, governmental and others) with inpatient and/or outpatient facilities are defined as a

"health facility." Examples here include community health centre, community health post, maternal and child health post, faith-based clinics, NGOs, private hospitals and clinics.

District: The DHMT will be responsible for implementing IDSR and overseeing surveillance activities carried out at community and health facility levels.

National level: This is the central level where policies are set, and resources are allocated. In relation to surveillance, the DHSE and the DPPI at MoHS report on priority diseases using the decision instrument.

Laboratory: The National Reference Laboratories, regional, district and chiefdom laboratories.

10.5.2 Collect and transport specimens for laboratory confirmation

Laboratory confirmation of diagnoses of diseases, conditions and events under surveillance is essential, first, in order to accurately diagnose illness in an individual patient and verify the cause (etiology) of a suspected outbreak; and, secondly, a laboratory specimen should arrive in the laboratory in good condition and in timely fashion so that processing of the specimen provides reliable results. Specimen should be collected, stored and handled according to disease specification. One should minimize delays between collection of the specimen and processing in the laboratory.

Many factors can affect the reliability and interpretation of laboratory test results. For example, results are difficult to interpret when:

- A specimen is collected inappropriately, for example, a blood specimen has haemolysed or there are inadequate quantities of the specimen
- A delay in transportation and processing may result in bacterial overgrowth in the collected specimen, such as urine and CSF
- Use of wrong transport or storage media may cause reduced viability of the suspected organism.
- Wrong labelling and missing information of specimen.

10.5.3 Report on the occurrence of priority diseases, condition and events

Table 9: Diseases, conditions or events requiring immediate reporting

Diseases, conditions, or events requiring immediate reporting	
Acute Flaccid Paralysis (AFP) Acute haemorrhagic fever syndrome (Ebola, Marburg, Lassa Fever, RVF, Crimean-Congo) Acute Jaundice Syndrome Adverse events following immunization (AEFI) Anthrax Cholera Dengue Fever Dracunculiasis (Guinea Worm) Influenza due to new subtype	Maternal death Measles Meningococcal meningitis Monkey pox Neonatal tetanus Plague Smallpox Yellow fever Any public health event of international concern (infectious, zoonotic, food borne, chemical, radio nuclear or due to an unknown condition)

Table 10: Diseases **requiring** weekly **summary reporting**

Diseases requiring weekly summary reporting	
Animal bite (dog, cat, etc.) Buruli ulcer Chikungunya Diarrhoea with blood (Shigellosis) Diarrhoea with severe dehydration in children under 5 years of age	Malaria Malnutrition in children under 5 years Severe pneumonia in children under 5 years of age Typhoid Fever

Table 11: Diseases **requiring** weekly, **monthly or quarterly** summary **reporting**

Diseases requiring weekly, monthly or quarterly summary reporting	
Acute viral hepatitis Diabetes mellitus Epilepsy Gender and home-based violence HIV (new detections) Hypertension Injuries (Road Traffic Accidents) Leprosy (quarterly) Lymphatic Filariasis	Noma Onchocerciasis Schistosomiasis Sexually transmitted diseases (STIs) Soil Transmitted Helminthiasis (STH) Trachoma Trypanosomiasis Non MDR/XDR Tuberculosis (quarterly) Underweight Newborns (less than 2.5kg) Yaws

Special effort will be made to obtain this information from the health information system (HMIS), as well as the total number of outpatients and inpatients data for any health condition (including those not in the IDSR list) during the reported period.

10.5.4 Analyse and interpret data

Prepare and periodically update tables, graphs and charts to describe time, person and place for reported diseases and conditions.

10.5.5 Reporting disease from analysis: From the analysis, report any disease or condition ds unusual trends or patterns.

10.5.6 Interpret results and initiate possible public health actions with authorities

Review the analysed results and make conclusions about the outbreak. For example: What was the causal agent of the outbreak? What was the source of infection? What was the transmission pattern? Who were most affected? When (time) and where (place). What control measures were implemented and to what effect?

10.5.7 Investigate and confirm disease outbreaks and **other** public **health** events

The responsibility/success for investigating outbreaks depends on national policy, resources and local policy (depends on national/local policies and resources). In Sierra Leone, districts have the overall responsibility for conducting initial outbreak

investigations. These guidelines assume that the district level has the capacity for leading the investigation, and the guidelines also apply to health facilities and districts levels.

10.5.8 How a district prepares to conduct an investigation

- Mobilize the district rapid response team and make arrangements for investigating reported rumour of suspected outbreak, condition or events.
- The DMO should organize a rapid response team during the investigation planning meeting.
- Periodically review and update the immunization status of personnel who take part in an infectious diseases outbreak investigation and response activities.
- With the team, define the objectives of the investigation so that the essential information will be gathered for implementing the most appropriate and relevant response.
- Include standard methods that are relevant to the disease or condition being investigated (for example, collecting, packaging, transportation of specimen to the appropriate laboratory).

10.5.9. Surveillance information system

For timely and effective disease surveillance and response, reliable data and information need to be shared promptly and regularly. Communication among front-line health workers in the districts, epidemiologists, disease prevention and control authorities and disaster risk management officials has to be conducted effectively and efficiently. The Ebola outbreak highlighted Sierra Leone's potential to use data for improved decision-making to better target services and resources.

Monitoring systems based on case-finding, contact tracing and community-based surveillance were established to support the Ebola response; these systems were linked with laboratory and admissions data to draw a fuller picture of the outbreak and to focus efforts. Harnessing lessons learned from this experience and applying them to routine information and surveillance systems is a critical priority for the post-Ebola recovery period. The adoption of district health information System 2 (DHIS) by the MoHS is an important achievement. Deployment is ongoing and currently limited to routine service data from primary and secondary facilities. Surveillance and information are technically not services provided under the BPEHS, but improved, robust surveillance and information systems at all levels, with access to laboratory confirmation services, are crucial components of the enabling environment for a functioning and resilient health system capable of delivering the BPEHS

Community-based surveillance and reporting of any events related to the following diseases/conditions based on community-level case definitions for:

- Acute flaccid paralysis (polio),
- Acute watery diarrhoea
- Cholera
- Clustered deaths
- Guinea worm

- Maternal death
- Measles
- Neonatal tetanus
- Neonatal death
- Suspected Ebola
- Yellow fever
- Any unusual event

Chapter 11

THE ROLE OF HOSPITALS IN PRIMARY HEALTH CARE

11.1 Introduction

Health care comprises a continuum from home-based, self-administered treatment to highly specialized interventions dependent on professionals with many years of training and a heavy capital investment. In this framework the referral level, hospital acts as the hub of the health system, serving a well-defined population, usually a district of 200,000-500,000 people in a defined geographical area. In this context, we define the place, purpose and role of the first referral hospital within a balanced integrated system of care.

At present, a referral hospital in Sierra Leone has a minimum bed capacity of 100 and at least two resident doctors. It is the referral centre, which handles all services in a holistic manner, including the comprehensive package of health services, and therefore should be an integral part of a wider district health system. It is the apex of the health system, linking up with other governmental and nongovernmental actors in health and health-related programmes, which may include water and sanitation, education, and social services, but may be critical in sustaining a coordinated health care approach, especially in the light of greater autonomy devolved to district administrations, as prescribed by the Local Government Act, 2017. The hospitals also act as teaching base for the health workforce.

11.2 Provision of primary health care services in the hospital

Referral level hospitals operate on a 24-hour basis serving the whole district population and beyond. Although hospitals are secondary care institutions, in most cases they also provide many primary care services to the population in their immediate surroundings, including antenatal care and under-5 services, and also provide treatment for minor ailments. Within this reality, managers search for the balance between community care, PHU services and hospital-based care that result in the greatest health benefit at minimum cost.

Given the concentration of inputs, both human and technological evident at the referral hospitals offer major opportunities and play a leading role in many aspects of Primary Health Care interventions, particularly in the interpretation and implementation of policies.

Table 12: PHC basic package of services provided by hospitals

Area of care	PHC services provided
Maternal health	Identify and treat mild and moderate anaemia, Provision of LLINs and IPTp through ANC clinics, Screening, diagnosis and treatment for STIs, Syndromic management of STIs, Voluntary confidenti$bunselling and testing for HIV (Voluntary Confidential Counselling and Testing (VCCT)), Provider Initiated Counselling and Testing (PICT)/ PMTCT/, Management of fever / uncomplicated malaria. Treatment with ARV therapy for pregnant women living with HIV and provision of supplementary nutrition, Clinical management of rape and treatment of injuries caused by gender and sexual-based violence and referral to legal and social services. Check TT immunization status and give tetanus toxoid if needed. Managing minor complications in pregnancy, includirig asic package of emergency obstetrics and newborn care (Em0NC) • Administration of iv antibiotics • Administration of iv uterotonic • Administration of iv anticonvulsant • Essential newborn care • Manual removal of retained placenta • Manual vacuum aspiration (product of conception) • Manual vacuum extraction Management of complication of abortion: post-abortion care (PAC), postnatal care, health education, provision of family planning commodities/services (e.g. invasive — intrauterine device (IUD). Screening for obstetricfi stula and referral for treatment, management of urinary tract infection. Administration of pediatric ARV (prophylaxis) to HIV exposed infant. Promotion of early initiation of breastfeeding.
Child health	Neonatal resuscitation, Management of neonatal complications (e.g. low birth weight baby less than 2.5 kg (l500gms -2500gms), skin pustules, cord infection, neonatal sepsis,), Early infant diagnosis of HIV for babies born to HIV positive mothers, Provision of HIV prophylaxis for infants born to HIV jsrtive mother Family Planning / Reproductive Health, EPI, Childhood Illnesses: IMNCI Diagnosis and treatment of children with HIV/AIDS, Identification and referral of children with disabilities, malaria, management of moderate and severe acute malnutrition (without medical complications).
School and adolescent health care	Vaccination, deworming. Oral/ENT/Sight screening and referral, first aid, age appropriate sexual and reproductive health. Provision of adolescent-friendly family planning services (counselling and provision of commodities). Post-abortion care for adolescents. Prevention of teenage pregnancy and linking schools to facilities which are adolescents friendly.

