



MINISTRY OF HEALTH AND SANITATION

SIERRA LEONE
BASIC PACKAGE OF
ESSENTIAL HEALTH SERVICES
2015-2020

JULY 2015

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ACRONYMS

ANC	Antenatal Care
APH	Antepartum Hemorrhage
BEmONC	Basic Emergency Obstetric and Neonatal Care
BPEHS	Basic Package of Essential Health Services
CAG	Community Advocacy Group
CEBS	Community Events-Based Surveillance
CEmONC	Comprehensive Emergency Obstetric and Neonatal Care
CHA	Community Health Assistant
CHC	Community Health Center
CHO	Community Health Officer
CHP	Community Health Post
CHP	Community Health Program
CHW	Community Health Worker
CSO	Civil Society Organization
CVD	Cardio-Vascular Disease
DHIS	District Health Information System
DHMT	District Health Management Team
DHS	Demographic and Health Survey
EHS	Essential Health Services
EML	Essential Medicines List
EmONC	Emergency Obstetric and Neonatal Care
ENT	Ear, Nose, and Throat
EPI	Expanded Program for Immunization
ETU	Ebola Treatment Unit
EVD	Ebola Virus Disease
FMC	Facility Management Committee
GoSL	Government of Sierra Leone
HIV/AIDS	Human Immunodeficiency Virus / Auto-immune Deficiency Syndrome
HRH	Human Resources for Health
HSCC	Health Sector Coordinating Committee
iCCM	Integrated Community Case Management
IDSR	Integrated Disease Surveillance and Reporting
IMNCI	Integrated Management of Neonatal and Childhood Illnesses
IPC	Infection Prevention and Control
IYCF(N)	Infant and Young Child Feeding (Nutrition)
JPWF	Joint Program of Work and Funding
MCH Aide	Maternal and Child Health Aide
MCHP	Maternal and Child Health Post
MDG	Millennium Development Goals
MEST	Ministry of Education, Science, and Technology
MoHS	Ministry of Health and Sanitation

NCD	Non-Communicable Disease
NGO	Non-Governmental Organization
NHSSP	National Health Sector Strategic Plan
PBF	Performance Based Financing
PHU	Peripheral Health Unit
PHWS	Patient and Health Worker Safety
PNC	Post-natal care
SECHN	State-Enrolled Community Health Nurse
STI	Sexually Transmitted Infection
TB	Tuberculosis
UN	United Nations
WHO	World Health Organization

FOREWORD



The Sierra Leone Basic Package of Essential Health Services was first developed in 2010 and was a momentous milestone in our country's efforts to improve the health status of our women and children. It was developed in close partnership with all stakeholders in the health sector, and throughout the past five years, has been implemented in equally close collaboration with our partners.

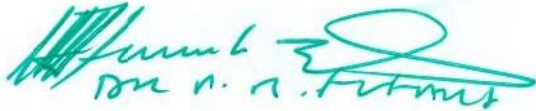
Sierra Leone suffered a devastating and historic Ebola outbreak in recent times. The first of its kind – it was the first to affect three countries simultaneously, the first to rapidly spread from remote areas to urban cities of Freetown, Monrovia and Conakry; the first to affect thousands, both the public and health care workers; and also the first to compel the World Health Organization to declare a state of public health emergency. We all know that the major contributing factor to the failure to contain the epidemic as rapidly as other countries that have experienced it before have been able to was the severe weakness in our health care system. We simply lacked the knowledge, the human resource capacity as well as infrastructure to spot, track and control the epidemic. Although the first in scale and length of the epidemic, two years earlier, Sierra Leone experienced the country's largest cholera outbreak in fifteen years. Both of these two incidences revealed the serious weaknesses in the country's health system. This is the situation which compelled us to update the Basic Package of Essential Health Services to capture both services and inputs that are required to build a resilient health care system that can withstand future epidemics while providing the much needed high quality health care services to Sierra Leoneans.

The revised Basic Package will also restore the significant gains made before the EVD outbreak in maternal and child health following the implementation of the Free Health Care Initiative, increased focus on environmental health and sanitation issues following the cholera outbreak, respond to a growing burden of non-communicable and chronic diseases, and cushion the country against a subsequent EVD outbreak which we are still battling as we publish this document.

The review of the 2010-2015 Basic Package and the subsequent updating process were done in close alignment with the simultaneous preparation of the post-Ebola Health Sector Recovery Plan 2015 – 2020 and the drafting of the next Health Sector Strategic Plan for 2015 – 2020. These three documents reflect a harmonized set of priorities for the health system in the medium term, and are constructed to reinforce one another.

In the coming years, we will continue to strive for universal access to essential health services in Sierra Leone, for mothers and children, and for all Sierra Leoneans. As a Government, we will utilize the various levels of leadership to play an active role in the successful implementation of this package and we will work very closely with the local councils and the Ministry of Local Government and Rural Development at the central level to improve coordination of devolved health and sanitation functions. The Basic Package, as the name says, is pretty basic and covers primary and secondary levels of care. The Ministry is working with relevant stakeholders to introduce tertiary care that will complement the Basic Package. Both the establishment of the postgraduate medical training and the university teaching hospital complex in Freetown present a milestone to improving health care for all Sierra Leoneans. Together, we will achieve our vision of improving the health of all citizens of Sierra Leone by defining a functional and resilient national

health system, which delivers efficient, high quality health care services that are accessible, equitable and affordable for all. Through the successful implementation of this Basic Package of Essential Health Services, the Ministry of Health and Sanitation upholds its core principle that health is a human right.



Dr. Abu Bakar Fofanah
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July 2015

REMARKS



In November 2014, the Ministry of Health and Sanitation, with support from the WHO, conducted a joint assessment of the country's health system. This led to the development of a health system recovery and resilience investment framework, which was endorsed by the Health Sector Coordinating Committee (HSCC) in December 2014. The updating of the BPEHS has been an integral part of a larger process to develop the Sierra Leone National Post-Ebola Health Sector Recovery Plan, and the National Health Sector Strategic Plan (NHSSP) 2015-2020.

The priorities reflected in the Basic Package of Essential Health Services are shaped by the five years of experience of a quickly evolving health system which has achieved improvements in key population health indicators, but also culminated in the weaknesses highlighted by the Ebola outbreak. The revision of the BPEHS in 2015 thus updated the document with a special focus on the following principles, drawing from these recent experiences: (1) improving surveillance, early reporting, control, and treatment of epidemic-prone diseases; (2) promoting patient and health worker safety, including reducing the risk of occupational hazards to health workers; (3) ensuring alignment between the services in the BPEHS and new guidelines, protocols, and policies that have been implemented in the intervening years; and (4) adding an emphasis on the emerging importance of non-communicable diseases in the health of the population.

Further, as the updated BPEHS 2015 and the Health Sector Recovery Plan are intended to work together and reinforce each other, the BPEHS has been revised to align with the five priority pillars of the Health Sector Recovery Plan: Patient and Health Worker Safety, Health Workforce, Essential Health Services, Surveillance and Information, and Community Ownership.

Finally, the presentation of the services outlined in the BPEHS has been restructured compared to the format in the 2010 document. This has been done to reflect more clearly the full package of services available at each level of the health system in a holistic manner rather than siloed program-specific sub-sections. It also demonstrates progression of the continuum of care through the levels of health service delivery.

We believe that the revised Basic Package of Essential Health Services will pave the way for continuing improvement in the health of the people of Sierra Leone. It provides a framework for improving health service delivery in Sierra Leone. Most importantly, it represents a commitment from the Government of Sierra Leone (GoSL) through the Ministry of Health and Sanitation (MoHS) to ensure that a basic level of essential health care service delivery is available to its people.



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July 2015

ACKNOWLEDGEMENTS



The revision of the Basic Package of Essential Health Services is the result of a series of consultations and team work with the cooperation of key stakeholders and partners of the Ministry of Health and Sanitation. Many institutions, organizations, and individuals have contributed to the preparation of this document.

The dedication and commitment of the Directors and Programme Managers within the Ministry of Health and Sanitation has been commendable. I also thank the chairpersons and secretaries of the Health Sector Steering Group Working Groups for their tireless efforts during the process. The Ministry of Health and Sanitation is grateful to all partners and recognizes the participation of civil society, local and international health Non-Governmental Organizations, and technical support of development partners – in particular the support of the World Health Organization and the UK government through DFID.

The participation of the District Health Management Teams in the review of the basic package ensured that the final product is both implementable and is owned by those who will be responsible to make it a reality. We recognize the role that District Health Management Teams, local councils, and especially frontline health workers – our heroes – will play in the successful implementation of this Basic Package of Essential Health Services.

This document will continue to serve as a source of reference for health practitioners and all those who contribute their talents and expertise to the health sector in Sierra Leone.

I thank you all.

A handwritten signature in blue ink, consisting of a large, stylized 'S' followed by several loops and a long horizontal stroke.

Dr. Samuel A. S. Kargbo
Director, Health Systems, Policy, Planning, and Information
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July 2015

INTRODUCTION

First developed in 2010, the Basic Package of Essential Health Services (BPEHS) provides a framework and guiding document for improving health service delivery in Sierra Leone. It represents a commitment from the Government of Sierra Leone (GoSL) through the Ministry of Health and Sanitation (MoHS) to ensure that a basic level of essential health care service delivery is available to its people.

In conjunction with the launching of the BPEHS in 2010, a series of supporting policies and documents were also put in place to promote its implementation. The **National Health Sector Strategic Plan (NHSSP) 2010-2015** provides a common strategic framework to guide interventions by all actors at all levels of the health system in Sierra Leone. It provides the basis for the strategic and operational plans of the MoHS, formalizes coordination mechanisms for all stakeholders and implementers, and informs expenditure frameworks and the annual budget. The *Joint Program of Work and Funding (JPWF) 2012-2014* was developed as the operational plan for implementation of the NHSSP, providing a basis for harmonization of work plans and alignment of stakeholder activities to Government priorities. Recognizing that the majority of health care costs in Sierra Leone are borne by households and patients, and that this presents a significant barrier to accessing health services for many families, the MoHS also launched the **Free Health Care Initiative (FHCI)** in 2010, which provides maternal and child health services to pregnant women, lactating mothers, and children under five years at no cost. It also provides malaria testing and treatment services free to the entire population since 2011. Finally, in light of the emerging policy context of the NHSSP, JPWF, and BPEHS, development partners signed the **Health Compact** with the Government of Sierra Leone in April 2011. The compact outlines the rules of engagement for partners in the health sector; it affirms national ownership of the health sector strategy and implementation, and commits development partners to planning and implementation in alignment with the priorities of the GoSL. Together, these key documents have provided guidance for health system strengthening and improving the health status of the population.

By 2014, significant progress had been made in the enabling environment through the above policies, and in health outcomes in the population of Sierra Leone. Unfortunately, at a time when a comprehensive review of the health sector and planning for the next NHSSP was due, Sierra Leone found itself at the epicenter of the worst Ebola outbreak in history. The Ebola outbreak brought sharp focus to several areas of the health system that remained particularly weak, including surveillance, emergency response, information management, and safety in health facilities. It also caused detrimental setbacks to the progress that had been made and disrupted the emerging but still fragile health service delivery system.

Given this context, the MoHS and health sector partners recognized a need to update the BPEHS to ensure its appropriateness and relevance in the coming years. This document – the BPEHS 2015 – is the product of a comprehensive and participatory review of the BPEHS 2010. It maintains much of the original BPEHS 2010, while also incorporating emerging priorities in the post-Ebola recovery and health system strengthening plans.

COUNTRY CONTEXT

The Republic of Sierra Leone is situated on the west coast of Africa, sharing borders with Guinea and Liberia. Its 400km coastline overlooks the North Atlantic Ocean and it has approximately

71,740 sq. km land area. The climate is tropical, with a hot, humid, rainy season from May to October and a dry season from November to April. The estimated population of Sierra Leone is 6.1 million people, of which 40% reside in urban areas (World Bank, 2015). The country is home to about 20 distinct language groups, reflecting a diversity of cultural traditions.

Administratively, the country is divided into four major areas, namely Northern, Southern, Eastern regions and the Western area where the capital, Freetown, is located. The Western Area is sub-divided into Western Rural and Western Urban. The regions are divided into 12 Districts and 149 chiefdoms. The districts are administered by District Councils consisting of a district chairman, administrators and councilors; while the chiefdoms are governed by locally elected paramount chiefs. With recent decentralization, the country has been divided into 19 local councils that have been further sub-divided into 392 wards. Each ward is headed by an elected councilor.

Sierra Leone's protracted civil conflict, which ended in 2002, eroded vital infrastructure and human capacity. This has resulted in a range of social and economic challenges. The Gross National Income (GNI) per capita (current dollar, purchasing power parity (PPP)) is \$1,690 while the GDP growth rate was 6% in 2013. Just 43% of the population older than 15 years are literate, and life expectancy at birth is just 45 years (World Bank, 2015). The Human Development Index rank for Sierra Leone is 177 out of 187 countries (UNDP, 2014).

HEALTH SECTOR SITUATION ANALYSIS

Prior to the onset of the Ebola outbreak in 2014, Sierra Leone had made substantial progress towards a number of the Millennium Development Goal (MDG) targets for health and nutrition. Based on the results of the preceding two Demographic and Health Surveys (DHS 2008, 2013) there have been notable coverage gains in access to essential services – including modern contraception (7% to 16%), skilled birth attendance (42% to 62%), malaria bed net utilization (26% to 49%), malaria treatment (6% to 77%), diarrhea management (68% to 88%) and basic immunization (DPT3 54% to 78%) (Measure DHS and Statistics Sierra Leone, 2008) (Measure DHS and Statistics Sierra Leone, 2013).

The recent National Nutrition Survey (2014) also demonstrated steady progress towards reducing undernutrition. Between 2008 and 2014, levels of stunting among children under five have been reduced from 34% to 29%, and wasting from 7% to 5% (MoHS UNICEF and Irish Aid, 2014). The national nutrition program in Sierra Leone, through the MoHS' Directorate of Food and Nutrition and with the support of partners, has worked extensively to improve infant and young child feeding practices (IYCF). Virtually all babies born in the country are breastfed, with the median duration for all breastfeeding at 19.8 months. While the percentage of infants under 6 months who are exclusively breastfed tripled from 11% in 2008 to 32% in 2013, and was reported at an even higher 58.8% in the 2014 National Nutrition Survey, the median duration of exclusive breastfeeding is only 0.6 months, far below the recommended 6 months. Levels of anemia are high (79.9%), and only half of children regularly consume foods rich in Vitamin A (Measure DHS and Statistics Sierra Leone, 2013).

Anecdotal evidence suggests that the prevalence of non-communicable diseases (NCDs) such as diabetes mellitus, cardio-vascular diseases (CVDs), and cancer is on the increase in Sierra Leone. The National STEPS survey for the prevalence of risk factors for NCDs, conducted in November 2009, indicates that the majority (99%) of the population is exposed to at least one risk factor, such as tobacco smoke, consumption of less than 5 servings of fruits and/or vegetables on average per day, low level of physical activity, overweight, or raised blood pressure. 27% of the

population is exposed to 3 to 5 of these risk factors. Evidence from hospital-based morbidity data also shows an increasing trend of cardiovascular diseases including hypertension and strokes; diabetes; cancers; sickle cell disease and epilepsy (MoHS, 2013).

Despite encouraging gains, levels of child and maternal mortality remain intractably high - 156/1,000 and 1165/100,000 live births respectively (Measure DHS and Statistics Sierra Leone, 2013). These reflect a range of critical implementation challenges. Sierra Leone faces a critical **shortage of health workers**. The WHO has determined a critical threshold of 23 doctors, nurses, and midwives per 10,000 population for the health workforce to be able to provide the minimal levels of basic skilled care for pregnant women and children. Countries that fall below this threshold will struggle to provide the skilled services required to improve the status of maternal and child health, and are likely to suffer higher levels of maternal and child mortality. As of 2010, Sierra Leone had only 2 skilled providers per 10,000 population, and the country ranked fourth from the bottom of a list of 49 priority low-and-middle-income countries for health worker-to-population ratios (Chen, et al., 2004) (WHO, 2014). Based on the recent Human Resources for Health Strategic Plan, 64% of skilled health worker posts are currently vacant.

The **distribution and skill sets of health professionals** are also far from being adequate. Presently, 50% of all health professionals are concentrated in the capitol of Freetown, serving just 16% of the population. There are only 185 doctors in-post in the entire country (MOHS, 2012), and only 288 midwives with 48% serving in Freetown (draft UNFPA midwifery mapping, 2014). No post-graduate training program exists for medical practitioners, thus graduates who want to specialize are forced to leave the country to pursue further education, and many never return. The health workforce is currently dominated by auxiliary level workers – MCH Aides and CHOs. While development of these cadres has gone a long way towards improving basic primary care at community and PHUs, there remains a critical need to deploy more highly skilled clinical manpower to attain MDGs and build a resilient system.