Outpatient Department (OPD) services	Diagnosis and management of uncomplicated malaria, Voluntary Confidential Testing and Counselling, PICT for HIV,, Surveillance and case reporting of vaccine preventable diseases, Nutrition counselling for the management of NCDs, Testing and Counselling services, TB screening, Diagnosis of TB (HIV/TB co-infection) and Treatment of TB (HIV/TB co-infection), Identification and treatment of opportunistic infections, Referral and linkages for HIV patients to other support services, Supervision of continuation phase of Directly Observed Therapy, Short Course (DOTS), Sputum examination and treatment review at end of intensive phase and continuation phase, Screening for hypertension management of hypertension without complication, Screening for diabetes, management of diabetes without complication, Referral to hospital for further care and follow-up , screening for breast lump, Prostate cancer screeningrequiring digital rectal exam (DRG), Measurement of visual acuity (outreach), Refractive Error andpoor vision, Eye injigl spoma (outreach). Management of acute external/internal otitis redia and chronic otitis, Screening and reporting of notifiable diseases and events, Case investigations and contact tracing Diagnosis and clinical management of some infectious diseases, Acute rheumatic fever, Measles, Pertussis, Acute watery diarrhoea and bloody diarrhoea, diagnose and report diseases with epidemic potential.
Laboratory	Diagnosis of malaria, anaemia, urinalysis, Diagnosis of TB (sputum and microscopy), Diagnosis of HIV, Laboratory diagnosis of Leprosy, Screening for non-communicable diseases e.g. diabetes, hypertension

Hospitals also provide primary-level, cross-cutting services to support a range of departments or users. Such services include those aimed at recuperation and rehabilitation (e.g. physiotherapy, occupational therapy). In the context of PHC, it is suggested that the high demand for services provided by hospitals rather than peripheral clinics is driven by the perception that hospitals provide higher quality services thus resulting
in bypassing of the PHC level of care.

11.3 The leadership role of hospitals in the PHC system

The World Health Organization (WHO 1992) envisaged that a first level hospital should be able to offer diagnostic, treatment, care, counselling and rehabilitation services provided predominantly by general practitioners and supporting a range of services. This may include:

- District health information
- Implementation of peripheral primary health care policies
- Administrative and logistics support to primary health care interventions
- Curative and chronic care for patients referred from peripheral units
- District laboratory services
- Links between health and other development agenda
- Development of local solutions to local health problems.

It provides what is perceived to be a fair minimum level of health provision for all, based on accumulated knowledge and experience of the common demands for hospital care, the availability and simplicity of interventions, the perceived effectiveness of interventions and their acceptability. The WHO Commission on Macroeconomics and Health has

attempted to define the services that small hospitals should offer as part of the close-to-client package on the basis of burden and likely cost-effectiveness (Sachs 2001).

The primary care activities of the hospitals focus primarily on infectious diseases and maternal and child health. Thus, the first referral hospital is envisaged as the apex of the pyramid of primary health care, most obviously in such programmes as Safe Motherhood and Integrated Management of Childhood Illness. In programmes such as Integrated Management of Childhood Illness, the expected role of the hospital-level care is explicit with priority conditions reflecting burden-of-disease estimates

First referral level hospitals have a wider role in the district health system since they have the technical expertise and professional authority essential for local implementation of national policy, making them potentially key players in managing, monitoring and supervising district health plans. They should also act as advocates for plans that address local health needs, a role that may be critical to the effectiveness of the local health system as a whole. The NGO and private sector, often religious organizations, are major health-service providers, and should be included in leadership roles supporting the district health system, given the belief that they may be more efficient than public sector hospitals Mechanisms permitting local income-generation (cost recovery, cost-sharing, facility improvement funds and local taxes) tend to contribute to the effectiveness of service delivery by enhancing accountability to service users.

A district first referral level hospital provides its services in co-operation with agencies in the district that have similar concerns, through a wide range in technical and administrative support, district health system planning services and delivery of safe, high quality essential care package in an integrated manner. The first referral hospital also leads in disaster preparedness and response at all times. The services include an outpatient department, emergency services, accident and trauma services, leading in developing local guidelines for patient safety, infection control and health care workers' safety.

Many national health information systems rely on district hospitals to coordinate data collection in the district. In theory, for a number of diseases the district hospital may be the only source of information, for example, for severe diseases such as neonatal tetanus, acute flaccid paralysis, or operative deliveries. The district hospital is a core data source supposedly providing burden-of disease data at greater resolution than is commonly available and at a meaningful administrative level if action is required. Introducing an information culture and the necessary skills and infrastructure to support such a transition is of enormous value.

11.4 Integrated supportive supervision and quality assurance

Health systems are organized in such a way that hospitals provide support to the PHUs since they have more and better-trained personnel and better equipment than PHUs. The need to establish a framework for supportive supervision for quality improvement strategies and referral system integrated with PHC is necessary to improve district hospital performance and be relatively cost-effective. Such interventions deserve attention, along with more operational research aimed at optimizing treatment of specific diseases.

The hospital should collaborate with the DHMT to ensure effective quality assurance and quality improvement in its catchment area. The hospital should participate in defining standards for service provision which can span all areas, including the technical content of care, the physical environment in which care takes place and interpersonal relations between patients and health workers throughout the district health system. Hospitals can support design ways of promoting positive competition, and a means of identifying poorly performing PHUs and even community health action areas and community health workers. To play this role the hospitals must have in place appropriate institutional arrangements, managerial capacity and information system to implement a quality improvement programme in PHUs.

11.5 Capacity-building and mentorship

The hospitals have a direct role in the training of PHC workers, particularly clinical assistants, nurses and MCH Aides, as well as an ongoing role in providing continuing medical education. In addition, it should provide facilities for skills-based trainings and mentorship for different levels of health care workers. Training activity should mainly involve the use of participatory problem-solving techniques, with problems identified during supervision.

11.6 Sustaining the continuum of care in PHC (receiving referrals from PHUs)

The hospitals may also serve as a gatekeeping role for those patients with less common problems, for whom skills and resources are most effectively concentrated at the hospital level of care. The performance of these functions may be critical to the success of the health system as a whole.

These examples all serve to emphasize that the close-to-client health services must be tightly integrated with district hospital—level care and demonstrate strong dependency on the referral system. Thus, cases too complex or serious to be managed in the periphery are sent for care where skills and resources are more highly concentrated, in the expectation that health outcomes will be better.

11.7 Mobile services to PHUs/communities

Mobile services are advanced/specialized services provided to PHUs and communities by teams organized by hospitals or DHMTs. The hospitals provide mobile services for different clinical needs as and when expected mobile services ensure specialized health services are brought closer to the doorstep of people and promoting progress towards achieving UHC. Hospitals should play an active role in planning and providing mobile services, so as to be in position to receive referrals from the mobile services.

11.8 PHC role of hospitals in transition as disease spectrum changes

With the increase in NCDs, especially cancers, diabetes, cardiovascular disease, including hypertension, stroke and heart attacks, a tendency arose for a prolonged inpatient care which increases the cost of care. This can be reduced with an effective collaboration with PHC for continuum care and rehabilitation after discharged.

11.9 PHC role of hospitals in transition as uses of information technologies expand (e-Health)

Technology has had an enormous effect on the amount of information available to clinicians and managers in industrial countries, from new rapid diagnostic tests to

automated stock-checking and ordering procedures and expands the roles that the hospitals can play in PHC. A particularly exciting potential is the ability to undertake and interpret many diagnostic tests remotely, thereby enabling hospitals to operate without a skilled diagnostic staff on site, but also able to expand capacity for care at PHU and community levels through mobile information technology.

It also seems probable that appropriately targeted technology could have a major effect, not least in the generation, communication and analysis of data, without which the health system cannot identify and respond to needs. By establishing a telemedicine link with the district health system, every provider is wired up into a mutually supportive system down to the CHW and household.

11.10 Leading operations in health research

Hospitals should be able to collaborate with PHUs in operations research and clinical trials towards a continuous improvement in performance. Hospitals can share with DHMT information collection, on-the-spot analysis of data and real-time use of the results for service planning, which might be both possible and of considerable benefit. Local information on population health, on use and referral patterns, on success and failures and the reasons underlying these successes and failures is invaluable if the hospital is to respond to the particular needs of its locality.

Chapter 12

FINANCING AND FINANCIAL MANAGEMENT FOR PRIMARY HEALTH CARE

Health-care financing is the mobilization of funds for health care and the mechanisms for paying for health care services at all levels. Financing systems are critical for reaching UHC. Raising funds for health; reducing financial barriers to access through prepayment (health insurance) and subsequent pooling of funds in preference to direct payment at point of service); and allocating or using funds in a way that promotes efficiency and equity are all forms of health financing. Health care is paid for by individuals, households, government, private health insurance and donors.

Health-care financial management provides accounting and financial information for accountability and transparency that assists managers to accomplish the organization's goals.

12.1 Primary health care financing sources and mechanisms

12.1.1 Government funding

PHC is an inclusive, effective and efficient approach to enhance people's physical and mental health, social well-being, and a cornerstone of a sustainable health system for UHC and those SDGs focused on health. One must ensure that the use of these services does not expose people to financial hardship, and to that end the government must therefore make substantial financial contributions to cover the cost of care. This can be done in several ways, such as by budget allocations to MoHS and other key players in the health care delivery system, in conformity with the government meeting with global and regional commitments/declarations (Abuja Declaration, the Bamako Initiative for cost recovery), or by the government taking loans for health financing.

12.1.2 Cost recovery

Cost recovery and user charges at facilities remain an important source of revenue for public services, as much for the flexible cash funding that they provide. Cost recovery at PHUs obtain supplies from district medical stores of MoHS and sell them at a subsidized cost to patients. The aim of the cost recovery systems for drugs was to help maintain consistent drug supplies at health facilities and careful pricing that was affordable for patients. For the system to be sustainable, stringent monitoring, transparency and accountability are needed.

12.1.3 Health insurance schemes and social protection

The government continues to invest in PHC to improve health outcomes and to address the inefficiencies and inequities that expose people to financial hardship. In this way the government works towards financial sustainability, efficiency and resilience of national health systems, appropriately allocating resources to PHC. This effort saves millions of people from poverty, particularly extreme poverty, caused by disproportionate out-of-pocket spending on health. Insurance is at an early stage throughout the country.

Community insurance is non-existent, but there are a number of examples of community savings and loan schemes that help communities to spread the care and transport costs. These have the potential for developing into community health insurance schemes and could become important ways to develop local accountability for services. The Sierra

Leone Social Health Insurance (SLeSHI) Scheme (2017) was enacted and launched in 2018.There are discussions for its implementation. The benefits package under SLeSHI includes primary and secondary health services.

12.1.4 External donors

External funding for the health sector is the second largest source of funding after household expenditure, and it compliments other sources of health-care financing.

12.2 Financing universal access to PHC

The government has been implementing a number of strategies for achieving UHC. One of the key fundamentals for UHC is adequate funding. It is in this vein that the government is developing certain mechanism in favour of PHC.

12.3 Financial management

An effective health-care manager should have managerial skills, and one such important skill is managing the finances of the organization in a prudent manner to achieve the organizational objective of providing better health-care services. A healthcare manager should both ensure that the funds are appropriately utilized for the intended objectives, that transparency and accountability attend the reporting funding use and that controls are functioning effectively to avoid misappropriation of funds.