Optimizing **quality of care** remains a persistent challenge. While 90% of health facilities provide MCH services, the quality of these services remains sub-optimal. In a recent health facility assessment, only 1% of health facilities had basic amenities¹, including standard measures for ensuring patient safety (WHO, 2012). Just 35% of facilities had basic equipment required for service delivery.² Despite a recent effort to strengthen 13 hospitals and 65 CHCs nationwide and upgrade them to EmONC status, an assessment conducted in July 2014 suggested *not a single facility* had been sufficiently upgraded to meet standards across the seven domains assessed – with a lack of necessary equipment, staffing, drug supplies, laboratory services, referral system, electricity, water and sanitation noted as frequent obstacles (MOHS, Evidence4Action, World Bank, and Options, 2014).

Total health expenditure is approximately \$95 per capita – of which 24.4% comes from donors, 6.8% from government, 7.2% from NGOs, and 61.6% from private out-of-pocket household contributions. Government expenditure on health as a percentage of total government expenditure is 11.2%, approaching the 15% target of the Abuja Declaration (MOHS, 2015). Major external supporters of the health sector include the World Bank, Global Fund, UK government, European Union, African Development Fund, and GAVI.

¹ Sanitation facilities, Emergency transport, Consultation room, Improved water supply, Communication, Power supply and internet connection

² Thermometer, stethoscope, adult and child scales, BP apparatus and light source

EBOLA OUTBREAK RESPONSE AND RECOVERY CONTEXT

In May 2014, Sierra Leone experienced its first cases of Ebola Virus Disease (EVD) in the remote eastern part of the country at its border with Guinea and Liberia (Dixon & Schaefer, 2014). The outbreak quickly progressed from a localized to a generalized epidemic, shifting from the sparsely populated east to more densely settled urban and peri-urban areas in the west. The virus eventually reached all 14 districts in the country, with the epicenter migrating to the northern region in later months. By April 2015, there were more than 8,500 confirmed cases and 3,600 deaths, making Sierra Leone the worst affected country in West Africa and the world (MOHS, 2015).

The Ebola epidemic had direct and disproportionate effects on the health and nutrition sectors, eroding recent progress towards the MDGs. As first responders, health workers became infected through the provision of routine care and support to sick patients. Poor early recognition of EVD accompanied by inadequate Infection Prevention and Control (IPC) standards combined to fuel transmission in health facilities. Over 300 health workers became infected in Sierra Leone, and health workers experienced notably high fatality rates – over 220 of those infected ultimately died from the disease. The result was an erosion of community confidence in the sector and a reduction in the delivery of critical maternal and child health services. In the case of nutrition, quarantine restrictions affecting food production and distribution coupled with a deepening of household poverty likely exacerbated acute and chronic undernutrition.

As the EVD outbreak recedes, many key actors including the government, development partners, national and international NGOs, and civil society are actively contributing towards recovery phase planning efforts. This represents an opportunity to ‘build back better’ – to draw from the learning and capacity generated from the Ebola response to identify and address critical gaps in the health and nutrition sectors. The expected outcomes of this health system recovery phase include the immediate resumption of routine and ‘catch-up’ activities; the accelerated implementation of the Basic Package of Essential Health Services (BPEHS); and focused efforts to identify and address health system vulnerabilities that led to the unprecedented EVD outbreak.

REVISION OF THE BPEHS IN 2015

In November 2014, the MoHS and the WHO conducted a joint assessment of the country’s health system. This led to the development of a health system recovery and resilience investment framework, which was endorsed by the Health Sector Coordinating Committee (HSCC), chaired by the Minister of Health and Sanitation, in December 2014.

In January 2015, a multi-stakeholder *Consultation on building a resilient system for health in Sierra Leone* was convened with participants representing the Ministry of Health and Sanitation, district councils, district health management teams (DHMTs) and medical superintendents, development partners, and NGOs. The consultation delivered the following: 1) consensus on the situational analysis and identified strategies for recovery and building a resilient system for health in Sierra Leone; 2) agreement on lessons learned and recommendations from a review of the implementation of the ongoing JPWF; **3) draft means of operationalizing a recovery plan through the BPEHS**; and 4) next steps in developing and finalizing the health system recovery and resilience plan.

In moving forward towards drafting and finalization of a costed, multi-year recovery plan for Sierra Leone by the end of March 2015, stakeholders at the consultation agreed on the following:

- National health system recovery and resilience shall be accomplished and sustained by making every district functional and resilient;
- **The utilization of the BPEHS in recovery planning and its full implementation afterwards is particularly important;** and
- The continuation of an inclusive, intersectoral action for health guided by the leadership of country compact signatories³ will be key in paving the transition and restoration of essential health services.

This meeting was followed by a process of **updating and costing the BPEHS** and the development of the district plans between January and March 2015.

Thus, the updating of the BPEHS has been an integral part of a larger process to develop the Sierra Leone National Post-Ebola Health Sector Recovery Plan, and the National Health Sector Strategic Plan (NHSSP) 2015-2020. These three documents – the BPEHS, Recovery Plan, and NHSSP – are thus coordinated and harmonized around the same guiding principles and are meant to inform and reinforce each other. The goal of the NHSSP 2015-2020 is to provide a functional and resilient health system, measured by its ability to provide the full BPEHS to the entire population of Sierra Leone. Thus it was essential to have an updated and relevant BPEHS to inform this strategic plan and implementation planning.

THE BASIC PACKAGE OF ESSENTIAL HEALTH SERVICES

GOAL

The goal of the BPEHS is to maintain and improve the health of all citizens of Sierra Leone by defining a functional and resilient national health system, which delivers efficient, high quality primary and secondary health care services that are accessible, equitable and affordable for all. It emanates from the Ministry of Health and Sanitation's core principle that health is a human right, and represents a firm commitment from the government of Sierra Leone to improve the health of all citizens of Sierra Leone. The BPEHS is the guiding document for service delivery in all primary and secondary public health care settings.

KEY CHARACTERISTICS OF THE BPEHS

The BPEHS is made up of services which are cost-effective, evidence-based, and will improve the health of all Sierra Leoneans, with special focus on reducing maternal, infant, and child mortality and morbidity. The full package must be delivered to give equitable access to both rural and urban populations, including to the most remote, hard-to-reach, and vulnerable populations.

The BPEHS outlines a set of services which must be made available as an integrated whole. The MoHS commits to ensuring that the core services making up the BPEHS are available nationwide in all communities, PHUs, and public hospitals. The MoHS also expects that all partners and key

³ The country compact has not been updated since it was first put in place in 2011. It may be due for updating and review of signatories in the post-Ebola context.

stakeholders involved in the delivery of health services in Sierra Leone will use this BPEHS as the basis for planning and implementation of their health programs. Any additional services that are not part of the BPEHS may be added as and when appropriate, but these additional services may not be substituted for any of the services in the BPEHS.

CRITERIA FOR SELECTION OF SERVICES

The MoHS used the following criteria to select the interventions that were included in the original BPEHS in 2010:

- High impact, cost effective, evidence based services that can be delivered successfully in Sierra Leone
- Diseases that have a heavy burden on the Sierra Leonean population, considering the effect on individuals as well as the social impact of the disease (such as epidemics and adverse economic effects)
- Sustainability of the services in the long term as donors reduce support in the years ahead, taking into consideration the government's ability to maintain a basic level of health service
- The need for equity in ensuring that critical health services are provided to all, especially vulnerable populations (pregnant women, lactating mothers, children, the poorest households, and those living in remote and difficult-to-access communities).

As the BPEHS has been revised in 2015, these same criteria were maintained, with added attention to:

- Services that improve surveillance, early reporting, control, and treatment of epidemic-prone diseases
- Promoting patient and health worker safety, including reducing the risk of occupational hazards to health workers
- Ensuring alignment between the services in the BPEHS and existing case management (testing and treatment) guidelines / protocols / policies that have been implemented in the intervening years
- Adding an emphasis on emerging importance of non-communicable diseases in the health of the population

GUIDING PRINCIPLES

The BPEHS is designed to ensure that a consistent standard of service is maintained within the health care delivery system in Sierra Leone. It will also enable effective utilization of the limited resources available in the sector. The intention is to implement the BPEHS as an indivisible set of services and activities in all health facilities. A public health facility cannot be deemed 'fully functional' unless it is capable of providing the entire BPEHS (as appropriate per the level of service delivery) to its catchment population. The full functionality of most facilities according to the BPEHS will be achieved through a gradual process. Full coverage of the complete package has proved difficult to achieve in the period of 2010-2015. As described previously, the revised BPEHS has been developed in parallel with the post-Ebola health sector recovery plan, and the recovery plan is designed to strengthen public health facilities to a point where they are able to achieve the full BPEHS by 2020.

Private health facilities operated by private entities, faith-based organizations, and NGOs, although not bound through policy, are also encouraged to achieve full delivery of the BPEHS. All health partners are expected to support the BPEHS in all of their health care service delivery programs (facilities and community level). It is understood that many partners do not have the intention or capacity to deliver the full package of services under the BPEHS, and may prefer to contribute to a more targeted sub-set of specialized health services. In such a case, partners are encouraged to ensure that the services they do support / deliver are in line with the BPEHS and are strengthening the system as a whole, rather than creating parallel systems or supporting vertical implementation of disease-specific programs that undermine the concept of the package as an ‘integrated whole.’

The consistent nature of the BPEHS, and the provision of a standardized suite of services, will help communities to hold the health system to account.. MoHS will ensure that the BPEHS is popularized through ongoing public information campaigns, and will provide refresher training for all PHU staff on the updated BPEHS so staff at all levels are fully aware of the contents of the package and the commitment of the government to its people. Citizens will be informed of the package of services that the government is promising to them, and will be empowered to hold the health system accountable for provision of these services. It is the basis upon which the public can claim their right to health in line with the core principles of the MoHS.

IMPACT

As the BPEHS is meant to provide essential health services to the entire population of Sierra Leone, it is envisaged to have an impact in the following ways:

- People, especially vulnerable groups (pregnant and lactating women, infants, young children, adolescents particularly girls, the poorest, and those living in remote areas) in all areas of Sierra Leone, will experience improved health outcomes by having a basic set of services available to them which will address the major health problems they and their families face
- It provides a framework for the government to prioritize its major health problems and gives a clear direction for effective service delivery
- It provides a framework and harmonized vision for partners to adhere to in order to strengthen the national health system and use their expertise and resources in a cost effective and efficient manner
- It provides a tool for communities and individuals to use in holding the health system accountable. By knowing what services *should* be available, individuals and communities will be empowered to demand the services they need and are entitled to, confidently interface with health care providers, and send alerts when the BPEHS is not implemented properly.

PILLARS OF THE BASIC PACKAGE OF ESSENTIAL HEALTH SERVICES

As the updated BPEHS 2015 and the Health Sector Recovery Plan are intended to work together and reinforce each other, the BPEHS has been revised to align with the five priority pillars of the Health Sector Recovery Plan:

PATIENT AND HEALTH WORKER SAFETY

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: Included in the figures were over 300 cumulative Ebola cases among health care workers with over 220 cumulative deaths (Case fatality rate: 77%). In the first phases of the outbreak, before dedicated Ebola Treatment Units (ETUs) were established or a comprehensive referral system was in place, cases were presenting in general wards in PHUs and hospitals. This situation generated great fear that health facilities and hospitals were dangerous places that facilitated transmission of the disease, rather than a place to seek help. This perception contributed to erosion of communities' trust in the health system and discouraged treatment seeking not only for suspected Ebola cases, but for all health services, including routine services such as ANC, safe and skilled delivery, under-fives clinics, immunization, and malaria testing and treatment. The outbreak context has highlighted the poor infection prevention and control (IPC) measures in PHUs and hospitals. Improved patient and health worker safety protocols and procedures, including improved IPC practices, are thus an essential part of upgrading the health system in Sierra Leone.

HEALTH WORKFORCE

The full delivery of the BPEHS in Sierra Leone can only be realized through an adequate and skilled health workforce. Sierra Leone has a Human Resources for Health (HRH) Policy (2002) and HRH Strategic Plan (2012-2016), which require full implementation now more than ever. In the primary health care concept era in the late 1970s, a strategy of filling the health workforce with auxiliary level health workers (MCH Aides, SECHNs, and CHOs) in rural areas where there was limited access to more skilled clinicians was deployed and made great strides to fill gaps in capacity to delivery basic health services. However, some of these ranks are now over-staffed, but more skilled personnel including nurses, midwives, and doctors (general practitioners, family doctors, and specialists) remain scarce in the health workforce in the country. Looking to the future, it is necessary to ensure that the staffing needs and HRH strategy in the country are driven by the services promised in the BPEHS. The recovery plan HRH strategy thus takes cognizance of Sierra Leone's health workforce inadequacy in terms of numbers, skills and distribution; and seeks to fast-track the equitable provision of required HRH, especially at the more advanced skill levels, in all districts.

In regards to the Health Workforce, the BPEHS outlines the cadres required to deliver the package of services at each level of service delivery (the 'staffing norms' for the health system). The accompanying Recovery Plan details the strategies for increasing availability and support to this level of staffing over the next five years.

ESSENTIAL HEALTH SERVICES

Essential Health Services (EHS) is the core of the BPEHS, with the other pillars providing the support and enabling environment for the full and successful implementation of the EHS as defined in this document.

The EHS that make up the basic package must be delivered as an integrated whole. The 2010 BPEHS outlined these services by program area. In an effort to realign conceptualization of the package towards integration and away from verticalization by program / disease, the revised BPEHS 2015 is presented by level of service delivery, i.e. the full range of services available in each of the six levels of the primary and secondary health system: community, Maternal and Child Health Post (MCHP), Community Health Post (CHP), Community Health Center (CHC), District Hospital, and Regional Hospital. The full package encompasses a range of services that spans the following specialties:

- Reproductive, maternal, and newborn health
 - Antenatal care
 - Supervision of labor, delivery, and immediate post-natal care
 - Managing complications in pregnancy, including EmONC
 - Post-natal care
 - Family planning / Reproductive health
- School and Adolescent health
 - School Health Services
 - Prevention, response and mitigation of Teenage Pregnancy
- Child health services
 - EPI
 - IMNCI
- Malaria
- Nutrition (IYCN, IMAM, micronutrient malnutrition, clinical malnutrition)
- HIV/AIDS and STIs
- Tuberculosis and Leprosy
- Non-Communicable Diseases (hypertension, diabetes, and cancers)
- Eye health
- Mental health
- Oral health
- ENT and Audiology
- Environmental health
- Health education
- Emergency services
- Control and management of other diseases with epidemic potential
- Blood services
- Diagnostic imaging services

The BPEHS also outlines the inputs required to effectively deliver the full package. Inputs include:

- Diagnostic Services
- Medical equipment
- Non-medical equipment
- Drugs (Essential Medicines List)
- Laboratory Supplies and Medical Consumables (including reagents, lab tests, and equipment)
- Transportation for outreach and referral services

SURVEILLANCE AND INFORMATION

For timely and effective disease surveillance and response, reliable data and information need to be shared promptly and regularly. Communication amongst frontline health workers in the districts, epidemiologists and 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 Event-Based Surveillance (CEBS) 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 on-going and currently limited to routing service data from primary and secondary facilities. Initial progress was made in the use of DHIS data for decision-making, but the process of sector review is yet to be institutionalized. National Technical Guidelines for IDSR were formulated since 2008, but are yet to be implemented.

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 OWNERSHIP

Making the health system in every district functional and resilient requires community ownership of best practices promoting community trust, engagement and participation in delivering the BPEHS, and building back better through effective and efficient community health work. The health sector recovery plan's strategy includes community leadership, dialogue, community-based approaches and community-health facility interface.

The 2010 BPEHS noted that while many individual services were available at community level, there was not one coordinated and harmonized community health program. It made a clear statement that this area required particular attention and further development in the coming years. Between 2010 and 2015, a significant amount of progress has been made to unify and define a national Community Health Program. An iCCM program was piloted in four districts beginning in 2010, implemented by partners but coordinated with the vision of the MoHS. Under this program, CHWs provide testing and treatment (including provision of drugs) for malaria, respiratory infections, and diarrhea for children under 5 years directly in their communities. A National Community Health Worker Policy was launched in 2012, uniting all the various community-level health volunteers (TBAs, CDDs, blue flag volunteers, etc) under one umbrella, standardizing the scope of services to be provided, defining the qualifications and selection criteria, and providing guidance on motivation packages. Alongside the policy, a standard training manual was also developed and agreed for use among implementing partners to train CHWs going forward. A national CHW mapping in 2013 found over 13,000 active CHWs under various partners throughout the country.

The Directorate of Primary Health Care has proposed a national CHW coordinating structure, which will be adopted in 2015, and the Health Sector Recovery Plan includes a work plan and

resources for national scale-up of the CHW program. There is also a recognized need to review and update the CHW policy and training manual in light of lessons learned through implementation between 2012 and 2014 and through the experiences of the Ebola outbreak. All of these initiatives together will form the basis for a more established and well-coordinated community level of implementation for the BPEHS from 2015 forward.

Placing service providers at community level, with referral and reporting linkages to health facilities, goes a long way to improve community-facility relationships. However, the community ownership concept goes further than this; it represents a movement to encourage communities and individuals to take ownership of their own health and of their responsibilities in supporting a functioning health system. Community leadership entails policy and guideline development as well as raising awareness on health issues, sensitizing community leaders on their roles and responsibilities, and strengthening community groups such as community health clubs, mother support groups, community / neighborhood watch groups for disease surveillance, and engagement of youth and men in women's and children's health issues. It also involves regular communication on risk identification, reduction and management, especially on all hazards inclusive of disease prevention and control, disease outbreaks and health emergencies.