The health care manager must be skilled in public sector financial management, budgeting, reporting, controls and audit, in addition to social accountability. Financial management is all about acquisition and use of scare resources. In the public sector, the emphasis is on proper use of resources to achieve the objective of providing quality health-care services.

12.3.1 Planning and budgeting

A plan is a detailed proposal for carrying out tasks. Plans are important as they help the district establish important objectives, put in place proper activities and actions to achieve the objectives and respond to new challenges as they arise. Each district is supposed to provide a plan, based on the amended Local Government Act 2017. District councils have autonomy in the preparation and approval of health sector strategies, which should be linked to the budget estimates for health services devolved to districts. Certain health programmes may be prioritized. Also, health sector plans and actions must be subjected to public scrutiny through the district council. Districts may prioritize based on their specific needs and national priorities and targets.

12.3.1.1 Costing of PHC services

Costing is basically trying to determine the cost of a product. For instance, a unit or a service. Costing usually commences with classification of costs into different types such as material costs, labour costs and overheads. Cost allocation and apportionment is separation of certain overheads into different departments and products especially if they are shared. Cost drivers are those activities in the district that lead to changes in costs. The Activity Based Costing (ABC) is a process of acting the cost of shared services to various departments and products based on the level of cost drivers i.e. activities.

12.3.1.2 Budgeting

A budget is a plan that is expressed in monetary terms. A budget is a tool that brings

the plan into action. A budget is also defined as a document that sets out the government's proposed revenues, expenditure and priorities for a specific financial year. It is prepared in line with public finance management regulations in order to guide the country's economic policy, accountability and management of public funds.

The budget is the blueprint upon which the government is able to regulate its fiscal mechanisms. The key principles of budgeting are transparency and accountability, prudent and responsible management of resources and promoting the equitable provision of health services. The budget process goes through approval processes at district and national levels that have strict deadlines every year.

12.4 Public financial accountability

Accountability requires that those responsible for resources are accountable. The accounting process starts with the collection of information from source documents such as invoices and receipts, followed by proper recording in accounting books and safely stored and ready for presentation when required/asked.

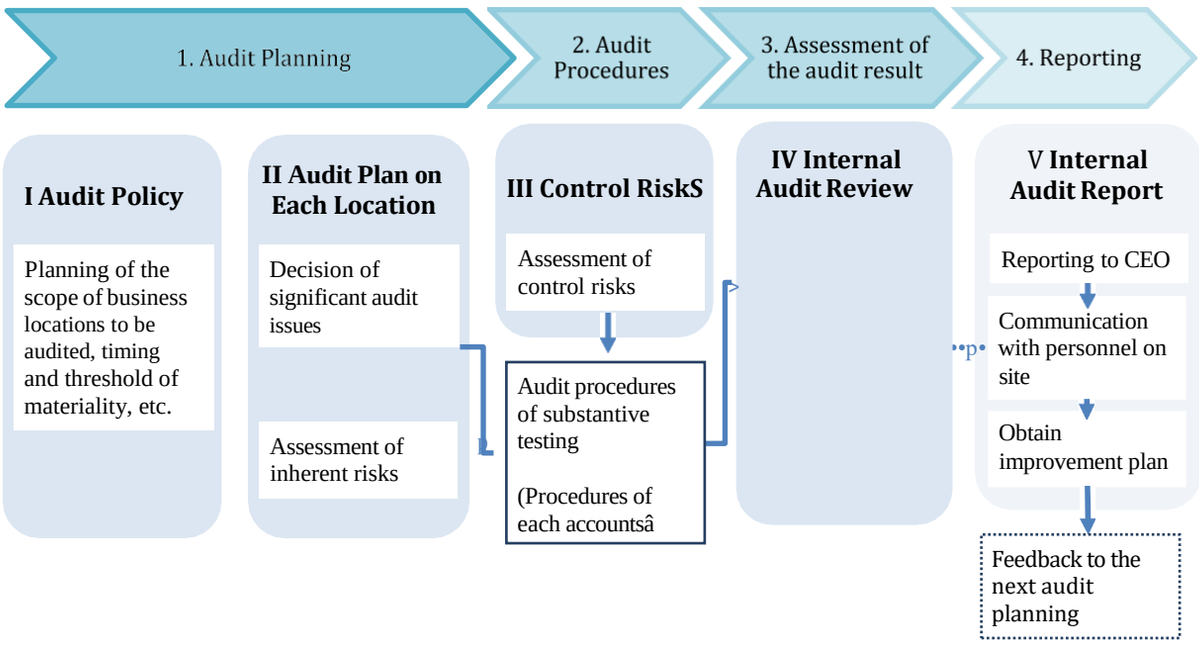
12.4.1 Financial reports

Financial reports are the statement of financial performance (reporting on whether the district has a surplus or deficit). It is a statement of financial position (covering the resources and how these have been funded), statements of cash flows (the receipts and payments of cash classified into operating, investing and financing) and statements of changes in equity. In addition, the financial statements include reconciliation between the budget and actual amounts with reasons for any variances, prepared in accordance with the required standards.

12.4.2 Audits and controls

Internal auditing can be defined as a self-governing, objective and consulting activity that is designed to add value and develop the operations of the district. It helps an organization to carry out its objectives by bringing an organized disciplined approach to assess and develop the effectiveness of risk management, control and governance processes.

Figure 21: The internal audit process



The internal audit covers areas such as risk management systems and controls, programme performance, financial compliance with regulations, advisory assistance and even investigations and other functional areas like marketing, finance, procurement and IT. The Directorate of Financial Resources provides support to a district in carrying out an internal audit for internal corrective measures by MoHS as and when required.

12.4.2.1 Internal controls

Internal controls are the processes designed and effected by those charged with governance and management responsibilities to provide reasonable assurance about the achievement of the districts' objectives with regard to reliability of financial reporting, effectiveness and efficiency of operations and compliance with applicable laws and regulations.

Internal control policies and procedures have to be put in place to ensure the management objectives are carried out. They cover performance reviews, information processing, physical controls and segregation of duties. An internal audit, as explained above, helps in ensuring that internal controls are functioning well and that any weaknesses are highlighted with appropriate action.

12.4.2.2 External audit

An external audit is normally carried out to provide an opinion on financial statements prepared by the district. This is normally carried out by the Office of the Auditor-General which draws its mandate from the Constitution. The districts should prepare for an audit by having all the relevant documents and accounting officers and other staff available.

12.5 Institutional arrangements

The **Directorate of Financial Resources (DFR)** is the primary financial management agency of the MoHS. Budgeting and expenditure of Government of Sierra Leone funds on

the programmes and directorates of the MoHS are administered by the DFR. In addition to the DFR, the MoHS has also set up the **Integrated Health Projects Administrative Unit (IHPAU),** which provides fiduciary oversight of donor-supported projects.

In line with the decentralization policy adopted after the enactment of the Local Government Act 2004, primary and secondary health-care services are devolved functions in Sierra Leone. Government funding for these services are transferred directly to the local council primary and secondary health-care accounts by the Ministry of Finance. In the case of primary health care, the district health management teams are the technical wing that accesses funds available to local councils and support operations of primary health units.

In the case of secondary /district hospitals, their funds operate as separate accounting units and the medical superintendents of hospitals access funds. DHMT/PHC receives funding from the central MoHS pool and from donors through accounts held separately from those associated with local councils.

Chapter 13

HUMAN RESOURCES MANAGEMENT FOR PHC

13.1 How HR fits into the health system

Human resources can be defined as the different kinds of clinical and non-clinical staff in the public health sector. It is the most important resource of the health system inputs because the performance and the benefits of the system depend largely upon the knowledge, skills and motivation of those individuals responsible for delivering health services. Human resource drives the other health systems for effective service delivery. Thus, the need for HR capacity- development.

Human resource management and development is a key element to effective service delivery in the health sector. It is the strategic and coherent approach to the management of an organization's most valued assets -- the people working there who individually and collectively contribute to the achievement of the objectives of the business. The human resources management department oversees a number of functions within the organization, including hiring, training, monitoring HR policies and even handling disputes. In addition, the human resources department must keep their staff updated on certain laws, such as safety and discrimination. HR officers must also make known the different types of leave, requirement on attendance and other critical HR issues.

At the MoHS, the Directorate of Human Resources for Health (DHRH) is responsible for the overall management of HR. In line with the decentralization process, the DHRH has ensured the deployment of the district HR officers in all DHMTs for effective district HR management.

13.2 Training for operationalization of the PHC Handbook

For the operationalization of the PHC Handbook, the users must be trained using specific training modules. The training modules are developed from the revised PHC Operational Handbook. The intention is to make the users of the Handbook are well acquainted with its content and context to facilitate its usage. It is expected that these training modules would make the Handbook user friendly and more hands-on for its users. The modules would make the PHC Handbook an everyday working tool for users.

13.2.1 PHC management training modules

Based on management's core functions and required competencies, the following eight modules would equip the team with the necessary leadership, governance and management skills they need for effective management of the district PHC programme.

Module 1. The concepts, principles and strategies of PHC and communication

- From Alma Ata to the Astana Declarations
- Ouagadougou Declaration
- Major reforms affecting the health sector
- Effective communication
- Community engagement

Module 2. Leadership, governance, policy and accountability

- Introduction to health systems leadership, attributes, styles and approaches
- Effective health services governance, management structures, roles, responsibilities and functions
- Leading multiple stakeholders (government sectors, implementing partners, donors, private sector) in health actions through negotiation, communication and relationship building.
- Leading people and organizational change in the health sector

Module 3. Evidence-based planning of service provision monitoring and evaluation

- Policy interpretation, analysis, implementation, review and development
- Situation analysis, Priority setting, strategic and operational planning, monitoring and evaluation
- Essentials of outcome monitoring and outcome evaluation, methods and tools
- Development of essential packages, protocols, performance standards for health services for the district
- Managing effective referral mechanisms ensuring continuum of care
- Managing PHC services for quality
- Outreach services

Module 4. Health management information system

- Introduction to HMIS, maintaining coverage, integrity, timeliness and quality of routing information on health services provision
- Roles and functions of HMIS in monitoring of performance standards, patient statistics, adverse patient events and referrals to and from services in the district through aggregation of data from facilities
- Information knowledge management in monitoring health-service utilization, coverage, and population health indicators, and reporting on district health performance to national government and to other stakeholders
- Role of ICT in HMIS strengthening
- Role of CBHMIS in HMIS strengthening

Module 5. Health-care financing and financial management

- Health-financing functions in Sierra Leone
- Health-financing for universal health financing
- Health system equity in the context of health policy and planning
- Introduction to financial management and planning
- Introduction to accounting, the accounting process and financial reports
- Budgetary planning and implementation

Module 6. **Human resources** planning **and management**

- Introduction on human resources for Health Service Delivery
- Functional areas of human resource management e.g. workforce

planning, deployment, staff job descriptions
- Staff performance management and staff incentives (financial, non-financial)
- Human resource development, through in-service education, based on training needs assessment and career plans
- Employee relations, communication
- Employee motivation and retention
- Mode of reporting

Module 7. Procurement and supply chain management

- Introduction to procurement and supply-chain management
- Stock management of commodities
- Quality management
- Key principles in drug supply chain management
- Equipment management, maintenance
- Disposal management
- Integrity and accountability

Module 8. Research in health

- Introduction to research in health
- Setting research priorities in area of responsibility
- Identifying research issues, knowledge gap and developing research questions
- Designing a study to answer research questions
- Collecting and analysing data
- Interpreting data
- Disseminating and using research findings to influence policy and practice

13.2.2 Integration into pre-service curricula for training institutions

These modules should be taken up by training institutions and should factor them in as various curricula are revised at different levels of formal pre-service and in-service training.

13.2.3 Training, induction and orientation of DHMT and PHU lead staff

The PHC workforce is expected to already have technical/clinical training in service delivery, but usually the personnel lack capacity in other areas that may help them to deliver on their mandate. They may therefore need capacity strengthening in non-technical PHC areas such as governance , leadership and management.

13.3 Functions of district health human resources officer

At the district level, the district HR officer has to carry out all HR functions including the

following:

- Manage health workforce of all cadres according to norms and standards
- Monitor attendance of health workforce
- Appraisal of health workforce
- Support training at district level
- Implement HR policies
- Manage current trends, emerging issues and practices in health workforce
- Review of scheme of service
- Rationalization of training
- Performance management
- Internal posting of staff (through the DHMT Postings Committee)
- Workplace improvement

For the ease of placement and effective management of HRH at district level, DHMTs must establish a district postings committee headed by the DMO and the district HRH officer serves as secretary.

13.4 Performance management

This represents a means of obtaining better results from the organization, teams and individuals by understanding and managing performance within an agreed framework of planned goals, standards and competence requirements. It is a process of establishing shared understanding about what is to be achieved, with an approach to managing and developing people in a way that increases the probability that goals will be achieved in the long- and short-term, in the most efficient way. A process that consolidates goal setting, performance appraisal and development into a single, common system, with the aim to ensure that the employee's performance is supporting the district's strategic goals.

13.4.1 Importance of performance management

- Maximize productivity
- Ensure efficient and effective delivery of services
- Provide conducive environment for individual employee growth and development
- Reward contribution
- Make decision

13.4.2 Steps in performance management

1. **Role definition**
   - Agreeing on key result areas and competency requirements (job descriptions).
2. **Performance agreement (contract) or workplan**
   - Objectives
   - Mechanism for measuring performance
3. **Competencies needed to deliver required results**

- Personal development plan:
- Intended actions for competency improvement for performance

4. Managing performance throughout the year

- Taking action to implement performance agreement and personal development plan (continuous feedback, informal progress reviews, updating objectives, counselling and remedial measures).

13.4.3 Performance review or appraisal

PHC personnel should expect their performance to be reviewed regularly with different HR tools, based on their performance. Personnel can be rewarded through their career pathway.

13.5 Human resource development

13.5.1 Orientation and induction

This is a procedure for providing new employees with basic background information about the health sector. New employee orientation effectively integrates the new employee into the PHC team and assists with retention, motivation, job satisfaction, thereby quickly enabling each individual to become contributing members of the work team.

13.5.2 Training

This refers to a learning experience organized by an employer to develop and sustain behaviours that bring about improvement and personal growth. It is organized for a specific period of time, but outcomes can take long periods to be realized. Training of employees is a planned learning experience, which provides staff with the knowledge, attitudes and skills to enable them perform a specific job either today or in the future.

13.5.3 Continuous professional development

Short courses that improve skills, knowledge and experience that you gain as you work, beyond any initial training. It comprises a record of what you experience, learn and then apply, and lead to points that contribute to staff promotion.

13.6 Employee relations

13.6.1 What are employee relations? Employee and employer relations describe the relationship between workers and employers in the health system, such as MoHS vs staff, local council vs DHMTs, or DHMTs vs PHU staff. This must be a cordial relationship to boost the morale of the workers and, consequently, their productivity. It also covers relations among employees themselves. Management holds the key to creating a conducive environment for such interaction to take root and flourish.

13.6.2 Importance of employee relations: healthy employee relationships increase motivation and efficiency among service providers which results in improved quality of services and in sound health outputs and outcomes.

Chapter 14

PROCUREMENT AND SUPPLY CHAIN MANAGEMENT FOR PRIMARY HEALTH CARE

A well-functioning health-care system must be backed by a reliable procurement and supply chain management pillar. Studies have shown a clear linkage between the public's trust in health-care services and the availability of essential commodities* for the prevention, diagnosis and management of all disease conditions.

14.1 Principles of procurement and supply chain management

The procurement and supply chain cycle revolves around the following core functions that include:

- Selection (forecasting and quantification)
- Procurement
- Warehousing
- Distribution
- Rational use
- Effective inventory management

The design and planning of operational mechanisms allow MoHS and DHMTs to keep a well-balanced inventory of drugs and medical commodities, and ensures there are no stock outs, no expired drugs, vaccines and wastages. Management of the supply chain is in accordance with international best practices and involves good logistics and warehousing standard practices.

14.2 The selection process

The selection process as the first principle of supply chain management, deals with the generation of an essential medicine lists to treat common diseases at all level of health care. The selected products should also be informed by the safety and efficacy of the product, their relevance to the pattern of prevalence of disease, evidence-based practice and cost-benefit analysis. The quantified essential medicines list must be generated with inputs from all relevant actors in the health-care sector.

14.3 Procurement of drugs and medical supplies

The procurement process ensures the availability of the right quality of drugs and medical commodities at the specified quantities at the most cost-effective rate. An integrated approach to procurement in a resource challenged health-care system, assures proper coordination, saves cost and guarantees quality and availability of commodities at service delivery points. Procurement of drugs is mainly centralized to ensure quality and standard drugs in circulation.

The GoSL has established, through a legislative act, that the NMSA is responsible for procurement and distribution of drugs and medical supplies in all public health facilities. Districts/PHUs can also receive drugs and medical supplies in the form of donations, but these need to be registered in the respective district stores system.

14.4 Distribution

An effective distribution system maintains the steady flow of commodities to facilities where they are needed. The distribution process takes into account the warehouse capacity and fleet management best practices. The distribution of drugs and medical supplies from the central point to districts is carried out by MoHS HQ, while distribution from the district medical stores to PHUs is done by the DHMTs, with vehicles provided for last-mile distribution. The MoHS is robustly insisting on transparency in the distribution of drugs and medical commodities, with the presence of key district stakeholders and key community stakeholders during drug distribution at district and PHU level respectively. Key district stakeholders include the local council representatives, paramount chiefs, CSOs, NGOs, MDAs, media representatives, among others.

Key community stakeholders for PHU drug distribution include ward councillors, paramount/ section/village chiefs, FMCs, VDCs, CHWs, CSOs, youth representatives and religious leaders, all from the affected community. This requires MoHS to inform DHMTs ahead of distribution to ensure all the key district stakeholders are present. The same must be applied for PHU drug distribution, to inform community stakeholders ahead of drug distribution to PHUs to ensure their presence to ensure transparency. All supplies distribution plans for health commodities to PHUs/health facilities from the DMS must be approved by the DMO.

14.5 Transport logistics

A well-coordinated fleet management system ensures the safety and timely delivery of medical commodities. The use of both the insourcing and outsourcing model, especially for last mile distribution, considering the road network beyond the districts and limited fleet at CMS, has a lot of advantages.

14.6 Monitoring drug use and availability in the district

Monitoring drug use/utilization at district and PHU level can be done through the regular review of WHO Logistics Management and Information System (LMIS) tools (including stock cards, Reports Request and Issue Voucher (RRIV) and the daily consumption registers) during supervision visits, data quality assessment and other integrated monitoring visits,

14.7 Warehouse logistics: drugs and medical stores

Assess drug storage facility (central, districts, PHUs) to ascertain whether they meet minimum standards for storage capacity; and follow good practice to:

- Ensure stocks are maintained in optimum storage conditions
- Ensure items are arranged according to expiry dates, generally practicing the FIFO system, applying policy guidelines for safe handling of commodities with better and safe storage conditions and for reducing warehouse wastage and stock-outs
- Ensuring clean, spacious and well-maintained storage conditions, clear labelling of shelves/area
- Effective supply tracking and stock control systems, and ensure accurate inventories to minimize wastage, pilferage, stock-outs of essential commodities medicines and expired stocks

- Maintain effective distribution and fleet management system
- Apply the cold chain concepts to manage relevant medicines and vaccines in accordance with cold chain practices (integrating cold chain management into the general supply chain management is a good idea).

14.8 Digitalization of supply chain information system: This increases accountability at all levels.

14.8.1 Inventory management software

Sierra Leone has upgraded the CHANNEL software, modifying it to incorporate Sierra Leone's RRIV) forms to ensure entry of consumption data from PHUs, use of a username and password, all this in an effort to domesticate the software. This has enabled the CMS to generate monthly consumption data in over 60 per cent of the districts. During the run-up to the launch of the FHC the CHANNEL was adopted by Sierra Leone as the national e-LMIS software for all drugs and has been upgraded for continued effectiveness and efficiency of inventory control and management. Various trainings were organized on the use of CHANNEL after the installation.

14.8.2 Training on the supply chain inventory management software (msupply)

Train all DHMT and PHU Staff, District Medical Store programme managers, logisticians, pharmacists, M&E officers, hospital superintendents and civil society district monitors of health commodities on the use of msupply, aimed at building inventory management and data collection capacity of logisticians and health workers at the district level. Consideration to incorporate msupply on mobile devices like tablets and smart phones can also assure real time transmittance of data for planning and decision-making.