There has long been a strained relationship and tenuous level of trust in the health system among communities in Sierra Leone. With recent improvements in policy and implementation of health services, trust had been improving, with corresponding increases in health facility utilization. The Ebola outbreak unfortunately eroded many of the gains that had been made, as health facilities came to be seen as sources of Ebola transmission. The community ownership pillar represents an effort to engage communities in advocacy roles, to hold the health system accountable for providing the promised services in the BPEHS in a holistic manner while respecting safety and responding to the needs of the communities. It empowers communities to know the contents of the BPEHS and engage with facilities to share the responsibility of implementing it effectively, as well as sending alerts to higher levels of the system when gaps or insufficiencies are identified. This will be carried out by engagement of community structures such as Community Advocacy Groups (CAGs) and Facility Management Committees (FMCs).

While the accountability aspect of the community ownership pillar does not involve direct provision of services and thus does not come out as clearly in the BPEHS as the CHP component, it is nevertheless important to highlight in the implementation arrangements. Communities should be considered important stakeholders as the end users and clients of the health system. As such, they have a role to play in ensuring that the health system is meeting their needs, as well as interacting productively with health service providers.

STRUCTURE OF THE HEALTH SYSTEM FOR DELIVERY OF THE BASIC PACKAGE OF ESSENTIAL HEALTH SERVICES

The BPEHS includes primary and secondary level health service delivery. Primary health care is delivered in four levels of increasing clinical skill and capacity to handle complications (three levels of health facilities and community level).

Primary health care facilities are referred to as Peripheral Health Units (PHUs). There are three levels of PHUs which are recognized and standardized: Maternal and Child Health Post (MCHP), Community Health Post (CHP), and Community Health Centre (CHC). Each level has clearly defined functions. The buildings, equipment, drug and supplies, and staffing are specified to meet

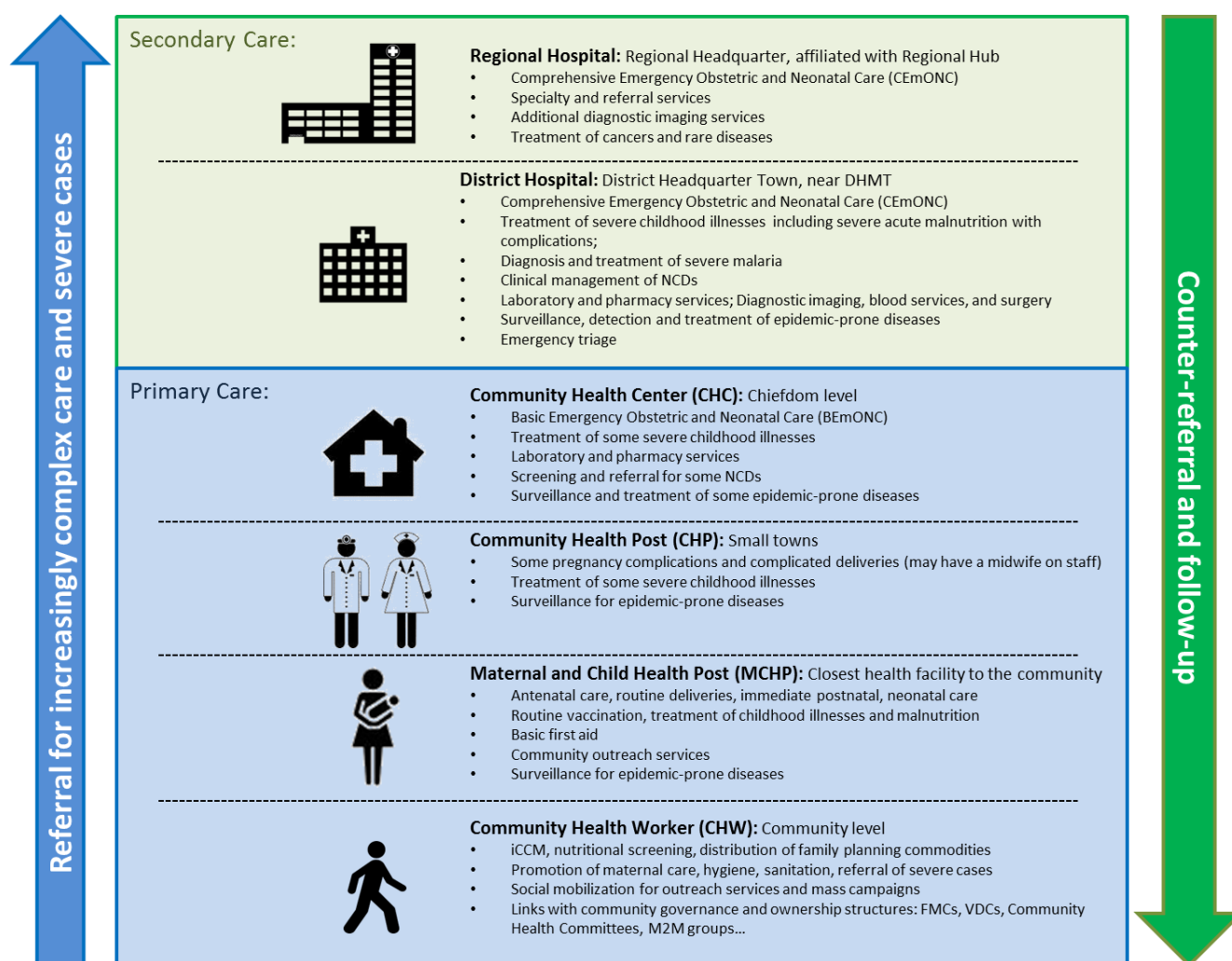
the functions. PHUs have preventive and curative functions and are supposed to be open 24 hours, or have a staff on-call for off hours patient needs. MCHPs and CHPs have beds only used for observation. Patients requiring further supervised care are referred to the CHC or hospital. CHCs, where a wider 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. Regional hospitals provide further specialized care, and accept referrals of complicated cases that cannot be managed at the district hospital.

In most countries, tertiary care is not included in the BPEHS. Sierra Leone does have a limited number of hospitals (all located in the capital, Freetown) that are considered to be tertiary level facilities – Connaught Hospital, Ola Daring Children's Hospital, Princess Christian Maternity Hospital, Lakka, Kissy Mental Hospital, and Jui. Some of these facilities do provide a limited range of primary care services. For example, PCMH runs a routine ANC clinic for women who live in close proximity to the hospital and for whom the hospital is the nearest health care facility. This has come about because historically, access to PHUs was more limited and the workforce, supplies, and drugs were scarce. However, through the revised BPEHS and NHSSP 2015-2020, the intention is to upgrade the skill level, supply chain, and services available throughout the health system, including building a true tertiary level of care through the University Teaching Hospital Complex. Thus, it was decided for the Sierra Leone BPEHS 2015 to adhere to international standards and exclude tertiary care. Tertiary care will be outlined separately in other relevant documents, including the University Teaching Hospital Act, which is expected to pass in Parliament in 2015.

LEVELS OF SERVICE DELIVERY

Figure 1: Levels of Service Delivery



PRIMARY CARE

COMMUNITY

The 2010 BPEHS described a wide variety of fragmented community-based health programs, and expressed the need to harmonize roles through a Community Health Worker (CHW) policy. This policy was developed in 2012, and harmonizes the various community volunteers including TBAs, social mobilizers, community drug distributors, blue flag volunteers, etc. under one umbrella with standardized selection criteria, roles, and training requirements. The policy further outlines a specific package of services that can be offered by trained CHWs at community level. These include:

- Community sensitization and advocacy
- Home visits to promote preventive care, hygiene and sanitation, ANC, birth preparedness and skilled delivery, PNC, nutrition, and other essential services
- iCCM consisting of diagnosis and treatment for simple diarrhea, pneumonia, and malaria (including provision of ACTs and antibiotics as needed)
- Screening and referral for acute malnutrition
- Defaulter tracing
- Vital events reporting
- Reporting of outbreaks; and
- Some family planning services.

The services listed in the basic package below are more extensive than those described in the CHW policy and training manual. They also include supplementary services which could be added on to their workload as and when appropriate, or that may be provided by other community-level service providers or as outreach from the MCHP. As the CHW policy, strategy, and training manual are revised in the early recovery phase, the community level service package may be expanded to include more or all of the services listed below.

CHWs are the main staffing cadre at community level. The 2012 CHW policy provides guidance that there should be one CHW per between 100 and 500 population (20 to 100 households). This is variable depending on the size of the community – each village should have at least one functioning CHW – as well as population density, i.e. urban versus rural context. For the purposes of human resource projections, it is estimated that approximately 16,000 CHWs are needed for full coverage (1:375 based on a 2015 projected population of 6,014,804). A national CHW mapping in 2014 identified 13,000 functional CHWs in the country being supported by various implementing partners. This mapping will be updated in 2015 to account for changes in workforce due to the Ebola outbreak and routine attrition.

CHWs are required to undergo a 10-day standardized training in order to be certified and recognized within the health system. Community volunteers who previously worked under other titles are required to undergo the comprehensive training in order to work under the title of CHW⁴. While CHW programs are currently managed by non-governmental implementing partners (international and national NGOs), there remains a need to institutionalize this cadre under the MoHS as part of the national health workforce. Achievement of this goal is planned under the NHSSP 2015-2020.

MATERNAL AND CHILD HEALTH POST (MCHP)

MCPH is the most peripheral level of PHU. An MCHP should ideally serve a population of 500 to 5,000 within a 5 km (3 miles) radius of the facility. Staffed by MCH Aides, MCHPs are often the first facility level of contact for patients. As the name suggests, services in the MCHP focus primarily on antenatal care, safe and skilled deliveries (without complications), post-natal care,

⁴ The roles of TBAs have shifted significantly in the past five years, and TBAs are now discouraged from provided home delivery services. Instead, they are encouraged to carry out health promotion and education, and refer pregnant women to PHUs for ANC and skilled delivery. Many programs have worked to improve relationships between TBAs and MCH Aides and bring them to work together to improve maternal and child health in their communities. TBAs have also been reorganized into Community Advocacy Groups (CAGs) which conduct health promotion and referrals for mothers. TBAs who meet the qualifications and selection criteria outlined in the CHW policy are eligible to become CHWs .

and child health services including EPI, nutrition, and IMNCI. As they are the closest facility to the community level, MCHPs have a close relationship with CHWs and an active role in implementing outreach campaigns including Maternal and Child Health Week, National Immunization Days (NIDs), and bed net distribution campaigns. MCHPs do not have pharmacies but MCH Aides are qualified to dispense free health care drugs and other basic medicines.

COMMUNITY HEALTH POST (CHP)

CHPs are usually situated in a smaller town, and serve a population of 5,000 to 10,000 or more within 8 km (5 miles) radius of the facility. These posts have similar functions to the MCHP with added curative functions. An SECHN or Community Health Assistant (CHA) typically serves as the in-charge in CHPs. Looking forward, as the availability of trained SECHN Midwives increases, CHPs will be staffed by a trained midwife and have the capacity to handle some complicated births and obstetric and neonatal emergencies.

COMMUNITY HEALTH CENTRE (CHC)

CHCs are usually situated in the chiefdom headquarter town or in a well-populated area with a catchment population of 10,000 to 30,000 or more within 15 km (10 miles) radius of the facility. The CHC has preventive and curative functions. It offers the most complex and skilled services within the primary care level of the health system. Since 2010, the Ministry of Health and Sanitation has been working towards facility readiness goals to certify 65 CHCs for Basic EmONC (BEmONC) – five CHCs per district. Ideally, all CHCs should eventually be able to provide a full BEmONC package. According to the December 2014 FIT Assessment, no CHCs currently meet the full requirement, but improvement towards this goal is an objective of the Health Sector Recovery Plan and NHSSP 2015-2020. 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.

The in-charge in a CHC is a Community Health Officer (CHO), supported by a team consisting of a CHA, SECHNs, Midwives, MCH Aides, and other clinical and support staff. The CHC supervises the lower levels of care, including CHWs, MCHPs, and CHPs within its catchment area.

SCHOOL HEALTH PACKAGE

The school health package consists of child health services including routine immunization, deworming and vitamin A supplementation, IMNCI, oral / ENT / sight screening, 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 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).

SECONDARY CARE

Secondary care is provided in district and regional hospitals. Although hospitals are primarily secondary care institutions, in most cases they also provide many primary care services to the population in their immediate surroundings, including ANC services and under-5's clinics. As skill levels throughout the health system are upgraded in the coming years and further differentiation is developed between primary, secondary, and tertiary levels of care, hospitals will be expected to specialize more in secondary level and referral services, and gradually provide fewer primary care services. The services outlined in this document are focused on the additional secondary care services provided in hospitals that are above and beyond what is available at PHUs. However for the current context, it is important to note that this is not limiting and it is assumed that most hospitals are also providing many of the services detailed in the primary care section.

DISTRICT HOSPITAL

District hospitals are open 24 hours, and serve the whole district, with a catchment population of about 500,000. The staff are usually organized in three shifts in order to provide appropriate medical, midwifery and nursing coverage at all times. The district hospital provides some primary health care to its immediate catchment population, secondary medical care, emergency medical services, and comprehensive emergency obstetric and neonatal care (CEmONC) including general surgical and surgical obstetric care. To manage this, it has an operating theatre, an extensive laboratory with safe blood transfusion services, an X-Ray machine and ultrasound. District hospitals generally have more than 100 beds, and are staffed with doctors, midwives, nurses, nutritionists, and other categories of health staff in line with the HRH staff requirements.

REGIONAL HOSPITAL

Regional hospitals are situated within the provincial capital towns (Kenema for the East, Bo for the South, and Makeni for the North). In these towns, they are an expansion of the district hospital. In addition to providing the full package of services available in district hospitals, regional hospitals are additionally staffed with specialists that are not available in all of the districts, and are equipped with more complex equipment. They have higher capacity to handle complex infectious diseases, emergency services, surgery, and radiology.

The Health Sector Recovery Plan includes the establishment of three Regional Hubs, which will be attached to the regional hospitals. As part of the overall strengthening of the health workforce, the three regional hubs will serve as centers for excellence that include a critical mass of specialists who will be deployed as needed to districts in their coverage area. In 2015, the main focus will be the establishment and strengthening of these hubs. Moving forward into the recovery and resilience-building phases, the regional hubs will build up their capacity to support regional referrals and training needs. Hubs will concentrate health expertise to enable skills transfer, improvements in patient safety, mentoring and coaching for quality of care, and the creation of a continuum of care network. Quality of care guidelines will be developed including patient safety with a focus on IPC, along with improved surgical, medical, paediatric and obstetric/gynaecological services, for hospitals, PHUs and community level service delivery.

Table 1: Number of Health Facilities by District, July 2015

Organisation unit	MCHP	CHP	CHC	Government Hospital	Private Clinic ⁵	Private Hospital	Total
Bo	69	24	28	1	2	3	127
Bombali	55	32	15	1	5	3	111
Bonthe	15	26	14	1	4	2	62
Kailahun	18	42	14	1	1	1	77
Kambia	40	15	13	1	2	1	72
Kenema	60	33	26	1	2	2	124
Koinadugu	43	18	10	1	2	0	74
Kono	44	25	16	1	1	0	87
Moyamba	55	26	18	1	2	1	103
Port Loko	70	21	15	2	1	2	111
Pujehun	49	14	13	1	0	0	77
Tonkolili	75	15	12	1	1	2	106
Western Area	39	28	39	11	22	10	149
Total	632	319	233	24	45	27	1280

IMPLEMENTATION OF THE BASIC PACKAGE OF ESSENTIAL HEALTH SERVICES

MINISTRY OF HEALTH AND SANITATION

The MoHS is the principal health care provider in Sierra Leone. Public health facilities (PHUs and Hospitals) received 65% of total health expenditure in 2013, while only 13% of expenditure went into private health facilities, hospital, and pharmacies, showing that the vast majority of health services are delivered through government channels (MOHS, 2015). The BPEHS is the official statement of the GoSL through the MoHS of its commitment to providing a standard minimum package of health services to all people in Sierra Leone, and the MoHS takes ultimate responsibility for ensuring its full provision to the population, through a combination of direct implementation and oversight of implementation by partners and private service providers.

The national / central level of the MoHS is responsible for defining the services that are to be provided under the BPEHS – i.e., the ‘*what*’ of the BPEHS. – and for setting up the enabling environment. This includes training and employing health workers to provide the services, ensuring adequate supply chain of drugs and commodities, defining norms and standards, establishing national policies and protocols, etc. The national level also analyzes data and monitors quality of care, and translates this evidence into strategies for improved service delivery throughout the system. However, the District level, through the District Health Management Team

⁵ “Private” includes all non-governmental entities, including not-for-profit (NGO), for-profit, and faith-based institutions.

(DHMT), is responsible for implementation of the BPEHS through direct service provision – i.e. the ‘how’ of the BPEHS. Each district develops its own health plan as a collaborative effort between the DHMT, District Hospital Superintendent, and District Council. This allows district authorities to assess the situation in their own locality and tailor the implementation plan and strategies to their own circumstances. Thus, the national BPEHS document defines what services and standards are required, but it does not define how these services should be delivered.