Chapter 15

HEALTH MANAGEMENT INFORMATION SYSTEM

By "health information system" we mean the total process of collecting, collating, analysing data and giving feedback information on the health service delivery to users, service providers, decision-makers and other stakeholders. It is critical to have an integrated information system to monitor implementation at all levels

15.1 The components of the health information system

The system consists of three main activities:

1. The collection of raw data in the form of records, reports, and registers from hospital and peripheral health units.

2. The collation, analysis, interpretation and sharing of the information at:
   - Community-CHWs level.
   - PHUs
   - District level-DHMT- D
   - HMIS
   - National level- DPPI- HMIS

3. The feedback of information sent to:
   - National to district level
   - District to PHU level
   - PHU to community level

Health information is needed to guide the activities of the health service and to find out if these
activities are improving the health of the population. Health information tells us about:

- The health status of the population
- The major causes of mortality in different age groups and in different areas
- The common causes of morbidity
- The priority diseases and their prevalence
- The birth and death rates in different areas

Health information can also tell us about:

- The usage rate of various health facilities, such as how many persons attend clinics or are referred to hospital, or how many immunizations have been completed.
- The areas of the country that have poor access to health facilities or poor attendance rates.

From this type of information, it is possible to make decisions and plans about the best use of resources for example:

- Which type of drugs are most needed and in what quantities

- What categories of health workers are needed and where they should be posted?

In summary, health information is needed to answer questions that need to be known before making decisions about the allocation of resources (personnel, drugs, facilities) and the monitoring of health services. Without information appropriate activities cannot be planned, and the effectiveness of those activities remains unknown.

Health information is needed to make health sewice decisions and formulate plans and actions

15.2 Who uses health information?

All workers in the health field need to use information. But the type of information that is useful, is different for each category. Here are several examples of information useful to some categories of health personnel:

Information useful to VDCs and CHWs: On the health and sanitation side, the numbers of protected wells; the state of environmental sanitation and food hygiene in the area; the numbers of cases of infectious diseases reported; the state of new latrines built and whether they are used. On the mother and child issue, the number of pregnant women attending ANC, the number of under- five children that had fever, to name but few.

Information useful to PHUs: The number of attendances at the PHUs; the number of priority diseases diagnosed; the immunization coverage of catchment area, to name but few.

Information useful to DHMTs: Hospital statistics of all kinds, number and type of admissions, number of scheduled and emergency operations, inpatient and outpatient diagnoses, bed occupancies and the following: the availability of drugs and other supplies and of personnel, the emergency preparedness of the district and the availability of required equipment and their functionality.

The DMO also needs the following information:

- All data relating to PHC activities, including distribution of health facilities
- The general demography of the district
- The health staff available and deployed in the district
- Needs assessment report
- Supporting agency
- Available resources

The extent of community cooperation in the district (the number of VDC or ADCs):

- The attitude of community leaders on health development in their area.
- Studying health information (data analysis) tells us where improvements are needed for example, when a CHO notices low

immunization coverage he/she takes various actions: he/she holds outreach clinics, explains the importance of immunization to the community, organizes a campaign and encourages village registration.

Local health workers must use local **health information**

The district and central level of the MoHS needs much more information than the above-mentioned example. The district and central levels of MoHS use health information to improve the entire health service system. Collecting and analysing this information is a major task being undertaken by DPPI. DPPI is the central repository of health care information. It is compulsory for all DM0s (and the DHMT), the medical superintendent (and senior hospital staff) and programme managers to "feed" this directorate with all data collected in their fields of operation. Quantifiable indicators are needed to use this information on a national scale.

Information on control, treatment and prevention of diseases including Epidemic Prone are to be sent to the DHSE and copied to DPPI. Other Health related information such as super structures, personnel should be sent to DPPI and appropriate directorates.

15.3 What types of information are there?

Information needed by the DHMT can be grouped as follows:

1. "Base-line information"
    - General demography of the district.
    - On the health status of the population
    - On the health service situation

2. Regular, ongoing information for the "monitoring system"
    - Process information
    - Impact measurements

Definitions

Baseline information: relates to what exists NOW — that is, before the commencement of any new interventions and before the introduction of a regular monitoring system. At the commencement of its activities the DHMT conducts a preliminary review of base-line information. A detailed review is desirable whenever skilled personnel and finance are available to conduct one.

We can never know if the health service is improving the health status of the community, unless we know the base-line status. Some base-line information has been collected in Sierra Leone by special projects, at various times and in certain areas. Only if each DHMT collects some base-line data will we know if primary health care activities are having an effect on the population's health.

The demographic characteristics: The comprise the size of the population in the

district, the age, sex, structure, education, occupation/livelihood, migration, ethnic and religious distribution. These issues are essential background knowledge for programme planners and also form their basis for evaluation.

The health status of the *poR•*ation* ***(the health Problems):*** This denotes the exact situation regarding the health of the people in the catchment area.

The health service situation: This reflects is the exact situation in the health facilities which needs to be known for efficient management: which buildings need maintenance? Which equipment is available? What is the skill level of the personnel?

15.4. Regular or ongoing information for monitoring (process, output) and evaluation of results (outcome, impact) - the logic model

Process: This is the system, which tells us what is happening day-by-day and month-by-month within the health service. This type of information needed can be understood by asking two basic questions: What is being done? What activities are taking place? These are process measurements, for example: What activities took place last month? As a result of those activities, how many children have been immunized last month at a certain PHU? How many cases of a specific disease were treated? How many babies were delivered?

Process indicators are easier to collect. They only require the recording of events, although to ensure accuracy, close supervision of record keeping is needed. Monitoring implementation is done as part of governance and management to ensure that the government and implementing partners use the same norms and standards. Indicators measure inputs, activities, outputs, according to the plan and budget. M&E Technical Working Groups (TWGs) at district and national levels review and monitor PHC implementation and its outputs, based on targets allocated to each level and service points, using routinely collected data, including the community-based information system.

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Monitoring and evaluation of PHC implementation should be at every level based on objectives and targets. The monitoring and evaluation framework will be used to monitor the impact of PHC in achieving stated goals and objectives, outcomes and impact based on targets allocated to each level and service point, using routinely collected data, including the community-based information system, complemented by the Demographic Health Surveys. The framework defines the impact and coverage indicators, and targets, including data sources, frequency of the data collection/reporting. Baseline values for indicators were provided by the 2019 SLDHS.

15.4.1 What is monitoring and evaluation?

Monitoring and evaluation is a set of procedures and tools to examine how service delivery is conducted (inputs and activities), their level of performance (outputs) and whether they achieve what they are intended to achieve (outcomes and impact). Measures for the achievements of the outputs, outcomes and objective to determine whether a plan or programme is on schedule with planned activities and to assess whether a policy, plan or programme has produced the desired impacts.

It is generation of knowledge on factors (individual, community, programmatic) that influence health outcomes. It involves the selection of indicators, the systematic and consistent collection of information on selected indicators, an analysis of the data gathered, a comparison of results with the programme's initial goals and objectives and the sharing of results with stakeholders. It helps inform policy, planning or programme decisions: new services, resource allocation and corrections.

15.4.1.1 Monitoring: this is a continuous systematic process of collecting, analysing and using information to track the efficiency of effort in achieving objectives. It provides regular feedback that measures change over time in any of the programme components such as costs, personnel and activities. Any unexpected change in monitoring data may trigger the need for a more formal evaluation of activities in order to adjust the plan, based on evidence.

15.4.1.2 What is monitored?

Inputs: These are what you need to implement in a programme e.g. the financial, human and material resources used. They also include infrastructure, equipment, personnel, protocols and guidelines, training materials, medicines, supplies and money.
Activities: These are what the programme/DHMT does to accomplish its objectives such as conducting training workshops on specific topics for personnel, running outpatient clinics, screening of patients, distributing commodities, recording and reporting, dissemination of IEC materials, supervision, and referral of patients.
Outputs: These are what the programme/DHMT delivers such as the number of staff trained, number of patients seen, number of patients referred, number of patients operated on, the number of clients receiving care, materials distributed, people reached, intervention sessions completed, number of IEC materials disseminated and the number of patients screened.

15.4.2 Evaluation information system
This system addresses the question, What is the effect of the health service activities carried out? Are these activities improving the health of the community? These are outcome or impact measurements, measuring change that may have occurred as a result of activities, for example: Are there fewer cases of measles/polio/whooping cough? (As a result of the immunization programme). Is there less neonatal tetanus as a result of hygienic deliveries in the area?

Outcome and impact measurements are more difficult to ascertain, requiring specific techniques to obtain them. However, it is important to include them within an information system, otherwise the effectiveness of the health delivery system cannot be ascertained. The relationship between approved (activity) and its impact is not simple. It is often assumed that because a health service is functioning it will result in improved health, which is by no means always true. Evaluation indicators will measure outcome, such as coverage and impact, such as morbidity and mortality.

15.4.2.1 What is meant by evaluation? It is a systematic periodic process of collecting, analysing, interpreting and using information to assess the effectiveness (outcome), relevance towards achieving programme strategic objectives (impact). It is not undertaken routinely. It is reserved for specific situations, such as determining the success of a programme for continuation, scale-up or replication.

15.4.2.2 What is evaluated?

Outcomes: These are the results of the programme or changes that occur as a result of activities carried out, such as changes in knowledge, behaviour, attitudes and skills, or changes in quality of care following training and supervision activities. Clients develop timely care-seeking behaviour and personalized risk-reduction and treatment strategy, or percentage coverage of the target population improved.

Impact: These are the wider effect of the programme on long-term results, such as the reduced rate of diarrhea cases in under five infants; rate of malaria cases reduced in under five infants; burden of care relieved; households becoming more productive.

The three delays must be avoided if improvement in the reduction of maternal mortality is to be achieved. For example, it might be assumed that if 80 per cent of mothers attended an antenatal clinic (a process measurement), then there would be a reduction in the number of complications during labour (an impact measurement). But this would only happen if the clinic made correct diagnoses, gave correct treatment and referred cases at the correct time; and the referred cases presented themselves at the hospital and that the hospital was effectively provided with equipment, materials and appropriate personnel to intervene effectively.

Table 13: Monitoring and Evaluation Framework

Input	Activities	Output	Outcome	Impact
What goes in	What you do towards objectives	Results of activities achieved at program level. 1. No of activities performed 2. No of beneficiaries 3. Measures of service utilization	Population level changes in the short or intermediate e.g. Percentage knowledge, behaviour or practice change clearly related to the program	Anticipated end results or long-term population effects (Change in morbidity and mortality rates e.g. Due to lung disease)

15.4.3 Scope of M&E: Scope refers to the extent of the activity you will undertake in a M&E effort. Scope is determined by several questions: What should be monitored and evaluated? When should health programmes be monitored and evaluated? How much will M&E cost? Who should be involved in M&E? Who should carry out the evaluation? Where should M&E take place? It is important to agree on the scope and objectives of an M&E plan with stakeholders.