PARTNERS

While the MoHS ultimately is the owner and responsible agency for implementation of the BPEHS, the BPEHS is a comprehensive, wide-ranging set of services and no one entity would be able to implement it in its entirety on its own. Sierra Leone has always relied on partners including UN agencies, donors, international and national NGOs, and the private sector to supplement its services. Implementing partners have a definitive role to play in achieving the full implementation of the BPEHS.

The MoHS is aware that it is reliant on support from partners to fully provide the BPEHS, however it also maintains an expectation that partners will respect the leadership, vision, and plans of the MoHS. Partners in the health sector are expected to use the BPEHS as a guiding document. Where possible, they should implement the full package in their operational area (geographic and level of service). Where a partner does not have the expertise, capacity, or intention to implement the full package, MOHS will expect that they coordinate closely at central and district levels to ensure they are contributing to filling gaps in the overall provision of the BPEHS. At district level, the DHMT is the coordinating body, working with partners to ensure collective implementation of the BPEHS. DHMTs may ask implementing partners to sign a Memorandum of Understanding to formalize their commitment to supporting implementation of the BPEHS. As such, partners are discouraged from creating parallel systems, or vertical disease programs that undermine the integration and holistic approach of the BPEHS. Partners must understand and respect the priorities of the GoSL through the MoHS for evidence-based, high impact, cost-effective, life-saving interventions to improve the health of the population of Sierra Leone.

COMMUNITY OWNERSHIP

While the government ultimately owns the health system, communities have a role to play in ensuring its functioning. Communities and individuals do have ownership over their own health outcomes through engaging in healthy behaviors and seeking health services when needed. The BPEHS is rooted in the MoHS’ belief that health is a human right to which every citizen of Sierra Leone is entitled; but rights also come with responsibilities. Communities are in turn responsible for engaging in a positive and productive manner with the health system; supporting their local health workers and PHUs; and proactively utilizing the services that are made available to them.

Communities can be involved in the health system through management structures such as Facility Management Committees (FMCs), which work together with PHU staff to develop the facility investment plan for each PHU, agree on the use of PBF funds, and may contribute community materials and labor to infrastructure improvements at PHUs (construction / repairing of wells and latrines, housing for PHU staff, PHU structure construction / rehabilitation, etc.). Community Advocacy Groups (CAGs) carry out health promotion, health education, and refer community members – especially pregnant women, lactating mothers, and children – to the nearest PHU. Community Health Clubs similarly educate their communities on prevention and

care-seeking for common illnesses including malaria, and hygiene and sanitation issues. Other structures including community health committees, neighborhood watch groups for surveillance of epidemic-prone diseases, mother support groups, and others are active in many communities throughout the country.

Civil society and grassroots organizations play an important role in monitoring the health system and holding it accountable to those they serve. This may be through monitoring of implementation of the Free Health Care Initiative, monitoring drug supplies for stock-outs and expiry, reporting frequent absenteeism or poor health worker attitudes, and reporting of other abnormalities noted by patients at health facilities that supervisors or centralized managers need to follow up.

Civil society has a further role to play in promoting utilization of services that are available. In collaboration with PHU staff and CHWs, grassroots Civil Society Organizations (CSOs) and community leaders can mobilize their communities for participation in mass campaigns and for seeking care at the nearest PHU. Community leaders of all types - political, religious, traditional, and members of mothers / caregivers / peer support groups - are instrumental in overcoming barriers to seeking care. They are the front line in recognizing and referring patients in the community who face barriers, and mobilizing community resources to assist such cases with financing for transportation, resolving family disputes about care-seeking, and overcoming negative family / caregiver attitudes about the health system.

Finally, as outlined previously, a basic subset of services under the BPEHS is delivered directly within communities by CHWs. With direct reporting and supervision lines to nearby PHU staff, CHWs provide a direct link between the health system and communities, and can play a significant role in ensuring community ownership and accountability of the health system to the communities it serves.

PACKAGE OF ESSENTIAL SERVICES BY SERVICE DELIVERY LEVEL

PRIMARY CARE

Service Delivery Area	Community	MCHP	CHP	CHC
Antenatal Care	<ul style="list-style-type: none"> • Counseling for early ANC • Screening services for danger signs around pregnancy • Identify and refer suspected moderate and severe anemia • Malaria prevention and education (give IPTp, promotion of use of LLINs) • Counseling on Maternal and Infant Nutrition • Support for development of birth plan, including emergency (birth preparedness) 	Same as Community, plus: <ul style="list-style-type: none"> • Diagnose pregnancy (Clinical diagnosis) • Screening, diagnosis and treatment for STIs • Voluntary Counseling 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 • De-worming 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: <ul style="list-style-type: none"> • Clinical diagnosis of pregnancy • Hemoglobin testing • Microscopy • Urinalysis
Supervision of Labor, Delivery, Neonatal and Immediate postnatal care	<i>N/A: CHWs and TBAs should refer pregnant women to the nearest PHU for labor and delivery services.</i>	Supervision of Labor and Delivery <ul style="list-style-type: none"> • Monitor / Observe labor • Conduct normal delivery • Provide essential newborn care 	Same as MCHP, Plus: <ul style="list-style-type: none"> • Initiate management of complicated births and refer 	Same as CHP, Plus: <ul style="list-style-type: none"> • Management and/or referral of complicated births

Service Delivery Area	Community	MCHP	CHP	CHC
		<ul style="list-style-type: none"> • Risk assessment and refer complicated cases • Perform minor interventions, if necessary, such as amniotomy and episiotomy <p>Immediate post-natal care</p> <ul style="list-style-type: none"> • Detect and initiate management of danger signs in mother (hemorrhage, 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	<ul style="list-style-type: none"> • Referral of pregnant women with fever/malaria to PHU for diagnosis and treatment • Recognize danger signs and refer for 	<p>Same as Community, Plus:</p> <ul style="list-style-type: none"> • Recognize signs of APH (Placenta Previa, HRP...), initiate management and refer • Recognize signs of 	Same as MCHP	<p>Same as MCHP and CHP, Plus:</p> <ul style="list-style-type: none"> • Management of Urinary Tract Infection • Assisted vaginal

Service Delivery Area	Community	MCHP	CHP	CHC
	management of complications	ectopic pregnancy and refer <ul style="list-style-type: none"> 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 Neonatal Resuscitation Management of fever / uncomplicated malaria Management of severe malaria: initiate treatment and refer to secondary care Neonatal Resuscitation 		delivery <ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Recognize danger signs and refer for: <ul style="list-style-type: none"> Diagnosis and case management of infections in infant and mother Counseling and management of nipple or breast pain Management of neonatal complications (low birth weight (LBW) baby, very LBW baby) 	Same as community, Plus: <ul style="list-style-type: none"> Provide immunization according to national guideline Counseling and management of nipple or breast pain Treatment with ARV therapy for women living with HIV 	Same as MCHP	Same as MCHP and CHP, Plus: <ul style="list-style-type: none"> Management of neonatal complications (low birth weight (LBW) baby (1500gms - 2500gms), very LBW baby (<150gms) or <32 weeks gestation, neonatal jaundice, skin pustules, cord infection, sepsis, etc) Early infant diagnosis

Service Delivery Area	Community	MCHP	CHP	CHC
	<ul style="list-style-type: none"> , neonatal jaundice, skin pustules, cord infection, sepsis, etc) ○ Neonatal tetanus ○ Early infant diagnosis for baby born to HIV positive mother (at 6weeks) ○ Provision of HIV prophylaxis for infants born to HIV positive mothers ○ Maternal post-partum complications • Counsel and support mother on initiation of breastfeeding and exclusive breastfeeding • Counseling on birth spacing, hygiene and nutrition for mothers • Provision or referral of family planning based on client choice • Counseling on adherence to ARV for HIV positive mother 			<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> • Counseling on birth spacing and family planning • Counseling on informed choice • Provision of Family Planning commodities/services 	Same as Community, Plus: <ul style="list-style-type: none"> • Provision of Family Planning commodities/services (invasive - IUD, etc.) • Syndromic management of STIs • Infertility counseling 	Same as MCHP, Plus: <ul style="list-style-type: none"> • Screening for obstetric Fistula and referral for treatment 	Same as CHP, Plus: <ul style="list-style-type: none"> • Infertility Treatment: initiate and refer to secondary or tertiary care

Service Delivery Area	Community	MCHP	CHP	CHC
	(non-invasive - condom, pill) <ul style="list-style-type: none"> Referral for: <ul style="list-style-type: none"> Syndromic management of STIs Infertility Counseling and Treatment Clinical management of rape and treatment of injuries caused by Gender/Sexually-based violence and Referral to legal and social services Education and counseling of adolescents on reproductive health Education of adolescents on family life skills 	<ul style="list-style-type: none"> Screening for Reproductive Health Cancers Treatment of injuries caused by Gender/Sexually-based violence and Referral to Social Welfare Referral for: <ul style="list-style-type: none"> Treatment for Reproductive Health Cancers (cervical cancer) 		
School and Adolescent Health <i>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</i>	<ul style="list-style-type: none"> Age-appropriate education and counseling on Sexual and Reproductive health for school-age children and adolescents Counseling and education on prevention of HIV and other STIs among adolescents Prevention of Teenage Pregnancy Counseling and promotion of ANC services for teenage 	Same as Community, Plus: <ul style="list-style-type: none"> Provision of adolescent-friendly HIV, TB, and STI screening and treatment services Provision of adolescent-friendly family planning services (counseling and provision of commodities) 	Same as MCHP	Same as MCHP and CHP, plus: <ul style="list-style-type: none"> Post abortion care

Service Delivery Area	Community	MCHP	CHP	CHC
<i>information education and counseling, and family and community dialogue on health and safe child and adolescent issues.</i>	mothers <ul style="list-style-type: none"> Life skills education for adolescents Linking schools to facilities which are adolescents friendly 			
Child Health Services	EPI: <ul style="list-style-type: none"> Implement RED Approach strategies (All the six components) Social mobilization for: <ul style="list-style-type: none"> Mass immunization campaigns (social mobilization) Supplemental immunization activities (SIAs) (and EPI plus) Outreach immunization services to communities Surveillance and case reporting of immunizable diseases IMNCI: <ul style="list-style-type: none"> Diagnosis of common childhood illnesses including pneumonia, cough, cold, diarrhea, ear infection, malaria, malnutrition Treatment of common childhood illnesses 	EPI: <ul style="list-style-type: none"> 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 immunizable diseases IMNCI: Same as Community, Plus: <ul style="list-style-type: none"> Diagnosis of common childhood illnesses including pneumonia, cough, cold, diarrhea, dysentery, ear infection, measles, malaria, malnutrition Treatment of common 	Same as MCHP, plus: <ul style="list-style-type: none"> Treatment of some severe childhood illnesses, and onward referral 	Same as MCHP and CHP, plus: <ul style="list-style-type: none"> Treatment of some severe childhood illnesses, and onward referral

Service Delivery Area	Community	MCHP	CHP	CHC
	<p>(pneumonia, diarrhea, malaria only) and referral of complicated / severe cases</p> <ul style="list-style-type: none"> • Identification and referral of children with disabilities 	<p>childhood illnesses (all from list above)</p> <ul style="list-style-type: none"> • Initiate treatment and referral of complicated illnesses 		
Malaria	<p>Prevention:</p> <ul style="list-style-type: none"> • IPTp for pregnant women (Sulphadoxine/Pyrimethamine 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 <p>Case Management:</p> <ul style="list-style-type: none"> • Diagnosis of malaria (RDTs only) • Treatment of uncomplicated malaria with oral ACTs • Referral of severe malaria cases 	<p>Same as Community, Plus:</p> <p>Prevention:</p> <ul style="list-style-type: none"> • 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 <p>Treatment:</p> <ul style="list-style-type: none"> • 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 	Same as MCHP	<p>Same as MCHP and CHP, Plus:</p> <ul style="list-style-type: none"> • Diagnosis of severe malaria using microscopy and/or RDT • Treatment of severe malaria: initiate treatment and refer to hospital

Service Delivery Area	Community	MCHP	CHP	CHC
		ACTs in 2nd & 3rd trimesters)		
Nutrition	Prevention: <ul style="list-style-type: none"> • Growth Monitoring and Promotion • Nutrition Counseling/Education • Maternal Infant and Young Child Feeding counseling • Promotion and mobilization for micronutrient supplementation and deworming • Provision of school and adolescent nutrition counseling and education • Screening and referral of children under 5 for acute malnutrition (moderate and severe) 	Same as Community, Plus: Case Management <ul style="list-style-type: none"> • Treatment of Moderate Acute Malnutrition • Treatment of Severe Acute Malnutrition (SAM) without complications • Nutrition Counseling for Management of NCDs 	Same as MCHP	Same as MCHP and CHP
HIV/AIDS and STIs	<ul style="list-style-type: none"> • 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 <p><i>Note: NAS is exploring the possibility of extending testing services and treatment (distribution of medications)</i></p>	Same as Community, Plus: <ul style="list-style-type: none"> • Testing and Counseling 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, 	Same as MCHP	Same as MCHP and CHP, Plus: <ul style="list-style-type: none"> • 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

Service Delivery Area	Community	MCHP	CHP	CHC
	<p><i>at community level, especially for key populations (sex workers, MSM⁶, IDU⁷s). This is not yet part of the basic package but may be integrated in the coming years.</i></p>	<p>pregnant women and children, including home-based care</p> <ul style="list-style-type: none"> • Adherence counseling • TB screening, identification of TB suspects in PLHIV • Prevention of opportunistic infections • HIV Testing and Counseling for pregnant women for Prevention of Mother To Child Transmission (PMTCT) services • Adherence and infant feeding counseling for pregnant women with HIV • Early infant diagnosis for baby born to HIV positive mother (at 6weeks) • Prophylactic treatment for infants born to HIV+ mothers • Syndromic management of STIs at HIV clinics, antenatal, family planning and general outpatient clinics. • Referral for: 		<p>(psychosocial support, TB, nutrition)</p>

⁶ MSM: Men who have sex with men

⁷ IDU: Injection drug user

Service Delivery Area	Community	MCHP	CHP	CHC
		<ul style="list-style-type: none"> ○ 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	<p>Prevention:</p> <ul style="list-style-type: none"> • Awareness raising and sensitization on spread of TB, recognition of symptoms and case management • Awareness raising and sensitization on spread of Leprosy, recognition of symptoms and case management • Identification and referral of suspected cases of TB and Leprosy • Tracing and Screening of contact members for TB and Leprosy. <p>Case Management</p> <ul style="list-style-type: none"> • Nutritional support to TB 	<p>Same as Community, Plus:</p> <p>Prevention:</p> <ul style="list-style-type: none"> • BCG immunization to all newborns (EPI) • Provision of IPT to children in homes with infected adults <p>Case Management:</p> <ul style="list-style-type: none"> • Recognition and referral of complications and suspected drug-resistant cases • Identify and refer patients with adverse drug reaction 	<p>Same as MCHP, Plus:</p> <p>Case Management:</p> <ul style="list-style-type: none"> • Supervision of continuation phase of DOTS • Provision of CPT and ART to TB/HIV co-infected cases 	<p>Same as CHP, Plus:</p> <p>Laboratory:</p> <ul style="list-style-type: none"> • 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 <p>Case Management:</p> <ul style="list-style-type: none"> • Registration and assignment to

Service Delivery Area	Community	MCHP	CHP	CHC
	patients (counseling) <ul style="list-style-type: none"> • Provide psycho-social support (peer support groups) 			treatment regimen <ul style="list-style-type: none"> • Sputum examination & Treatment review at end of intensive phase and continuation phase. • Provision of IPT to HIV patients • Identification and management of DR-TB cases
Non-Communicable Diseases	<ul style="list-style-type: none"> • Health promotion and counseling on risk factors for major non-communicable diseases (diabetes, hypertension, and cancers [cervical, breast, prostate]) • Behavior change for prevention of non-communicable diseases 	Same as Community	Same as Community and MCHP	Same as MCHP and CHP, plus: <ul style="list-style-type: none"> • Screening for hypertension and referral to hospital • 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: <ul style="list-style-type: none"> • Awareness raising and sensitization on the prevention of eye diseases and blindness • Recognition of red eye and referral • Recognition of suspected 	Same as Community, Plus: <ul style="list-style-type: none"> • Treatment of red eye 	Same as MCHP	Same as MCHP and CHP

Service Delivery Area	Community	MCHP	CHP	CHC
	cataract and referral <ul style="list-style-type: none"> • Recognition of childhood blindness and referral Case Management: <ul style="list-style-type: none"> • Preventive and curative management of Onchocerciasis 			
Mental Health	<i>CHWs are trained on basic psychosocial counseling and can provide follow-up and referrals for members of their communities with identified mental health conditions. The Mental Health program 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.</i>	<ul style="list-style-type: none"> • Identification of individuals with commonly occurring and/or enduring mental illness • Alcohol/ Substance abuse prevention and treatment programs • Child and Adolescent mental health programs • School mental health programs • 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 counseling Refer for: <ul style="list-style-type: none"> • Diagnosis and treatment of commonly occurring mental illnesses and 	Same as MCHP, plus: <ul style="list-style-type: none"> • 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 programs • Psychosocial counseling 	Same as CHP, plus: <ul style="list-style-type: none"> • Prescription of some psychotropic medications • Identification and management of somatoform disorders through medication and counseling • Psychosocial counseling