All stakeholders should be involved in the M&E. Efforts should be made to include programme/DHMT staff, programme recipients (youth, service providers, parents), government officials and donors to develop a consensus about the key issues to be addressed in an evaluation; to identify what information stakeholders need; and to ensure that staff understand the need for evaluation, their roles in it and how the results will be used to improve service delivery. All stakeholders should be involved in the detailed description of indicators, sources of data for indicators, data collection tools and the data collection plan for monitoring and evaluation; and the roles and responsibilities

of each group/member of the system and the plans for using information collected.

15.5 Sources of data and indicators

Data can be collected routinely (continuous), usually monitoring data to measure inputs, activities, and outputs, obtained from financia1,1ogistica1, and patient records, attendance registers, tally sheets, and commodity management forms (e.g., vaccines, family planning methods). Routine data is collected, assembled and made available regularly, intended to allow tracking over time and should be analysed and presented for information and decision-making, fed into reports and presented in charts displayed for public consumption.

Data can also be collected non-routinely, periodically, usually linked to an evaluation, often for a particular purpose, usually aimed at a specific time and conducted at regular intervals, e.g. quarterly, annually, through surveys, using instruments and according to well-defined protocols and national/international standards, codified according to the goals and the objectives of evaluation.

Health information is needed from the hospitals, the peripheral health units and the community level to get a clear picture of the health situation in the country. The M&E office is responsible for the distribution of the forms, regular supervision of data collection and compilation of the returns. The national M&E office of DPPI analyses all data from the districts, and also carries out periodic supervision of PHU activities using the protocol. The data analysed are made available to all users at every level, and feedback in particular is sent regularly to the DHMT.

The DHMT then provides the necessary information to the PHUs and communities for use at regular meetings with stakeholders. It must be emphasized that the essential purpose of all records is to provide data for decision-making, and this applies to all levels from the community to the national level.

CHWs collect data that are harmonized with the reporting system, in line with the national M&E system, including data from household registers, and daily activities log, aligned with CHW scope of work described in the CHW strategy. The following sources and indicators are included:

15.5.1 General CHW records:

- Number of meetings, attendance at meetings, minutes of meetings
- Number of mapped registered households (at baseline followed by six monthly updates); total number of people in the community, number of women 15-49, pregnant women, adolescent girls and under fives
- Timely submission of data and reports
- No and attendance at community meetings (leading to chiefdom dialogue sessions)
- Key health actions arising from dialogue sessions (village, chiefdom, district)

15.5.2. Service provision and care seeking, CHW records:

- Home visits undertaken for household-level informed dialogue
- Number reached, assessed, managed, referred

- Number and proportion using family planning method by age
- Number and proportion attending ANC four times or more
- Number and proportion using skilled delivery (outcome of pregnancy)
- Number and proportion fully immunized
- Number receiving iCCM
- Number of clients treated by age, sex and illness
- Number of deaths by age, sex, date, place and cause
- Number of unusual events or rumours affecting the health of community member(s)

15.5.3. Community-based surveillance: The CHW is required to report any unusual events immediately to their peer supervisors by phone or any other means. They are required to document all events in a register to be kept at home. CHWs in hard-to-reach areas far from the PHU are expected to provide treatment for uncomplicated cases of illnesses that they have been trained to manage, as per the CHW National Policy (such as acute watery diarrhea without dehydration in children under five years, except in the case of an outbreak when referral is needed; pneumonia in infants under five and malaria in all cases). If unable to treat, refer the patient immediately to the closest facility that can deal with the condition. CHWs are expected to support community engagement activities in response to outbreaks.

15.5.4 Civil registration and vital statistics (CRVS): Although CRVS has the potential to provide maternal, neonatal and under-five mortality data of better quality, currently it is far from complete. A well-functioning CRVS system registers all births and deaths and issues birth and death certificates, compiles and disseminates birth and death statistics, including information on causes of death. The national health sector recovery plan for 2015 identifies CRVS as a priority investment area. A National Civil Registration Authority (NCRA) was established by an Act of Parliament in June 2016 to oversee all civil registrations in the country.

15.5.5 Health facility routine statistics: They can be obtained from:

- Outpatient records (registers)
- Mother and child health registers
- Immunization tally sheets
- Laboratory records and supply chain management records

15.5.6 Other records

The DHMT needs five types of information:

1. Information on the existing health services.
2. Information on the health status of the district population (from surveys, studies)
3. Demographic information and the population to be served (from census data)
4. A regular information flow on the functioning of the district health services
5. A regular information on changes in population by births, deaths, migration and what factors are at play e.g. diseases causing mortality (from civil registration)

6. Information, which enables an assessment of effectiveness

The first three are grouped under baseline information, the fourth is process information and the fifth is essential for calculating the sixth impact indicator.

15.6 Monitoring and evaluation plan

The M&E plan consists of what data to collect, when to collect and analyse it and feed the data into quarterly and annual reviews. The annual M&E plan for individual DHMTs and for the network should address all the PHC objectives.

Table 14: Monitoring and Evaluation Plan

What to monitor	Inputs (HR, materials, money)	Activities	Outputs	Outcomes
Data to collect				
Source				
How/tool				
When to collect				
When to analyse				
When/how to use				

15.7 How data is collected, analysed and disseminated?

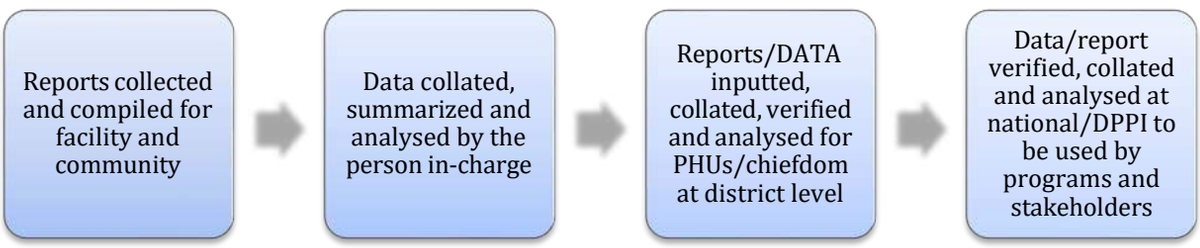
- Information is collected on record forms, registers, tally sheets and summary forms, filled in by staff. However, efforts are being made by MoHS and partners to introduce e—based data collection tools for PHU personnel and DHMTs nationwide. If information is to be used at district, and national levels, then certain conditions for its collection must be fulfilled.
- The record and report forms used by auxiliary staff in the PHUs must be easy to understand and to fill in.
- The PHU staff must be trained to keep accurate records. Inaccurate records giving misinformation are an expensive waste of time, paper, money and computer space.
- The records must be standardized nationally. Unless this is done they cannot be collated together and analysed.
- The data obtained from the records must be timely and area specific.

There are many advantages of a standardized national records system:

- All health workers can be taught to use them during pre-service training
- Supervisors can be taught how to cross-check them
- The same method of analysis can be used at all levels—so that the DHMT can obtain results without waiting for a national annual analysis.
- Differences between areas can be rapidly noticed.
- Aberrations and errors are rapidly detected.
- The amount of data collected should be the minimal necessary.
- The data collected must be valid, reliable and sensitive. The way in which original data can be collected from the district is shown in figure

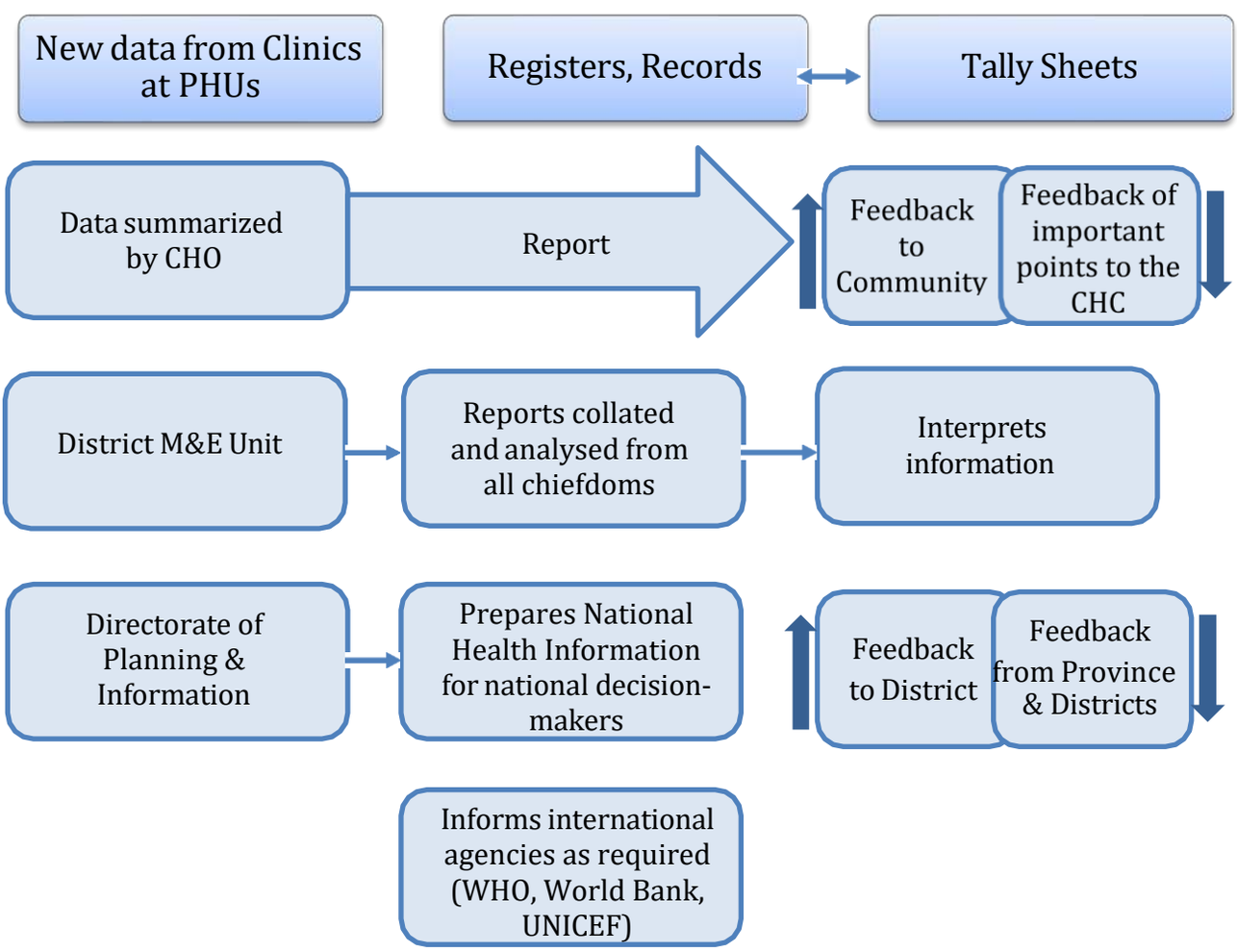
3.

Figure 22: Data flow/health information system



15.8 Basic health status indicators

Figure 23: Diagram of a health information flow system



What information is needed to measure improvement* impact *indicators)?

How can we know the health status of the people living in Sierra Leone is improving?

A health indicator is an observation or measurement, which tells us about certain aspects

of health in a population. The measurements can be taken from a sample of the population. It may be from a village, district or the whole nation. Because health indicators depend on measurements, they are only true and useful if the measurements are accurate. The following are some health status indicators:

1. **Infant mortality rate (IMR):** This is the number of deaths of infants up to one-year old for every 1,000 live births in a given year.

IMR =Number of deaths of children under 1 year
During a 12 months period x 1,000 (in a particular geographical
ar__}ea Number of live births during the same year

Infant deaths are generally regarded as a useful indicator of general socio-economic development and environmental health. Deaths in this age group are the results of perinatal causes (e.g. low birth weight, failure to breathe, or infections), a high concentration of environmental factors affecting health e.g. insect- and water-borne diseases, poor immunization services, poor infant feeding techniques, nutrition education and poverty.

2. **The child mortality rate (CMR):** This is the number of deaths in under five years in a given year per 1,000 children in that age group at the mid-point of the same year in a particular geographical Area.

CMR = Number of deaths between 1 and 4 years of age in given year.
X 1,000 in a particular geographical area
Total number of children between 1 and 4 years at mid-year

Deaths of children in this age group occur from acute respiratory infections, malaria, diarrhoea, and malnutrition, among others. Many deaths in this age group indicate poverty and poor sanitation. Reduced death in this age group indicates an improved environment and the improved education of mothers.

3. **Under-five mortality rate (USMR)** (IMC and CME combined):

U5MR = No of deaths of children under five years during a 12-month period

Mid-year population of children under 5 years x1,000

Ideally this should be the number of deaths of children under 5 years x 1,000 over the mid-year population under five years.

4. **Life expectancy at a given age:** Life expectancy at birth reflects the overall mortality level of a population. It summarizes the mortality pattern that prevails across all age groups — children and adolescents, adults and the elderly, and the average number of years that a newborn is expected to live if current mortality rates continue to apply. A short average life expectancy at birth means there is a high death rate in the younger age groups of a community — even though many individuals may reach to be one 100 years.

5. Maternal mortality rate (MMR): This is ratio of the number of maternal deaths

attributed to complications of pregnancy, childbirth and the puerperium during a given period per 100,000 live births during the same period.

*Where the deliveries are available it is a better denominator than "live births" because many maternal deaths may be also accompanied by the death of the foetus in still births.

6. **The crude birth rate:** This is the total number of births in one year for every 1,000 of the population.

$$\text{CBR} = \frac{\text{Tota1 number of births in a given year}}{\text{Total population midyear x1,000}}$$

7. Crude death rate (CDR): Total number of deaths in a given year per 1,000 population at mid-year.

8. **Morbidity:** The above indicators relate to births and deaths, but they do not measure the amount of sickness in community, either chronic or episodic. Two rates are used in relation to diseases in the community.

9. The incidence rate: This is the number of persons contracting a disease (new cases) during a given period of time per 1,000 of the population at risk.
Example: Of every 100 children under three years in this district, how many contracted measles in March (20…).

10. **The prevalence rate:**
This is the number of persons having particular disease new cases and these continuing to be ill at a given point in time per 1,000 of the population at risks.
Example: Of every 1,000 children under three years in this district, how many had tuberculosis on 30 June (20…)

These rates can only be measured by undertaking sample surveys of population groups, or where the population is not large as in a village, or census, an enumeration can be carried out.

11. **Nutritional status (a special variety of morbidity)**
There are several ways of measuring the nutritional status of a community. The most commonly used indicator is the growth of infants and young children in terms of weight-for-age, weight-for height and height-for-age, and mid-upper arm circumference (between six months and five years). A poor nutritional status correlates with a high morbidity/mortality in a population, that is the lower the nutritional status the higher the morbidity.

Annex I: Package of Essential Care by Primary Health Care Service Delivery Levels

Service Delivery Area	Community	MCHP	CHP	CHC
Antenatal Care	- Counselling for early ANC by health workers in PHU Screening services for danger signs during pregnancy Identify and refer suspected moderate and severe anaemia - Malaria prevention and education (give IPTp, promotion of use of LLINs) Counsel on TT, PMTCT - Counselling on Maternal, Infant Young Child and Nutrition (nutrition) - Support for development of birth plan, including emergency (birth preparedness)	Same as Community, plus: - Identify pregnancy (Clinically) Screening, diagnosis and treatment for STIs Voluntary Counselling and testing for HIV (PITC) - Treatment with ARV therapy for pregnant women living with HIV Check tetanus toxoid (TT) immunization status and give tetanus toxoid if needed Deworming in the 2nd & 3rd trimester Provision of prophylactic iron, folic acid, and multivitamins - Treatment of malaria in pregnant women - Screen for malnutrition	Same as MCHP	Same as MCHP and CHP, **plus:** Clinical diagnosis of pregnancy Hemoglobin testing Microscopy Urinalysis
Supervision of Labour, Delivery, Neonatal and Immediate Postnatal Care	N/A: CHWs should refer pregnant women to the nearest PHU for labour and delivery services.	Supervision of Labour and Delivery Monitor / Observe labour Conduct normal delivery - Provide essential newborn care - Risk assessment and refer complicated cases - Perform minor interventions, if necessary, such as amniotomy and episiotomy Immediate postnatal care Detect and initiate management of danger signs in mother	Same as MCHP, Plus: Initiate management of complicated births and refer	Same as CHP, Plus: Management and/or referral of complicated births

		(haemorrhage, vital signs, etc.) and refer as necessary - Detect and initiate management of danger signs in baby (low birth weight, keep baby dry and warm, cord care, vital signs, clear airway) and refer as necessary - Administration of pediatric ARV (prophylaxis) to HIV exposed infant - Initiate breastfeeding within one hour of delivery		
Managing complications in pregnancy, including EMONC	Referral of pregnant women with fever/ malaria to PHU for diagnosis and treatment Recognize danger signs and refer for management of complications	Same as Community, Plus: - Recognize signs of APH (Placenta Previa, HRP...), initiate management and refer Recognize signs of ectopic pregnancy and refer Recognize signs of PIH/ Eclampsia; initiate treatment and refer to secondary care Management of urinary tract infection: recognize, initiate treatment, and refer to CHC or secondary care Management of anxiety and depression - Management of anxiety and depression; - Neonatal resuscitation - Management of fever / uncomplicated malaria - Management of severe malaria: initiate treatment and refer to secondary care - Neonatal resuscitation	Same as MCHP	Same as MCHP and CHP, Plus: Management of Urinary Tract Infection - Assisted vaginal delivery Manual removal of retained placenta Removal of retained products *of* conception Manage Abortion (threatened, complete, incomplete, complicated) - Manage Postpartum Hemorrhage Management of sepsis
Postnatal Care	- Provide counselling on essential newborn care	Same as community, Plus: - Provide immunization	Same as MCHP	Same as MCHP and CHP, Plus: - Management of neonatal

	Recognize danger signs in the newborn and mother and refer for: Case management of infections in infant and mother Management of breast problems Neonatal complications (low birth weight (LBW) baby, very LBW baby, neonatal jaundice, skin pustules, cord infection, sepsis, inter alia Early infant diagnosis for baby born to HIV positive mother (at 6 wks.) Provision of HIV prophylaxis for infants born to HIV positive mothers - Counselling on adherence to ARV for HIV positive mother - Counsel and support mother on initiation of breastfeeding and exclusive breastfeeding - Counselling on birth spacing, hygiene and nutrition for mothers - Provision or referral of family planning based on client choice	according to national guideline - Counselling and management of nipple or breast pain - Treatment with ARV therapy for women living with HIV		complications (e.g. low birth weight (LBW) baby (l500gms 2500gms), very LBW baby (<l50gms) or <32 weeks gestation, neonatal jaundice, skin pustules, cord infection, sepsis) Early infant diagnosis for baby born to HIV positive mother Provision of HIV prophylaxis for infants born to HIV positive mothers Management of postpartum complications (bleeding, high blood pressure, sepsis, depression)
Family Planning / Reproductive Health	Counselling on birth spacing and family planning Counselling on informed choice Provision of Family Planning: commodities/services (non-invasive - condom, pill) Referral for: - Syndromic management of STIs - Infertility Counselling and Treatment	Same as Community, Plus: Provision of Family Planning commodities /services (e.g. invasive - IUD) - Syndromic management of STIs Infertility counselling - Screening for Reproductive Health Cancers	Same as MCHP, Plus: - Screening for obstetric Fistula and referral for treatment	Same as CHP, Plus: Infertility treatment: initiate and refer to secondary or tertiary care

	- Clinical management of rape and treatment of injuries caused by gender/sexual-based violence and referral to legal and social service Education and counselling of adolescents on reproductive health - Education of adolescents on family life skills	- Treatment of injuries caused by Gender/Sexual-based violence and Referral to Social Welfare Referral for: Treatment for Reproductive Health Cancers (cervical cancer)		
School and Adolescent Health **Note: The Essential School Health Package is delivered directly in Pre-Primary, Primary, and Secondary schools and includes vaccination, deworming, IMNCI, Oral/ENT/Sight screening** and care **twice per year, first aid,** age-**appropriate sexual and reproductive health**	- Age-appropriate education and counselling on sexual and reproductive health for school-age children and adolescents. - Counselling and education on prevention of HIV and other STIs among adolescents Prevention of teenage pregnancy Counselling and promotion of ANC services for teenage mothers Promotion of TT and PCV vaccination - Life skills education for adolescents Linking schools to facilities which are adolescents friendly	Same as Community, Plus: Provision of adolescent friendly HIV, TB, and STI screening and treatment services - Provision of adolescent friendly family planning services (counselling and provision of commodities)	Same as MCHP	Same as MCHP and CHP, plus: Post-abortion care

information education and counselling, and family and **community dialogue on health and safe child and adolescent issues.**				
Child Health Services	EPI: support for: - Implementing RED Approach strategies (All the six components) Social mobilization for: Mass immunization campaigns - Supplemental immunization activities (SIAs) (and EPI Plus) Outreach Immunization services - Detect zero dose or defaulter children of immunization and insure their vaccination - Surveillance and case reporting of vaccine preventable diseases - Integrated Community Case Management (iCCM): - Treatment of common childhood illnesses including pneumonia, diarrhea, malaria, screening of malnutrition and referral of complicated /severe cases	EPI: Implement RED Approach strategies (All the six components) - Routine immunization services at PHUs - Mass immunization campaigns Supplemental immunization activities (SIAs) (and EPI plus) - Outreach immunization services to communities - Introduction of new vaccines into routine EPI Services - Surveillance and case reporting of vaccine preventable diseases IMNCI: Same as Community, Plus: Diagnosis of common childhood illnesses including pneumonia, cough, cold, diarrhea, dysentery, ear infection, measles, malaria, malnutrition - Treatment of common childhood illnesses (all from list above)	Same as MCHP, Plus: Treatment of some severe childhood illnesses, and onward referral	Same as MCHP and CHP, Plus: Treatment of some severe childhood illnesses, and onward referral