Service Delivery Area	Community	MCHP	CHP	CHC
		psychological disorders <ul style="list-style-type: none"> Hospitalization of people with enduring mental illness 		
Oral Health	<ul style="list-style-type: none"> Education and sensitization on oral care prophylaxis (including tooth brushing) 	Same as Community, Plus: Referral for <ul style="list-style-type: none"> 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	N/A	<ul style="list-style-type: none"> Simple Test for hearing loss Management of acute and chronic Rhinitis Aural toilet and wick insertion Referral for: <ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> Removal of ear wax and foreign bodies Management of acute external / media otitis and chronic otitis
Environmental Health	<ul style="list-style-type: none"> Expanded sanitary inspection (ESICOM) 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 			

Service Delivery Area	Community	MCHP	CHP	CHC
	<ul style="list-style-type: none"> • Vector Control including promotion and facilitation of environmental sanitation, promotion of LLINs, etc • Management of medical waste • Promotion of food safety and hygiene • Prevention of indoor and outdoor air pollution • Promotion of safe burial practices 			
Health Education	<ul style="list-style-type: none"> • 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 			
Emergency services	<i>Community health workers are not currently trained in first aid or emergency management. Refer to nearest PHU or secondary care for all apparent emergencies.</i>	Management of: <ul style="list-style-type: none"> • Anaphylaxis • Wound infection • Hypoglycemia Initiate care and refer for management of: <ul style="list-style-type: none"> • Sepsis • Seizure • Airway Management • External hemorrhage: 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: <ul style="list-style-type: none"> • Soft tissue infection Initiate care and refer for management of: <ul style="list-style-type: none"> • Asthma • Hypertensive crisis Refer for all other emergencies	Same as CHP, Plus: Management of: <ul style="list-style-type: none"> • Simple closed fracture Initiate care and refer for management of: <ul style="list-style-type: none"> • Hyperglycemia • Upper GI Bleed • Sickle Cell Crisis • Tetanus • Pneumothorax (trauma or spontaneous) • Testicular torsion • Major burns Refer for all other emergencies
Control and management of other	Epidemic Control: <ul style="list-style-type: none"> • Community-based 	Same as Community, Plus:	Same as MCHP	Same as MCHP and CHP, Plus:

Service Delivery Area	Community	MCHP	CHP	CHC
diseases with epidemic potential	surveillance and reporting of Notifiable Diseases and events including maternal deaths <ul style="list-style-type: none"> Case investigations and contact tracing 	Clinical Management of infectious diseases: <ul style="list-style-type: none"> Acute watery diarrhea and bloody diarrhea Detection and referral for: <ul style="list-style-type: none"> Typhoid Meningitis Jaundice and Yellow Fever Acute rheumatic fever Measles Pertussis Neonatal tetanus Acute flaccid paralysis Hemorrhagic fevers (Lassa, Ebola, Marburg) 		Diagnosis and treatment of: <ul style="list-style-type: none"> Typhoid Measles Pertussis Referral for: <ul style="list-style-type: none"> Meningitis Jaundice and Yellow Fever Acute rheumatic fever Neonatal tetanus Acute flaccid paralysis Hemorrhagic fevers (Lassa, Ebola, Marburg)
Blood Services	Mobilization and referral for: <ul style="list-style-type: none"> Donor Services (mobilization, recruitment of new donors, donor registry, donor counseling and Retention of Voluntary Blood Donors) Blood Collection Services (donor screening, blood collection, cold chain to regional centers, including Mobile Blood Collection) 	N/A	N/A	N/A
Diagnostic Imaging (including Radiology)	N/A	Referral for all diagnostic imaging services	Referral for all diagnostic imaging services	Provision or Referral for: <ul style="list-style-type: none"> Chest X-Ray Skeletal X-Ray

Service Delivery Area	Community	MCHP	CHP	CHC
				<ul style="list-style-type: none"> • Intravenous Pyelography (IUV) • Retrograde Urethrogramme • Barium Swallow • Barium Meal Referral for all other Radiology services

SECONDARY CARE

Service Delivery Area	District Hospital	Regional Hospital
Antenatal Care	<ul style="list-style-type: none"> • Diagnose and treat severe anemia and moderate anemia • Screening, diagnosis and treatment for STIs • Voluntary Counseling and testing for HIV (PITC) • Treatment with ARV therapy for pregnant women living with HIV and provision of supplementary nutrition • Check tetanus toxoid (TT) immunization status and give tetanus toxoid if need • Management of complicated pregnancies 	
Supervision of Labor, Delivery, Neonatal and Immediate postnatal care	<ul style="list-style-type: none"> • Management of complicated births • Administration of pediatric ARV (prophylaxis) to HIV exposed infant • Promotion of early initiation of breastfeeding 	
Managing complications in pregnancy, including EMONC	<ul style="list-style-type: none"> • Assisted Vaginal delivery • Manual removal of retained placenta • Caesarian section • Removal of retained products of conception • Manage APH (Placenta Previa, HRP...) • Manage Abortion (threatened, complete, incomplete, complicated) • Manage ectopic Pregnancy 	

Service Delivery Area	District Hospital	Regional Hospital
	<ul style="list-style-type: none"> • Manage Postpartum Hemorrhage • Management of eclampsia (convulsions or unconsciousness) • Manage fever / malaria and severe malaria • Management of sepsis • Management of urinary tract infection • Management of anxiety and depression • Neonatal Resuscitation • Blood Transfusion 	
Postnatal Care	<ul style="list-style-type: none"> • Management of postpartum complications • Management of postnatal depression • Diagnosis and Management of Infections • Management of neonatal complications (low birth weight (LBW) baby (1500gms -2500gms), very LBW baby (<1500gms) or <32 weeks gestation, neonatal jaundice, skin pustules, cord infection, sepsis, etc) • Neonatal tetanus • Early infant diagnosis for baby born to HIV positive mother • Provision of HIV prophylaxis for infants born to HIV positive mother 	
Family Planning / Reproductive Health	<ul style="list-style-type: none"> • Provision of Family Planning commodities/services (invasive - IUD, etc) • Provision of permanent surgical methods of contraception • Syndromic management of STIs • Clinical management of rape and treatment of injuries caused gender- and sexually-based violence; referral to legal and social services • Voluntary Confidential Testing and Counseling for HIV • Infertility Counseling • Infertility Treatment • Screening for Reproductive Health Cancers • Screening for obstetric Fistula 	
School and Adolescent Health	<ul style="list-style-type: none"> • Provision of adolescent-friendly family planning services (counseling and provision of commodities) • Post abortion care for adolescents • Prevention of Teenage Pregnancy • Linking schools to facilities which are adolescents friendly 	
Child Health Services	EPI: <ul style="list-style-type: none"> • Surveillance and case reporting of immunisable diseases 	

Service Delivery Area	District Hospital	Regional Hospital
	Childhood Illnesses: <ul style="list-style-type: none"> • Emergency triage, assessment, and treatment (ETAT) of childhood illnesses • Treatment of severe illnesses • Diagnosis and treatment of children with HIV/AIDS • Diagnosis and treatment of children with diabetes and other medical conditions • Identification and management of children with disabilities 	
Malaria	<ul style="list-style-type: none"> • Diagnosis of malaria • Diagnosis of severe malaria using microscopy • Treatment of severe malaria and complications (using parenteral medication / injectable) • Provision of LLINs and IPTp through ANC clinics • Referral to regional hospital for severe cases that are not responding to treatment 	
Nutrition	<ul style="list-style-type: none"> • Management of Severe Acute Malnutrition (SAM) with Complications • Provision of therapeutic meals for clinical management of patients • Nutrition counseling for the management of NCDs in both inpatient and outpatient 	
HIV/AIDS and STIs	<ul style="list-style-type: none"> • Testing and Counseling services (client- and provider-initiated) • TB screening, identification of TB suspects in PLHIV • Diagnosis of TB (HIV/TB co-infection) • Treatment of TB (HIV/TB co-infection) • Identification and treatment of opportunistic infections • HIV Testing and Counseling for pregnant women for Prevention of Mother To Child Transmission (PMTCT) services • Early Infant Diagnosis for infants born to HIV mothers • Provision of HIV prophylaxis to infants born to HIV positive mothers • CD4 monitoring • Referral and linkages for HIV patients to other support services (psychosocial support, TB, nutrition) • Testing for syphilis at antenatal clinics 	Same as District Hospital, plus: <ul style="list-style-type: none"> • Viral load monitoring

Service Delivery Area	District Hospital	Regional Hospital
	<ul style="list-style-type: none"> • Testing and treatment for viral hepatitis 	
Tuberculosis / Leprosy	<p>Prevention:</p> <ul style="list-style-type: none"> • Awareness raising and sensitization on spread of TB, recognition of symptoms and case management • Awareness raising and sensitization on spread of Leprosy, recognition of symptoms and case management • BCG immunization of all newborns (EPI) • Tracing and Screening of contact members for TB and Leprosy <p>Laboratory:</p> <ul style="list-style-type: none"> • Diagnosis of TB (sputum and microscopy) • Diagnosis of MDR-TB • Diagnosis of HIV patients for TB • Clinical diagnosis of Leprosy and referral for confirmatory laboratory testing of Leprosy • Laboratory diagnosis of Leprosy <p>Case Management</p> <ul style="list-style-type: none"> • Registration and assignment to treatment regimen • Supervision of continuation phase of DOTS • Sputum examination & Treatment review at end of intensive phase and continuation phase. • Provision of IPT to HIV patients • Provision of CPT and ART to TB/HIV co-infected cases • Provision of IPT to children in homes with infected adults • Management of MDR-TB cases • Nutritional support to TB patients 	<p>Same as District Hospital, plus:</p> <p>Laboratory</p> <ul style="list-style-type: none"> • Diagnosis of MDR-TB • Confirmatory laboratory diagnosis of Leprosy

Service Delivery Area	District Hospital	Regional Hospital
	<ul style="list-style-type: none"> • Provide psycho-social support • Monitoring of adverse drug reactions • Management of complications and suspected drug-resistant cases 	
Non-Communicable Diseases	<ul style="list-style-type: none"> • Screening for hypertension • Clinical management of hypertension • Screening for diabetes • Clinical management of diabetes • Referral back to CHC for chronic follow-up • Pap smear for cervical cancer screening • Breast screening for breast cancer 	Same as District Hospital, plus: <ul style="list-style-type: none"> • Prostate cancer screening (digital rectal exam [DRG] or prostate-specific antigen test [PSA])
Eye Health	Case Management: <ul style="list-style-type: none"> • Measurement of visual acuity (outreach) • Treatment of cataract • Refractive Error & low vision • Eye injuries • Glaucoma • Measurement of visual acuity 	
Mental Health	<ul style="list-style-type: none"> • Diagnosis and treatment of commonly occurring mental illnesses and psychological disorders • Hospitalization of people with enduring mental illness • Alcohol/ Substance abuse prevention and treatment programs, including detoxification⁸ • Suicide prevention programs and treatment for attempted suicide • Child and Adolescent mental health programs • Psychometric assessments • Child Abuse services (detection, reporting, referral to social services) • Gender- and sexually-based violence services (detection, treatment of injuries, referral to legal and social services) 	

⁸ The Mental Health program has developed a protocol and program design for detoxification program, and is starting it up at national level. It will be rolled out at regional level, and eventually to districts. This process will take some time but will eventually be incorporated at secondary level.

Service Delivery Area	District Hospital	Regional Hospital
	<ul style="list-style-type: none"> • Old-Age Psychiatry • Liaison services with families of patients before discharge, including stigma reduction services • Follow-up with discharged patients in their communities / homes • Occupational Therapy / rehabilitation for mentally ill patients 	
Oral Health	<ul style="list-style-type: none"> • Extraction, Filling and ART • Ameloblastoma • Mir surgery • Dentures, Crowns and Bridges • Burkett lymphoma • Treatment of Dental injuries • Mobile Clinic 	
ENT and Audiology	<ul style="list-style-type: none"> • Management of acute external / media otitis and chronic otitis • Targeted screening for hearing impairment 	
Environmental Health	<ul style="list-style-type: none"> • Provision of facilities and maintenance for safe drinking water, including infrastructure and/or point-of-use water treatment as appropriate and promotion of 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 • Management of medical waste 	
Health Education	N/A	N/A
Emergency services	Management of: <ul style="list-style-type: none"> • Sepsis • Anaphylaxis • Acute Coronary Syndrome and Acute Pulmonary Edema • Asthma • Poisoning • Seizure • Hypoglycemia • Hyperglycemia • Upper GI Bleed • Sickle Cell Crisis 	Same as District Hospital, Plus: Management of: <ul style="list-style-type: none"> • Open or complex fracture • Traumatic limb injury • Gangrenous limb • Traumatic abdominal injury • Acute Abdomen • Obstructed hernia • Traumatic head injury

Service Delivery Area	District Hospital	Regional Hospital
	<ul style="list-style-type: none"> • Airway Management • Hypertensive crisis • Tetanus • Simple closed fracture • Pneumothorax (trauma or spontaneous) • Pleural effusion • Wound infection • Appendicitis • Testicular torsion • Soft tissue infection • Postpartum complications requiring hysterectomy • Ectopic pregnancy • Miscarriage or abortion complication • Urethral stricture causing pre-renal failure • Major burns • Snake bite • Rabies <p>Initiate and refer to specialist care:</p> <ul style="list-style-type: none"> • Open or complex fracture • Traumatic limb injury • Gangrenous limb • Traumatic abdominal injury • Acute Abdomen • Obstructed hernia • Traumatic head injury 	
Control and management of other diseases with epidemic potential	<p>Epidemic Control:</p> <ul style="list-style-type: none"> • Screening and reporting of Notifiable Diseases and events including maternal death • Case investigations and contact tracing <p>Diagnosis and clinical management of infectious diseases:</p> <ul style="list-style-type: none"> • Typhoid 	Same as District Hospital

Service Delivery Area	District Hospital	Regional Hospital
	<ul style="list-style-type: none"> • Meningitis • Jaundice and Yellow Fever • Acute rheumatic fever • Measles • Pertussis • Acute water diarrhea and bloody diarrhea • Neonatal tetanus • Acute flaccid paralysis • Refer <ul style="list-style-type: none"> ○ Hemorrhagic fevers (Lassa, Ebola, Marburg) 	
Blood Services	<ul style="list-style-type: none"> • Blood Donor Services (mobilization, recruitment of new donors, donor registry, donor counseling and Retention of Voluntary Blood Donors) • Blood Collection Services (donor screening, blood collection, cold chain to regional centers, including Mobile Blood Collection) • Blood screening, (Blood typing, screening for TTIs, Cross matching and issuing to patients) • Transportation Services (Transportation of Blood and Blood Product to the Regional Centers, to district hospital and other transfusion sites, Mobile Blood Drive etc.) 	
Diagnostic Imaging (including Radiology)	<ul style="list-style-type: none"> • Chest X-Ray • Skeletal X-Ray • Ultrasound (Pelvic Scan (OBGYN) and Abdominal Scan) 	<p>Same as District Hospital, Plus provision of:</p> <ul style="list-style-type: none"> • Intravenous Pyelography (IUV) • Retrograde Urethrogramme • Barium Swallow • Barium Meal • Barium Enema • Hystero Salpin Gography (HSG) • KUBP Scan • CT-Scan Head • CT-Scan – Abdomen • Cardiac Ultrasound • Venography

RECOMMENDED MINIMUM STAFFING BY LEVEL OF CARE

The recommended staffing for each level of care is driven by the services that are defined for that level. Not all PHUs currently meet these recommendations, and it may not be possible for Sierra Leone to fully staff all health facilities according to these standards in the immediate future due to staffing shortages and maldistribution. However, the recommendations set a standard by which the MoHS and districts can plan their recruitment and deployment of staff. It also helps the MoHS to identify training needs and develop strategies to attract and adequately prepare the requisite human resources to fully staff the system in the future.

The recommended staffing is not meant to be limiting. In some contexts, more than the recommended number of staff may be deployed to a particular facility, or a cadre which is not specified in the recommendation may be placed at a facility. The districts can choose to add staff based on the identified needs in their localities. For example, an additional CHO or midwife may be placed at a CHC with a particularly large catchment population. Similarly, the recommended staffing for MCHPs does not include a midwife, but in a remote area where the nearest CHP or CHC is prohibitively far, a district may take the decision to place a midwife at an MCHP in order to provide access to skilled maternal care in an area that would otherwise lack access.

COMMUNITY STAFFING NORMS

Cadre	Number	Comments
Community Health Workers	1 CHW per 100-500 population	At least 160 should be trained as mental health support workers.

MCHP STAFFING NORMS

Cadre	Number	Comments
MCH Aide	3	To be trained as vaccinators and as psychosocial counselors
Porter/Cleaner	4	
Security	1	
TOTAL	5	

CHP STAFFING NORMS

Cadre	Number	Comments
Community Health Assistant	1	
SECHN	1	To also play role of IPC Officer
MCH Aide	2	To be trained as vaccinators and as psychosocial counselors
Midwife	1	Possible direct entry, or SECHN trained in midwifery
Porter/Cleaner	4	
Security	2	
TOTAL	9	

CHC STAFFING NORMS

Cadre	Number	Comments
Community Health Officer	2	To be trained as psychosocial counselors
Community Health Assistant	1	
Public Health Aide	1	
Environmental Health Officer	1	IPC Supervisor
Lab Technician	1	
Lab Assistant	1	
Community Mental Health Aide	1	
MCH Aide	4	To be trained as vaccinators / psychosocial counselors / in basic physical rehabilitation services
Midwife	2	Possible direct entry, or SECHN trained in midwifery
SECHN	2	To be trained as psychosocial counselors; 1 to be trained as IPC Supervisor to serve in absence of Environmental Health Officer
Pharmacy Technician	1	
Assistant Nutritionist	1	
Porter/Cleaner	5	
Security	2	
TOTAL	22	

SECONDARY HOSPITAL STAFFING NORMS

Cadre	Number	Comments	Cadre	Number	Comments
Anaesthetist	1		State Registered Nurse	12	per ward
Assistant Anaesthetist (Nurse / CHO)	3	Variable depending on number of theatres; 1 in the recovery room	State Registered Nurse Midwife	8	per hospital; in ANC unit, Labor ward, postnatal unit, pediatric unit
Community Health Officer	1	With emergency surgery training	Theatre Nurse	18	per hospital
Public Health Aide	2		Pediatric Nurse	2	per hospital
Clinical Officer	6		Accident and Emergency Nurse	2	per hospital
Family Physician	1		Critical Care Nurse	2	per hospital
Internal Medicine Physician	1		Assistant Nutritionist	1	
Medical Officers	6	1-2 medical officer / house officer per specialty	Nutritionist	1	
Public Health Physician	1		Dental Nursing Auxiliary / Assistant	1	
Environmental Health Officer	1		Dental Receptionist	1	
Infection Prevention and Control Focal Point	1		Dental Technician	2	
Ophthalmic CHO	1		Dental Therapist/Hygienist/Nurse	1	
Ophthalmic Nurse	4		Dental Surgeon (Dentist)	1	Regional deployment; dentist would be at district hospital part-time
Optician	1	Regional deployment; optician would be at district hospital	Clinical Pharmacist	1	

		part-time			
Optometrist	1	Regional deployment; optometrist would be at district hospital part-time	Pharmacist	2	
Health Education Officer	1		Pharmacy Technician	6	
Assistant Finance Officer	1		Radiology Assistant	1	Will need to be trained in ultrasound
Finance Officer	1		X-Ray Technician	1	
Hospital Manager	1		Physiotherapist	2	
Hospital Secretary	1		Rehabilitation Worker	2	
ICT Technician	1		ENT Assistant	1	
Medical Records Assistant	3		Obstetrics and Gynaecology	1	
Medical Records Officer	1		Paediatrician	1	
Laboratory Assistant	4		General Surgeon	1	
Laboratory Technician	3		Caterer	2	
Medical Laboratory Scientific Officer	1		Cleaners/Labourer	20	Possibility for outsourcing
Logistics Officer	1		Cook	6	
Procurement Assistant	1		Driver	3	Assumes that ambulance service is separate from hospital / managed by DHMT
Clinical Psychologist	1		Hospital Maintenance Team (Plumber, Carpenter, Electrician/Electronics, Mason, Painter, Mechanic, etc.)	5	
Mental Health CHO	2		Launderer	6	Possibility for outsourcing
Mental Health Nurses	2		Medical Equipment Technician	2	

Mental Health Social Worker	1		Mortician	1	
Nursing Aide	12	per ward	Mortuary Attendant	3	
Nursing Officer	2	per ward	Porter	12	
SECHN	12	per ward	Registration Clerk	1	
Senior Nursing Officer	1	per ward	Security	12	Possibility for outsourcing
TOTAL	228				

INPUTS REQUIRED TO ACCOMPLISH THE BASIC PACKAGE OF ESSENTIAL HEALTH SERVICES

EQUIPMENT

MEDICAL EQUIPMENT

	Community	MCHP	CHP	CHC	Hospital
Equipment (includes vehicles, motorcycles, maintenance)					
Medical Equipment					
All Outpatient Clinic Rooms					
Desk and chairs		√	√	√	√
Examination table or bed		√	√	√	√
Light source		√	√	√	√
Hand washing facilities		√	√	√	√
Receptacle for soiled pads, dressings, etc		√	√	√	√
Container for sharps disposal		√	√	√	√
Wall clock with second hand, torch with extra batteries		√	√	√	√
Instrument sterilizer		√	√	√	√
BP machine and stethoscope					
Bucket for decontamination					
Metal bins with pedals					
Jar for forceps		√	√		√
Women's Reproductive Health Rooms					
Examination table		√	√	√	√
BP machine and stethoscope		√	√	√	√
Thermometer		√	√	√	√
Foetal Stethoscope		√	√	√	√
Weighing scale		√	√	√	√
Height measure		√	√	√	√
Speculum and vaginal examination kit		√	√	√	√
Contraceptive supplies		√	√	√	√
Syringes and needles		√	√	√	√
MVA syringe and cannulas		X	√	√	√
IUCD insertion set		√	√	√	√
Examination gloves		√	√	√	√
IEC/BCC flip charts, posters and models		√	√	√	√
Register		√	√	√	√

	Community	MCHP	CHP	CHC	Hospital
Equipment (includes vehicles, motorcycles, maintenance)					
Medical Equipment					
Home-Based Mothers' cards		√	√	√	√
Antenatal Card					
Immunization cards		√	√	√	√
surgical gloves					
implant insertion and removal kit					
Gynaecological table					
Family Planning cards		√	√	√	√
HIV Clinic					
Infant scale		√	√	√	√
Standing scale		√	√	√	√
Height board		√	√	√	√
MUAC tapes		√	√	√	√
Pill-cutters		√	√	√	√
Thermometer (digital, infrared)		√	√	√	√
Calculator		√	√	√	√
Job aides on ART, OI, malnutrition assessment		√	√	√	√
IEC/BCC flip charts, posters		√	√	√	√
Appointment cards		√	√	√	√
Patient files		√	√	√	√
Registers (Pre-ART, ART, PMTCT, HTC, EID)		√	√	√	√
File cabinet		√	√	√	√
Drug cabinet		√	√	√	√
Syringes and needles		√	√	√	√
Hand sanitizers		√	√	√	√
Screening PPEs (gloves, face mask, goggles)		√	√	√	√
Sharps box		√	√	√	√
Child Health Clinic					
Baby scales		√	√	√	√
Hanging scales		√	√	√	√
Height measure/measuring board		√	√	√	√
Register		√	√	√	√
Road to Health cards		√	√	√	√
EPI Room					
Refrigerator		√	√	√	√
Temperature monitoring charts		√	√	√	√
Cold boxes and icepacks		√	√	√	√
Syringes, needles and swabs		√	√	√	√
Registers		√	√	√	√

	Community	MCHP	CHP	CHC	Hospital
Equipment (includes vehicles, motorcycles, maintenance)					
Medical Equipment					
Safety box		√	√	√	√
A.D. syringes		√	√	√	√
Voltage Stabilizers		√	√	√	√
Air conditioners					√
Computers and accessories					√
Photocopier					√
Standby generator		√	√	√	√
Vaccine labels and thermometers		√	√	√	√
Protective clothing and gloves		√	√	√	√
Delivery Room					
Delivery bed and bed linen		√	√	√	√
Curtains if more than one bed		√	√	√	√
Work surface near bed for newborn resuscitation		√	√	√	√
Instrument trolley		√	√	√	√
Tray with routine & emergency drugs, syringes and needles		√	√	√	√
BP machine and stethoscope		√	√	√	√
Thermometer		√	√	√	√
Foetal stethoscope		√	√	√	√
Urinary catheter and collection bag		√	√	√	√
Partograph charts		√	√	√	√
Latex gloves and protective clothing		√	√	√	√
Cleaning delivery kit and cord ties		√	√	√	√
Towel and blankets for newborn		√	√	√	√
Mucus extractor bulb		√	√	√	√
Ambu resuscitator and mask (adult)		√	√	√	√
Ambu resuscitator and mask (paediatric and neonatal)		√	√	√	√
Oropharyngeal airways, various sizes		√	√	√	√
Baby scales		√	√	√	√
Vacuum extractor set				√	√
Suturing set		√	√	√	√
Assorted sutures		√	√	√	√
I.V. giving sets and cannulas. Infusion bottles		√	√	√	√
In-patient Ward					
Beds, washable mattresses and linen		√	√	√	√
Patient trolley on wheels		√	√	√	√
Dressing trolley/Medicine trolley		√	√	√	√
Urinals and bedpans		√	√	√	√
I.V. stands		√	√	√	√

	Community	MCHP	CHP	CHC	Hospital
Equipment (includes vehicles, motorcycles, maintenance)					
Medical Equipment					
Bed tables or Locker (per patient)					√
Wheel chair for the Ward					√
Negatoscope					√
Water and WC facilities for the patients					√
Mosquito nets					√
BP machine					√
Glucose machine					√
Stethoscope					√
Fridge for medication					√
Resuscitation trolley					√
Basic examination equipment		√	√	√	√
Medicine storage cabinet		√	√	√	√
Treatment Room (Accident & Emergencies)					
Examination table		√	√	√	√
Stool, adjustable height		√	√	√	√
Instrument/dressing trolley		√	√	√	√
Instrument tray		√	√	√	√
Wound dressing set		√	√	√	√
Suturing set		√	√	√	√
Sterile gloves		√	√	√	√
Syringes and needles		√	√	√	√
Dressings		√	√	√	√
I.V. stands		√	√	√	√
Ambu resuscitation set with adult and child masks		√	√	√	√
POP Instruments set					√
Oral airways: various sizes		√	√	√	√
Splints and slings		√	√	√	√
Plaster bandages for casts					√
Gauze		√	√	√	√
Cotton wool		√	√	√	√
Suturing Materials		√	√	√	√
Operating Theatre					
Hand washing/scrubbing facilities					√
Universal operating table					√
Mobile operating light					√
Stool, adjustable height					√
Patient trolley on wheels					√
I.V. stand					√

	Community	MCHP	CHP	CHC	Hospital
Equipment (includes vehicles, motorcycles, maintenance)					
Medical Equipment					
Instrument trolley					√
Instrument tray					√
Syringes and needles					√
POP					√
POP instruments					√
Dressings (gauze, cotton wool, plaster etc)					√
I.V. giving sets and canulas					√
Portable suction machine					√
Anaesthetic trolley/machine					√
Sphygmomanometer and stethoscope					√
General Surgery Instrument Set					√
Ambu resuscitation set with adult and child masks					√
Oral airways: various sizes					√
Laryngoscope set					√
Operating drapes					√
Dressing Drums					√
Instrument Drums					√
Protective hats, aprons and gowns					√
Sterile gloves					√
Caesarean/hysterectomy set					√
Laparotomy set					√
Tubal ligation set					√
Dilatation and curettage set					√
Tracheotomy set					√
Chest drain tubes and under water seal bottles					√
Cardio Monitor					√
Oxy Pulsymeter					√
Sterilizer					√
Instrument cupboard					√
Laboratory					
Microscope (light) and emersion oil		√	√	√	√
Electrical microscope and emersion oil				√	√
Hand centrifuge		√	√	√	√
Electrical centrifuge					√
Haemoglobin meter		√	√	√	√
Haematocrit centrifuge					√
White cell differential counter					√
Timer		√	√	√	√

	Community	MCHP	CHP	CHC	Hospital
Equipment (includes vehicles, motorcycles, maintenance)					
Medical Equipment					
Laboratory scale and weights		√	√	√	√
Slide rack		√	√	√	√
Staining jars		√	√	√	√
Variable micro Pipettes and stand			√	√	√
Spirit lamp		√	√	√	√
Measuring jars, beakers, test tubes		√	√	√	√
Microscope slides & cover slips		√	√	√	√
Specimen collection cups, tubes and capillary tubes		√	√	√	√
Reagents, stains and test kits as appropriate (see table 11)		√	√	√	√
Haematological analysers					√
Chemical analysers					√
Deep freezers					√
Refrigerators				√	√
Bacteriological flow-hoods					√
Water distillers				√	√
Autoclaves and sterilizers				√	√
Spectro-photometer				√	√
colorimeter				√	√
Standby generator				√	√
Imaging Services					
X-Ray machine (fixed or portable)					√
X-Ray developing machine and darkroom equipment					√
X-Ray protective materials (lead aprons and walls)					√
Wall viewer					√
Voltage stabilizer for X-Ray machine					√
Ultrasound machine, small portable					√
EKG machine, 12 lead small portable					√

NON-MEDICAL EQUIPMENT

	Community	MCHP	CHP	CHC	Hospital
Equipment (includes vehicles, motorcycles, maintenance)					
Non-Medical Equipment					
Administration					
Office furniture		√	√	√	√

	Community	MCHP	CHP	CHC	Hospital
Equipment (includes vehicles, motorcycles, maintenance)					
Non-Medical Equipment					
Office equipment		√	√	√	√
Electricity supply					
solar lights and backup generator		√	√	√	√
Water supply					
Water source for drinking water		√	√	√	√
Storage tank		√	√	√	√
Water purification chemicals or filter		√	√	√	√
Hand-washing sinks and taps or veonica buckets in all areas		√	√	√	√
Waste disposal					
Incinerator or burial pit		√	√	√	√
Septic tanks		√	√	√	√
Drainage system		√	√	√	√
Sanitation facilities for patients		√	√	√	√
Metal Rubbish bins with pedal in all rooms		√	√	√	√
Rubbish bins with cover					
Sharps containers in all treatment areas		√	√	√	√
Buckets for contaminated waste in all treatment areas		√	√	√	√
3 bucket system for decontamination					
Protective boots and utility gloves		√	√	√	√
Safety					
Fire extinguisher					
Kitchen					
Cooking stove		√	√	√	√
Cooking pots and utensils		√	√	√	√
Food trolley					√
Plates, cups and cutlery		√	√	√	√
Refrigerator		√	√	√	√
Washing and drying area facilities					√
Shelves and storage		√	√	√	√
Laundry					
Washing and rinsing equipment/bowls		√	√		√
Detergent/soap		√	√	√	√
Water heater			-		√
Iron		√	√	√	√
House keeping					
Brooms, brushes and mops		√	√	√	√
Buckets for contaminated waste in all treatment		√	√	√	√

	Community	MCHP	CHP	CHC	Hospital
Equipment (includes vehicles, motorcycles, maintenance)					
Non-Medical Equipment areas					
Soap and disinfectant (including chlorine)		√	√	√	√
Medical/drug stores					
Refrigerator (solar powered)					√
Generator		-			√
Computer and its accessories					√
Computer printer					√
Photo copier					√
Cool boxes and vaccine carriers					
Shelves		√	√	√	√
Inventory control tools		√	√	√	√
Lockable medicine cupboards in treatment areas		√	√	√	√

ESSENTIAL MEDICINES

Note: some medicines from the EML are available mainly at the tertiary level. These medicines may be available in some secondary hospitals, but are not considered to be part of the basic package for the primary and secondary levels. These medicines have been removed from the list below to avoid confusion. The complete EML by level of care, including tertiary level, may be obtained from the National Pharmaceuticals Procurement Unit.