		- Initiate treatment and referral of complicated illnesses		
Malaria (see above)	Prevention: IPTp, for pregnant women (Sulphadoxine- Pyrimethamine at least 3 times in 2nd and in 3rd trimesters) Social Mobilization to promote the proper use of Long- Lasting Insecticidal Nets (LLINs) Community education, sensitization, and mobilization for environmental sanitation Case Management as per iCCM+): Diagnosis of malaria (RDTs) - Treatment of uncomplicated malaria with oral ACTs - Referral of severe malaria cases	Same as Community, Plus: Prevention: Provision of LLINs for pregnant women through ANC - Provision of LLINs for children under-5 through PNC and under-5's clinics Provision of LLINs for the total population through mass distribution campaigns Case management as per IMNCI): - Diagnosis of malaria (RDTs only) - Treatment of uncomplicated malaria with oral ACTs - Referral of severe malaria to hospital - Case management for uncomplicated malaria in pregnant women (quinine tabs in 1st trimester and ACTs in 2nd & 3rd trimesters)	Same as MCHP	Same as MCHP and CHP, Plus: - Diagnosis of severe malaria using microscopy and/or RDT - Treatment of severe malaria: initiate treatment and refer to hospital
Nutrition (see above)	Prevention: Growth Monitoring and Promotion Nutrition Counselling/ Education Maternal Infant and Young Child Nutrition counselling Promotion and distribution of vitamin A supplementation and deworming - Provision of school and adolescent nutrition counselling and education	Same as Community, Plus: Case Management (as per IMAM and IMNCI) - Treatment of Moderate Acute Malnutrition - Treatment of Severe Acute Malnutrition (SAM) without complications Nutrition Counselling for Management of NCDs	Same as MCHP	Same as MCHP and CHP

	- Screening and referral of children under 5 for acute malnutrition (moderate and severe)			
HIV/AIDS, STIs and TB:	Promotion of preventive measures (awareness raising and sensitization, distribution of condoms) Provision of information and services on HIV and other STIs in school and out-of-school Conduct dialogue with families of TB and HIV patients and communities to address the stigma and discrimination related to the diseases. Nutritional support to TB patients (counselling) Provide psycho-social support (peer support groups) - Screen household contacts of confirmed TB patients; identify and refer presumptive TB cases to the health facility for diagnosis and management. Follow up patients in their respective homes through home visits, to educate is on side effects, TB and HIV issues, adherence to treatment and prevention practices. - Identify and trace patients who have interrupted treatment and defaulters and bring them back into care, in collaboration with the in-charges at the DOT/ antiretroviral therapy (ART) sites.	Same as Community, Plus: - Testing and Counselling services (client- and provider-initiated) - ART services for positive members of key groups including, key populations, discordant couples, pregnant women - Post-exposure Prophylaxis (PEP) - ARV therapy for adults, pregnant women and children, including homebased care - Adherence counselling TB screening, identification of TB suspects in PLHIV Prevention of opportunistic infections - HIV Testing and Counselling for pregnant women for Prevention of Mother-to-Child Transmission (PMTCT) services - Adherence and infant feeding counselling for pregnant women with HIV Early infant diagnosis for baby born to HIV-positive mother (at 6 weeks) Prophylactic treatment for infants born to HIV+ mothers Syndromic management of STIs at HIV clinics, antenatal, family	Same as MCHP	Same as MCHP and CHP, Plus: - Diagnosis of TB (HIV/TB co-infection) Early Infant Diagnosis for infants born to HIV mothers Testing for syphilis at antenatal clinics Referral and linkages for HIV patients to other support services (psychosocial support, TB, nutrition)

	- Complete the integrated TB/HIV monthly summary form and report to the lead facility. - Participate in periodic review meetings organized by the CHW and TB/HIV District Focal Persons, or facility lead staff	planning and general outpatient clinics. Referral for: Identification and treatment of opportunistic infections Exposed Infant Diagnosis for infants born to HIV mothers - CD4 monitoring - Viral load monitoring - Testing for syphilis at antenatal clinics - Identification of suspected hepatitis patients and referral for testing, and treatment		
Tuberculosis / Leprosy		Same as Community, Plus: Prevention: BCG immunization to all newborns (EPI) -Provision of IPT to children in homes with infected adults Case Management: Recognition and referral of complications and suspected drug resistant cases Identify and refer patients with adverse drug reaction	Same as MCHP, Plus: Case Management: Supervision of continuation phase of DOTS Provision of CPT and ART to TB/HIV coinfected cases	Same as CHP, Plus: Laboratory: Diagnosis of TB (sputum and microscopy) Diagnosis of HIV patients for TB Clinical diagnosis of Leprosy and referral for confirmatory laboratory testing of Leprosy Laboratory diagnosis of Leprosy Case Management: Registration and assignment to treatment regimen Sputum examination & treatment review at end of intensive phase and continuation phase. Provision of IPT to HIV patients Identification and management of DRTB cases
Non-Communicable Diseases	- Health promotion and counselling on -Risk factors for major non-communicable	Same as Community	Same as Community and MCHP	Same as MCHP and CHP, plus: - Screening for hypertension and referral to hospital

	diseases (diabetes, hypertension, and cancers [cervical, breast, prostate) Behaviour change for prevention of non-communicable diseases Identify high-risk individuals using simplified protocols and refer them to the PHU - Promote a healthy lifestyle, physical exercise, and avoidance of alcohol and smoking. - Ensure adherence to the treatment advice from health workers. - Provide counselling services to enhance care-seeking from a health facility provider. - Provide support for the management of mental health patients in the community. - Facilitate support groups for the prevention and management of chronic conditions.			Screening for diabetes and referral to hospital Follow-up management for chronic conditions after return from treatment Breast screening for cancer detection and referral to hospital
Eye Health	Prevention: Awareness raising and sensitization on the prevention of eye diseases blindness and cataract and glaucoma through personal hygiene and sanitation - Recognition of red eye and referral - Recognition of suspected cataract and referral - Recognition of childhood blindness and referral case management:	Same as Community, Plus: - Treatment of red eye	Same as MCHP	Same as MCHP and CHP

	- Preventive and curative management of Onchocerciasis			
Mental Health	CHWs are trained on basic psychosocial counselling and can provide follow-up and referrals for members of their communities with identified mental health conditions. The Mental Health programme is exploring the development of a Community Mental Health Aide cadre. CHWs or future CMHAs can also provide advocacy and awareness raising in their communities about mental health conditions. - Child abuse services (detection, reporting, referral to social services) - Gender-based violence and domestic violence services (detection, medical care for victims, referral to legal and social services)	- Identification of individuals with commonly occurring and/or enduring mental illness - Alcohol/Substance abuse prevention and treatment programmes - Child and Adolescent mental health programmes School mental health programmes - Child abuse services (detection, reporting, referral to social services) - Gender-based violence and domestic violence services (detection, medical care for victims, referral to legal and social services) Psychosocial counselling Refer for: Diagnosis and treatment of commonly occurring mental illnesses and psychological disorders - Hospitalization of people with enduring mental illness	Same as MCHP, Plus: -Identification and referral of somatoform disorders -Identification and referral of alcohol and substance abuse disorders - Psycho- education on mental illness Community re-integration and rehabilitation - Stigma reduction programmes -Psychosocial counselling	Same as CHP, Plus: - Prescription of some psychotropic medications - Identification and management of somatoform disorders through medication and counselling - Psychosocial counselling
Oral Health	Education and sensitization on oral care prophylaxis (including tooth brushing)	Same as Community, Plus: **Referral for:** Extraction, filling and ART - Ameloblastoma Minor surgery - Dentures, crowns and bridges - Burkett lymphoma - Treatment of dental injuries	Same as MCHP	Same as MCHP and CHP, plus: Minor surgery - Ameloblastoma Dental injuries

ENT and Audiology	NA	Simple test for hearing loss Management of acute and chronic Rhinitis Aural toilet and wick insertion Referral for: Removal of ear wax and foreign bodies - Management of acute external /media otitis and chronic otitis	Same as MCHP	Same as MCHP and CHP, Plus: Removal of ear wax and foreign bodies Management of acute external/ media otitis and chronic otitis
Environmental Health	Expanded sanitary inspection Promotion of safe drinking water (including methods of point-of-use water treatment and safe water storage) Provision of facilities and maintenance for solid waste disposal Provision of facilities and maintenance for safe excreta disposal at household, community, and facility levels, including provision of drainage system Promotion of personal hygiene measures including hand washing with soap Vector control including promotion and facilitation of environmental sanitation, promotion of LLINs, inter alia Management of medical waste Promotion of food safety and hygiene Prevention of indoor and outdoor air pollution Promotion of safe burial practices			

Community	MCHP	CHP	CHC
- Sensitization and mobilization for uptake of preventive and curative services offered at facilities and through outreach - Promotion of hygiene and sanitation - Education on the causes, preventive measures, and treatment seeking for communicable and non-communicable diseases			
Refer to nearest PHU or secondary care for all apparent emergencies.	**Management of:** - Any danger signs such as lethargy or unconsciousness, convulsion, persistent vomiting, inability to take food or drink, abdominal distension; wound infection, inter alia. Initiate care and refer for management of: - Sepsis - Seizure - Airway Management External haemorrhage: administer first aid and refer to hospital - Shock: administer first aid and refer to hospital Cardiorespiratory arrest: administer first aid and refer to hospital - Snake bite: administer first aid and refer to hospital - Refer for all other emergencies	Same as MCHP, Plus: **Management of:** - Soft tissue infection - Initiate care and refer for management of: Asthma - Hypertensive crisis - Refer for all other emergencies	Same as CHP, Plus: **Management of:** Simple closed fracture Initiate care and refer for management of - Hyperglycaemia - Upper GI Bleed - Sickle Cell Crisis - Tetanus Pneumothorax (trauma or spontaneous) - Testicular torsion - Major burns Refer for all other emergencies
Epidemic Control: Community-based	Same as Community, Plus:	Same as MCHP	Same as MCHP and CHP, **Plus:**

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