	Community	MCHP	CHP	CHC	Secondary Hospital
Drugs and Medical Consumables					
Essential Medicines					
Halothane - Volatile Liquid					√
Halothane - Inhalation					√
Ketamine Hydrochloride - Injection - 50& 100mg/ml					√
Thiopentone Sodium - Powder for injection - 0.5 &1g					√
Oxygen (Medical Grade) inhalation. - Gas					√
Bupivacaine Hydrochloride without Adrenaline - Injection - 0.25 and 0.5%					√
Bupivacaine + Glucose - Spinal injection - 0.5% + 4%					√
Lignocaine (Lidocaine) Hydrochloride - Injection - 1% & 2%					√
Lignocaine (Lidocaine) + Adrenaline (Epinephrine) - Injection - 1%+1:200,00				√	√
Lignocaine (Lidocaine) + Adrenaline (Epinephrine) - Dental Cartridges - 2%+1:80,000				√	√
Atropine Sulphate - Injection - 0.5mg/ml					√
Atropine Sulphate - Injection - 1mg/ml				√	√

	Community	MCHP	CHP	CHC	Secondary Hospital
Drugs and Medical Consumables					
Essential Medicines					
Promethazine - Tablet - 25mg		√	√	√	√
Promethazine - Injection - 25mg/ml				√	√
Acetylsalicylic Acid (Aspirin) - Tablets - 300mg		√	√	√	√
Acetylsalicylic Acid (Aspirin) - Tablets - 75mg		√	√	√	√
Diclofenac Sodium - Tablets - 25&50mg 100mg SR		√	√		√
Diclofenac Sodium - Injection - 25 mg/ml				√	√
Ibuprofen - Tablets - 400mg		√	√	√	√
Ibuprofen - Tablets - 200mg		√	√	√	√
Paracetamol - Tablets - 100mg		√	√	√	√
Paracetamol - Tablets - 500mg		√	√	√	√
Paracetamol - Syrup - 120mg/5ml		√	√	√	√
Paracetamol - Suppositories - 50 & 100mg				√	√
Morphine Sulphate - Tablets - 10mg					√
Pethidine Hydrochloride - Injection - 50mg/ml					√
Tramadol Hydrochloride - Capsule/Tablets - 50mg					√
Tramadol Hydrochloride - Injection - 50mg/ml					√
Allopurinol - Tablets - 100mg					√
Colchicine - Tablets - 0.5mg					√
Probenecid - Tablets - 500mg					√
Probenecid - Injection - 100mg/5ml					√
Chloroquine - Tablets - 100mg& 150m base				√	√
Adrenaline (Epinephrine) - Injection - 1mg/ml				√	√
Chlorpheniramine - Tablets - 4mg		√	√	√	√
Chlorpheniramine - Injection - 10mg/ml					√
Clemastine - Tablets - 1mg					√
Dexamethasone - Tablets - 4mg		√	√	√	√
Dexamethasone - Injection - 4mg/ml					√
Hydrocortisone Sodium Succinate - Powder for Injection					√
Prednisolone - Tablets - 5mg		√	√	√	√
Promethazine - Tablets - 25mg		√	√	√	√
Promethazine - Syrup - 5mg/ml		√	√	√	√
Promethazine - Injection - 25mg ml				√	√
Acetyl cysteine - Injection - 200mg/ml					√
Calcium Gluconate - Injection - 100mg/ml				√	√
Naloxone Hydrochloride - Injection - 400mcg/ml					√
Protamine Sulphate - Injection - 10mg/ml					√
Carbamazepine - Tablets - 200mg					√
Carbamazepine - Tablets - 100mg					√
Diazepam – Tablets – 2mg					√
Diazepam - Tablets - 5mg				√	√
Diazepam - Tablets - 10mg					√
Diazepam - Injection - 5mg/ml				√	√
Magnesium Sulphate - Injection - 500mg/ml & 200mg/ml		√	√	√	√
Phenobarbitone Sodium - Tablets - 30mg				√	√

	Community	MCHP	CHP	CHC	Secondary Hospital
Drugs and Medical Consumables					
Essential Medicines					
Phenobarbitone Sodium - Injection - 200mg/ml					√
Phenytoin Sodium - Tablets/Capsules - 100mg					√
Phenytoin Sodium - Tablets/Capsules - 25mg					√
Phenytoin Sodium - Injection - 50mg/ml					√
Sodium Valproate - Tablets - 100mg					√
Sodium Valproate - Tablets - 200mg					√
Sodium Valproate - Tablets - 50mg					√
Albendazole - Tablets - 200mg		√	√	√	√
Niclosamide - Tablets - 500mg				√	√
Amoxicillin - Capsules and Tablets - 250mg (dispersible/non-dispersible)	√	√	√	√	√
Amoxicillin - Capsules and Tablets - 500mg (dispersible/non-dispersible)		√	√	√	√
Amoxicillin - Suspension - 125mg/5ml		√	√	√	√
Amoxicillin - Powder for injection - 500mg				√	√
CoAmoxiclav (Amoxy/Clav Acid) - Suspension - (125/31mg)/5ml		√	√	√	√
CoAmoxiclav (Amoxy/Clav Acid) - Tablets - 500/125mg		√	√	√	√
Benzathine Penicillin - Powder for injection - 2.4mu		√	√	√	√
Benzathine Penicillin - Powder for injection - 1.2 mu		√	√	√	√
Benzyl Penicillin - Powder for Injection - 1MU		√	√	√	√
Benzyl Penicillin - Powder for Injection - 5MU		√	√	√	√
Ceftriaxone - Powder for injection - 1g				√	√
Ceftriaxone - Powder for injection - 500mg				√	√
Cephalexin - Tablets/Capsules - 250mg					√
Cephalexin - Tablets/Capsules - 500mg					√
Chloramphenicol - Capsules - 250mg		√	√	√	√
Chloramphenicol - Powder for injection - 1 gram sodium					√
Chloramphenicol - IV - 500mg					√
Ciprofloxacin - Tablets - 250mg		√	√	√	√
Ciprofloxacin - 500mg			√	√	√
Ciprofloxacin - Injection - 200mg/100ml					√
Clindamycin - Capsules - 150mg					√
Clindamycin - Suspension - 75mg/5ml					√
Cloxacillin - Tablets/Capsules - 250mg					√
Cloxacillin - Tablets/Capsules - 500mg					√
Cloxacillin - Powder for injection - 500mg					√
Cotrimoxazole (Sulfamethoxazole/Trimethoprim) - Tablets - 400/80mg	√	√	√	√	√
Cotrimoxazole (Sulfamethoxazole/Trimethoprim) - Pediatric Tablets - 100/20mg	√	√	√	√	√
Cotrimoxazole (Sulfamethoxazole/Trimethoprim) - Oral suspension - 200/40mg		√	√	√	√
Doxycycline - Tablets/Capsules - 100mg				√	√

	Community	MCHP	CHP	CHC	Secondary Hospital
Drugs and Medical Consumables					
Essential Medicines					
Erythromycin - Tablets - 250mg		√	√	√	√
Erythromycin - Tablets - 500mg		√	√	√	√
Erythromycin - Suspension - 125mg/5ml		√	√	√	√
Gentamicin - Injection - 40mg/ml					√
Gentamicin - Injection - 20mg/ml					√
Gentamicin - Injection - 80mg/2ml					√
Lincomycin Hydrochloride - Tablets - 500mg					√
Lincomycin Hydrochloride - Injection - 500mg/ml					√
Metronidazole - Tablets - 250mg		√	√	√	√
Metronidazole - Tablets - 500mg		√	√	√	√
Metronidazole - Powder for Syrup - 125mg/5ml		√	√	√	√
Metronidazole - Injection - 5mg/ml					√
Nalidixic Acid - Tablets - 500mg				√	√
Nitrofurantoin - Tablets - 100mg				√	√
Penicillin V potassium - Tablets - 250mg		√	√	√	√
Procaine Penicillin - Injection - 3MU				√	√
Procaine Penicillin - Injection - 4MU				√	√
Spectinomycin - Injections - 2g					√
Tetracycline - Tablets/Capsules - 250mg		√	√	√	√
Rifampicin/ Dapsone - 450mg/50mg - Tablets/Capsules		√	√	√	√
Rifampicin/ Dapsone - 600mg/100mg - Tablets/Capsules		√	√	√	√
Rifampicin/Clofazimine /Dapsone - 450mg/50mg/50mg - Tablets/Capsules		√	√	√	√
Rifampicin/Clofazimine /Dapsone - 600mg/100mg/50mg - Tablets/Capsules		√	√	√	√
Amikacin Sulphate - Injection - 250mg/ml					√
Capreomycin Sulphate - Powder for injection - 1 MU					√
Ethambutol - Tablets - 400mg		√	√	√	√
Ethambutol - Tablets - 100mg		√	√	√	√
Isoniazid - Tablets - 100mg		√	√	√	√
Isoniazid - Tablets - 300mg		√	√	√	√
Kanamycin Sulphate - Powder for injection - 1g					√
Ofloxacin - Tablets - 200mg					√
Levofloxacin - Tablets - 250mg					√
Cycloserine - Capsule - 250mg					√
Ethionamide					√
Pyrazinamide - Tablets - 400mg		√	√	√	√
Rifampicin/Isoniazid - Tablets - 60/30mg		√	√	√	√
Rifampicin/Isoniazid - Tablets - 150/75mg		√	√	√	√
Rifampicin/Isoniazid/Pyrazinamide - Tablets - 60/30/150mg		√	√	√	√
Rifampicin /Isoniazid /Ethambutol - Tablets - 150/75/275mg		√	√	√	√

	Community	MCHP	CHP	CHC	Secondary Hospital
Drugs and Medical Consumables					
Essential Medicines					
Rifampicin /Isoniazid /Pyrazinamide /Ethambutol - Tablets - 150/75/400/275mg		√	√	√	√
Streptomycin - Powder for injection - 1 gram				√	√
Clotrimazole - Cream - 0.01 (30g tube)				√	√
Clotrimazole - Vaginal Tablets - 100mg				√	√
Fluconazole - Tablets/Capsules - 150mg				√	√
Griseofulvin - Tablets - 125mg				√	√
Griseofulvin - Tablets - 500mg				√	√
Ketoconazole - Suspension - 100mg/5ml					√
Ketoconazole - Tablets - 200mg					√
Ketoconazole - Cream - 0.02					√
Miconazole - Cream - 0.02					√
Nystatin - Oral Suspension - 100,000IU/ml				√	√
Nystatin - Oral Suspension - 500,000IU/ml				√	√
Nystatin - Vaginal Tablets - 500,000IU					√
Ivermectin - Tablets - 3mg				√	√
Ivermectin - Tablets - 6mg				√	√
Artesunate/Amodiaquine 2-11months - Tablets - 25mg/67.5mg (3 tabs)	√	√	√	√	√
Artesunate/Amodiaquine 12-59months - Tablets - 50mg/135mg (3 tabs)	√	√	√	√	√
Artesunate/Amodiaquine 5-13years - Tablets - 100mg/270mg (3 tabs)	√	√	√	√	√
Artesunate/Amodiaquine ≥14years - Tablets - 100mg/270mg (6 tabs)	√	√	√	√	√
Sulphadoxime/Pyrimethamine - Tablets - 500mg/125mg	√	√	√	√	√
Long Lasting Insecticide Treated Net		√	√	√	√
Artemether - Injection - 80mg/ml		√	√	√	√
Artemether - Injection - 20mg/ml		√	√	√	√
Artesunate - Injection - 20mg/vial		√	√	√	√
Artesunate - Injection - 60mg/ml		√	√	√	√
Quinine Sulphate - Injection - 300mg		√	√	√	√
Quinine Sulphate - Tablets - 300mg		√	√	√	√
Quinine Dihydrochloride - Injection - 300mg/ml		√		√	√
Praziquantel - Tablets - 600mg		√	√	√	√
Acyclovir - Tablets - 200mg					√
Acyclovir - Powder for Infusion - 250mg					√
Acyclovir - Cream					√
Ribavirin - Injection - 1mg/ml					√
Nevirapine 150mg/5ml					√
Zidovudine + Lamivudine + Névirapine - Tablets - 300/150/200 mg					√
Zidovudine + Lamivudine + Névirapine - Tablets -					√

	Community	MCHP	CHP	CHC	Secondary Hospital
Drugs and Medical Consumables					
Essential Medicines					
60/30/50 mg					
Zidovudine + Lamivudine + Abacavir - Tablets - 300/150/300 mg					√
Zidovudine + Lamivudine - Tablets - 300/150 mg					√
Zidovudine + Lamivudine - Tablets - 60/30 mg					√
Lamivudine + Abacavir - Tablets - 300/600 mg					√
Lamivudine + Abacavir - Tablets - 30/60 mg					√
Tenofovir + Lamivudine + Efavirenz - Tablets - 300/200/600 mg					√
Tenofovir + Lamivudine - Tablets - 300/200 mg					√
Efavirenz - Tablets - 600 mg					√
Efavirenz - Capsules - 200 mg					√
Névirapine - Tablets - 50 mg					√
Lopinavir/ritonavir - Tablets - 200/50 mg					√
Lopinavir/ritonavir - Tablets - 100/25 mg					√
Atazanavir/ritonavir - Tablets - 300/100 mg					√
Ascorbic Acid - Tablets - 100mg		√	√	√	√
Ascorbic Acid - Tablets - 500mg		√	√	√	√
Calcium Gluconate - Injection - 10% 10ml				√	√
Ferrous Sulphate - Tablets/Capsules - 65mg iron				√	√
Folic Acid - Tablets - 1 & 5mg		√	√	√	√
Folic Acid/Ferrous Sulphate - Spansules - 0.5mg/150mg		√	√	√	√
Hydroxocobalamin - Injection - 1mg/ml				√	√
Multivitamins - Tablets/capsules		√	√	√	√
Multivitamins - Syrup		√	√	√	√
Pyridoxine (Vitamin B6) - Tablets - 25mg					√
Vitamin A - Capsules - 100000 IU				√	√
Vitamin A - Capsules - 200,000 IU				√	√
Vitamin B1 - Tablets - 50mg				√	√
Vitamin B1 - Injection - 100mg				√	√
Vitamin BComplex - Tablets		√	√	√	√
Vitamin BComplex - Injection				√	√
Vitamin BComplex - Syrup		√	√	√	√
Vitamin B6 - Syrup				√	√
Vitamin B12 - liquid - 1mg/ml					√
Vitamin D				√	√
Therapeutic vitamins and Mineral complex - Powder for reconstitution - *see footnote for formula		√	√	√	√
Dextran - Infusion - 50 & 70					√
Dextran 70 + Sodium Chloride - Infusion - 6% + 0.9%					√
Dextrose(Glucose) - Infusion - 5% (1000ml bottle)				√	√
Dextrose(Glucose) - Infusion - 5% (500ml bottle)				√	√
Dextrose(Glucose) - Infusion - 0.1				√	√
Dextrose(Glucose) - Infusion - 0.5				√	√

	Community	MCHP	CHP	CHC	Secondary Hospital
Drugs and Medical Consumables					
Essential Medicines					
Glucose Hypertonic - Injection - 0.5 (50ml bottle)					√
Glucose Plus Sodium Chloride - Infusion - 5% + 0.9%				√	√
Haemacel - Infusion - B.P. Formulation					√
Oral Rehydration salts - Solution: Sodium, Chloride, Potassium, Citrate, Glucose	√	√	√	√	√
Sodium Bicarbonate - Injection - 1.4 % & 8.4 %					√
Sodium Chloride - Infusion - 0.9% (1000ml bottle)					√
Sodium Chloride - Infusion - 0.9% (500ml bottle)					√
Compound Sodium Lactate - Infusion - 0.25% (1000ml)					√
Compound Sodium Lactate - Infusion - 0.25% (500ml)					√
Zinc Supplement - Tablets - 20mg	√	√	√	√	√
HEPARIN Sodium - Injection - 1000 iu/ml					√
HEPARIN Sodium - Injection - 25000 iu/ml					√
Vitamin K(phytomenadine) - Injection - 10mg/ml					√
Warfarin Sodium - Tablets - 5mg					√
Warfarin Sodium - Tablets - 10mg					√
Atenolol - Tablets - 50mg					√
Atenolol - Tablets - 100mg					√
Glyceryl Trinitrate (Nitroglycerin) - Sublingual tablets - 500mcg					√
Isosorbide Dinitrate - Sublingual tablets - 5 & 10mg					√
Nifedipine - Tablets/Capsules - 5,10,20,30mg					√
Propranolol - Tablets - 40 & 80 mg					√
Lignocaine (Lidocaine) - Injection - 0.02					√
Verapamil Hydrochloride - Tablets - 40mg					√
Verapamil Hydrochloride - Injection - 2.5mg/ml					√
Bendrofluazide - Tablets - 2.5 & 5mg					√
Captopril - Tablets - 12.5 & 25					√
Enalapril - Tablets - 5&10mg					√
Furosemide - Tablets - 40mg					√
Furosemide - Injection - 10mg/ml					√
Hydralazine* - Tablets - 25mg					√
Hydralazine* - Tablets - 50mg					√
Hydralazine* - Injection - 20mg/ml					√
Hydrochlorothiazide - Tablets - 50mg					√
Methyldopa - Tablets - 250mg		√	√	√	√
Methyldopa - Tablets - 500mg		√	√	√	√
Methyldopa Hydrochloride - Injection - 50mg/ml					√
Digoxin - Tablets - 0.0625025mg				√	√
Digoxin - Injection - 0.25 & 0.1 mg				√	√
Adrenaline - Injection - 1mg/ml					√
Dopamine Hydrochloride - Injection - 40mg/ml					√
Benzoic Acid + Salicylic Acid - Ointment - 6% +3%		√	√	√	√
Clotrimazole - Ointment and Dusting powder - 0.01		√	√	√	√

	Community	MCHP	CHP	CHC	Secondary Hospital
Drugs and Medical Consumables					
Essential Medicines					
Miconazole Nitrate - Cream and Dusting powder - 0.02		√	√	√	√
Nystatin - Ointment/Cream - 100,000 iu/g					√
Calamine lotion - Suspension - BP formulation		√	√	√	√
Betamethasone - Ointment/Cream - 0.001					√
Hydrocortisone - Ointment/Cream - 0.01					√
Hydrocortisone - Cream - 0.005		√	√	√	√
Chlorhexidine - Gel - 0.071		√	√	√	√
Fusidic Acid - Ointment - 0.05					√
Methylrosanilinium Chloride (Crystal Violet/Gentian Violet) - Solution - 0.005					√
Methylrosanilinium Chloride (Crystal Violet/Gentian Violet) - Powder - 0.0025					√
Neomycin + Bacitracin - Ointment /Cream - 5mg+500g					√
Povidonolodine - Solution - 0.2 (100ml)					√
Silver Sulphadiazine - Cream - 0.01					√
Tetracycline - Skin Ointment - 0.03					√
Tetracycline - Eye Ointment					√
Lubricating Jelly					√
Petroleum Jelly (Vaseline)					√
Paraffin, Soft White B.P					√
Zinc Oxide - Ointment - 0.1		√	√	√	√
Silver Nitrate - Caustic Pencil - 0.95		√	√	√	√
Benzyl Benzoate - Emulsion ` - 0.125		√	√	√	√
Benzyl Benzoate - Emulsion ` - 0.25		√	√	√	√
Gamma Benzene Hexachloride - Lotion - 0.001				√	√
Ethanol /Alcohol - 0.98					√
Formaldehyde - Solution - 1.5 to 10%					√
Formaldehyde - Solution - 0.37					√
Glycerin					√
Phenol - Solution					√
Chlorhexidine Gluconate - Solution - 0.015 %/0.15%				√	√
Hydrogen Peroxide - Solution - 0.06				√	√
Hydrogen Peroxide - Solution - 0.03		√	√	√	√
Povidone iodine - Solution - 1.1		√	√	√	√
Surgical Spirit - Solution - 0.98		√	√	√	√
Hydrochlorothiazide - Tablets - 12.5,25 &50				√	√
Mannitol - Injection - 0.1				√	√
Mannitol - Injection - 0.2				√	√
Aluminium hydroxide - Tablets - 500mg		√	√	√	√
Bisacodyl - Tablets - 5mg					√
Bisacodyl - Suppositories - 10mg					√
Cimetidine - Tablets - 200mg					√
Cimetidine - Tablets - 400mg					√
Cimetidine - Injection - 100mg/ml					√

	Community	MCHP	CHP	CHC	Secondary Hospital
Drugs and Medical Consumables					
Essential Medicines					
Hyoscine Nbutylbromide - Tablet - 10mg				√	√
Hyoscine Nbutylbromide - Injectable - 10mg/ml				√	√
Hyoscine Butylbromide - Injectable - 20mg/ml				√	√
Liquid Paraffin - liquid - 4mg/sachet				√	√
Magnesium Trisilicate Compound - Oral Suspension - 0.05		√	√	√	√
Misoprostol - Tablets - 200mcg					√
Omeprazole - Capsules - 20mg			√	√	√
Omeprazole - Injection - 40mg					√
Ranitidine - Tablets - 150mg					√
Ranitidine - Tablets - 300mg					√
Metoclopramide - Tablets - 10mg				√	√
Metoclopramide - Injection - 5mg/ml					√
Carbimazole - Tablets - 5mg					√
Chlorpropamide - Tablets - 250mg					√
Glibenclamide - Tablets - 5mg					√
Insulin Lente - Injection - 100unit 10ml					√
Metformin - Tablets - 500mg					√
Soluble Insulin Shortacting - Injection - 40					√
Soluble Insulin Shortacting - Injection - 100 units					√
Soluble Insulin Lente and Isophane (use 100 units only for standardization) - Injection - 10ml					√
Hydrocortisone - Powder for injection - 100mg					√
Male Condom	√	√	√	√	√
Coppercontaining Device - (copper T or Copper 7)				√	√
Depot Medroxyprogesterone Acetate - Powder for injection - 150mg/ml		√	√	√	√
Ethinylloestradiol+Levonorgestrel (Microgynon) - Cycles - 35mcg+1mg	√	√	√	√	√
Levonorgestrel (Emergency Contraceptive Pill) - Tablets - 1.5mg		√	√	√	√
Female Condom	√	√	√	√	√
Implants - one or two rods - 150 mg				√	√
Progesterone only pill (Levonorgestrel/Microlut) - Cycles - 0.03mg	√	√	√	√	√
Antivenom Sera Polyvalent - Injectin - 10ml					√
BCG Vaccine (Dried) multidoes - Injection - 1 & 5ml amps				√	√
PentaValent vaccine - Injection - 0.5 & 5ml				√	√
Hepatitis B - Injection - 0.002mg/ml				√	√
Measles Vaccine - Injection - 0.5ml amp				√	√
Meningococcal Vaccine Multiple does - Injection - 0.5 & 2.5mg does					√
Rabies Immunoglobulin (Sera) - Injection					√
Rabies Vaccine (Human Diploid) - Injection - 0.5ml/doses				√	√

	Community	MCHP	CHP	CHC	Secondary Hospital
Drugs and Medical Consumables					
Essential Medicines					
Snake Venom antiserum, Africa					√
Tetanus antitoxin - Injection - 50000units					√
Tetanus Toxoid - Injection - 0.5ml					√
Tetanus immunoglobulin - Injection					√
Yellow fever Vaccine - Injection - 1,5 &10 dose vial					√
Rota virus - oral - 0.5&5ml					√
Pneumococcal conjugate - Injection - 0.5 ml					√
Oral Polio Vaccine				√	√
Injectable Polio Vaccine				√	√
MR Vaccine				√	√
Acetazolamide - Tablets - 250mg					√
Aciclovir - Eye Ointment - 0.03					√
Amethiocane (Tetracaine) - Drops - 0.01					√
Atropine - Drops - 0.05					√
Chloramphenicol - Ointment - 0.01					√
Chloramphenicol - Ear Drops - 0.005					√
Chloramphenicol - Eye Drops - 0.005					√
Gentamycin - Drops - 0.0003					√
Gentamycin - Injection - 40mg					√
Hydrocortisone +Neomycin - Ointment - 1.5% +0.5 %					√
Pilocarpine - Drops - 1,2 &4%					√
Timolol Maleate - Eye Drops - 0.0025					√
Timolol Maleate - Eye Drops - 0.005					√
Tetracycline - Ointment - 0.01					√
Ergometrine Maleate - Injection - 0.5mg/ml				√	√
Misoprostol - Tablet - 200mcg					√
Oxytocin - Injection - 10IU/ml				√	√
Oxytocin/ Ergometrine - Injection - 5 units/500mcg per ml					√
Amitriptyline Hydrochloride - Tablets - 25mg				√	√
Amitriptyline Hydrochloride - Tablets - 50mg				√	√
Imipramine - Tablets - 10g					√
Fluoxetine - Tablets - 10mg					√
Fluoxetine - Tablets - 20mg					√
Carbamazepine - Tablets - 10mg					√
Carbamazepine - Injection - 5mg/ml					√
Chlorpromazine Hydrochloride - Tablets - 25mg					√
Chlorpromazine Hydrochloride - Tablets - 50mg					√
Chlorpromazine - Tablets - 100mg					√
Chlorpromazine Hydrochloride - Injection - 25mg/ml					√
Fluphenazine Decanoate - Injection - 25mg/ml					√
Haloperidol - Tablets - 5mg					√
Lorazepam - Tablets - 2mg					√
Nitrazepam - Tablets - 5mg					√

	Community	MCHP	CHP	CHC	Secondary Hospital
Drugs and Medical Consumables					
Essential Medicines					
Aminophylline - Tablets - 100mg					√
Aminophylline - Injection - 25mg/ml					√
Beclomethasone - Aerosol - 50mcg per metered dose					√
Ephedrine Hydrochloride - Injection - 50mg/ml					√
Salbutamol - Tablets - 4mg					√
Salbutamol - Syrup - 2mg/5ml					√
Salbutamol - Aerosol - 100mcg per metered dose					√
Diphenhydramine - Paediatric Syrup - 6.25mg/5ml				√	√
Sterile water for injection - Injection - 5ml		√	√	√	√
Sterile water for injection - Injection - 10ml		√	√	√	√
Ampicillin - Injection - 500mg					√
Ampicillin - Injection - 1g					√
Anusol - Suppositories				√	√
Atracurium 25mg Injection, Amp - Injection - 25mg					√
Azithromycin - Suspension - 200mg/5ml					√
Azithromycin - Tablets - 250mg					√
Azithromycin - Capsules - 500mg					√
Cefixime - Tablets - 400mg					√
Codeine Phosphate - Tablets - 30mg					√
Lactulose 3.1 - Oral Solution - 3.7g/5ml					√
Loperamide HCl 2mg, Tabs - Tablets - 2mg					√
Phenobarbital - Injection - 100mg/ml					√
Phenobarbital 30mg, Tabs - Tablets - 30mg					√
Phytomenadion (Vit. K) - Injec - 1mg/ml					√
Tranexamic acid - 5ml Vials - 100mg/ml					√
Amiodarone - 150mg					√
Metoprolol - Ampule 5ml - 1mg/ml					√
Suxamethonium - 100mcg/2mls					√
Flumezanil - 5ml Vial - 100mcg/ml				√	√
Gelatin Modified 500 ml - 0.04					√
Midazolam hydrochloride 5 ml - 2mg/ml					√
Penicillin eye ointment - Eye Ointment		√	√	√	√
Ciprofloxacin eye drop - Eye Drops					√
Whitfield ointment - Ointment		√	√	√	√
Methylated Spirit - 0.85				√	√
immersion oil				√	√
methanol					√
Hydrochloric acid 37% - 0.37					√
Calcium Lactate - Tablets - 300mg				√	√
Cefuroxime - Powder for injection - 750mg					√
Chlopheniramine 2ml - 10mg/ml					√
Furosemide - Tablets - 40mg				√	√
Glycerol trinitrate sub ling - 0.5mg					√
Metocloperamide 2ml - 5mg/ml					√

	Community	MCHP	CHP	CHC	Secondary Hospital
Drugs and Medical Consumables					
Essential Medicines					
Propanolol - 40mg					√
Benzoic compound				√	√
Povidone Iodine 5% topical cream - Cream - 0.05				√	√
Laparotomy Instrument Set				√	√
Caesarian Instrument Set					√
Delivery Instrument Set					√
Dilatation and Curettage Instrument Set					√
Episiotomy Instrument Set					√
Minor Surgical Eye Instrument Set					√
Chest Drainage Instrument Set					√
Minor Surgery Instrument Set					√
Auriscope/Otoscope				√	√
Sphygmomanometer aneroid with adult Cuff					√
Stethoscope economy model for basic procedures dual head				√	√
Weighing Machine stand on bathroom type metric					√
Weighing Pack infant with 3 trousers and 2 infant slings					√
Bag tablets selfseal plastic with plain write on panels					√
Bandage elastic				√	√
Bandages crepe (8cm x 4cm)				√	√
Bandages crepe (10cm x 4.5m)				√	√
Bandage POP 50mm pk 80				√	√
Bandage POP 100mm pk 80				√	√
Bandage POP 150mm pk 80				√	√
Blade scalpel size 10 pk 100				√	√
Blade scalpel size 11 pk 100				√	√
Blade scalpel size 12 pk 100				√	√
Blade scalpel size 15 pk 100				√	√
Blade scalpel size 20 pk 100				√	√
Blade scalpel size 22 pk 100				√	√
Blade scalpel size 24 pk 100				√	√
Blade scalpel size 25 pk 100				√	√
Cannula IV 14G Sterile				√	√
Cannula IV 16G Sterile				√	√
Cannula IV 18G Sterile				√	√
Cannula IV 20G Sterile				√	√
Cannula IV 22G Sterile				√	√
Cannula IV 24G Sterile				√	√
Catheter 8FG 5ml balloon Foley tape paediatric					√
Catheter 10FG balloon pk 10 type paediatric					√
Catheter 12FG balloon pk 10 30ml Foley Type Sterile					√
Catheter 14FG balloon pk 10 30ml Foley Type Sterile					√
Catheter 16FG balloon pk 10 30ml Foley Type Sterile					√
Catheter 18FG balloon pk 10 30ml Foley Type Sterile					√

	Community	MCHP	CHP	CHC	Secondary Hospital
Drugs and Medical Consumables					
Essential Medicines					
Catheter 20FG balloon pk 10 30ml Foley Type Sterile					√
Catheter 22FG balloon pk 10 30ml Foley Type Sterile					√
Catheter 24FG balloon pk 10 30ml Foley Type Sterile					√
Cotton wool 100gm single roll absorbent					√
Cotton wool 500gm single roll absorbent		√	√	√	√
Gauze paraffin dressing (10cm x 10cm) sterile pieces		√	√	√	√
Glove Examination 671/2 pk 100		√	√	√	√
Gloves Household large 1 pair latex		√	√	√	√
Gloves Surgeon sizes 6 sterile		√	√	√	√
Gloves Surgeon sizes 7 sterile		√	√	√	√
Gloves surgeon sizes 7 1/2 sterile		√	√	√	√
Gloves surgeon sizes 8 sterile		√	√	√	√
Gloves exam latex large		√	√	√	√
Gloves exam latex medium		√	√	√	√
Gloves exam latex small		√	√	√	√
IV admin set blood/solution 150ml paediatric					√
IV admin set blood/solution 150ml without airway or needle					√
IV admin set blood/solution with IV needle and vent					√
Infusion set scalp vein 21g butterfly sterile					√
Infusion set scalp vein 23g butterfly sterile					√
Infusion set scalp vein 25g butterfly sterile					√
Mask Face surgical disp pk 300					√
Face Mask		√	√	√	√
Microscope cover strips				√	√
Microscope oil immersion				√	√
Microscope slide frosted end				√	√
Needle dental 27g long pk 100				√	√
Plaster Zinc Oxide (2.5cm x 10m)		√	√	√	√
Plaster Zinc Oxide (5cm x 10m)		√	√	√	√
Plaster Zinc Oxide (7.5cm x 10m)		√	√	√	√
Plaster Zinc Oxide (2.5cm x 5m)		√	√	√	√
Plaster Zinc Oxide (5cm x 5m)				√	√
Suture catgut Chromic 1 pk 12					√
Suture catgut Chromic 0 pk 12					√
Suture catgut Chromic 2/0 pk 12					√
Suture catgut Chromic 2 with needles					√
Suture catgut Chromic 3/0 pk 12					√
Suture catgut Chromic 3 with needles					√
Suture catgut Chromic 4/0 pk 12					√
Syringe 1ml insulin pk 100					√
Needle, hypodermic, luer, 19G x 1.5" (1.10 x 40mm) disposable				√	√
Needle 20G, Disp. sterile				√	√

	Community	MCHP	CHP	CHC	Secondary Hospital
Drugs and Medical Consumables					
Essential Medicines					
Syringe 2ml Luerdisp/needle 21 g x 1 1/2 pk 100		√	√	√	√
Needle, hypodermic, luer, 21G x 1.5" (0.80 x 40mm) disposable		√	√	√	√
Syringe 2ml Luerdisp/needle 23 g x 1 1/2 pk 100		√	√	√	√
Needle, hypodermic, luer, 23G x 1.25" (0.60 x 30mm) disposable				√	√
Needle 24G, Disp. sterile				√	√
Syringe, disp, 2ml, sterile		√	√	√	√
Syringe 5ml/needle 21g x 1/12 pk 100		√	√	√	√
Syringe 10ml Luerdisp 100		√	√	√	√
Syringe 20ml Luerdisp pk 100				√	√
Tube infant feeding 8 FG PK 100 disposable					√
Tube infant feeding 10 FG PK 100 disposable					√
Tube infant feeding 14 FG PK 100 disposable					√
Tube infant feeding 16 FG PK 100 disposable					√
Tape umbilical 25mm x 3mm				√	√
Abdominal (Sanitary) Pads,Pcs		√	√	√	√
Adhesive Plaster/Tape 2.5cm x 5m,Roll		√	√	√	√
Adhesive Plaster/Tape 5cm x 5m,Roll		√	√	√	√
Adhesive Plaster/Tape 7.5cm x 5m,Roll				√	√
Apron protection Surg. Washable,Pcs		√	√	√	√
Aspirator (Single Valve Syringe),pcs					√
Bag. Urine collecting 1000ml,Pcs					√
Biohazard Plastic Bag,Pcs		√	√	√	√
Black braided silk 20,45cm,3/8circle 24mm cutting needle				√	√
Clogs. Ops. Size 3839,Pair					√
Clogs. Ops. Size 4041,Pair					√
Clogs. Ops. Size 4243,Pair					√
Clogs. Ops. Size 4445,Pair					√
Drapes Surg. 100% cotton,Pcs					√
Elastic Gauze Bandage 8cmx4m,Roll		√	√	√	√
Elastic Gauze Bandage, 8cm x 4m		√	√	√	√
Fluprescein, diagnostic eye strips					√
Gauze Bandage, N17, 10cm x 4.5m,Roll		√	√	√	√
Gauze Bandage, N17, 5cm x 4.5m,Roll		√	√	√	√
Gauze Bandage, N17, 7.5cm x 4.5m,Roll		√	√	√	√
Gauze, hydrophilic, 90cm x 91m, 12 x 8 mesh, hospital				√	√
Glucometer with strips					√
Handle for surgical blades, no.4 (major Surgery)					√
Medicine Bags/Dispensing Envelopes		√	√	√	√
Needle, spinal 20G					√
Needle, spinal 21G					√
Needle, spinal 22G					√

	Community	MCHP	CHP	CHC	Secondary Hospital
Drugs and Medical Consumables					
Essential Medicines					
Needle, spinal 24G					√
Needle, spinal 25G					√
Needle, spinal 26G					√
Patient Gown,Pcs		√	√	√	√
Plain catgut, 75cm, size 0 with needle					√
Plain catgut, 75cm, size 1 with needle					√
Plain catgut, 75cm, size 2 with needle					√
Plain catgut, 75cm, size 20 with needle					√
Plain catgut, 75cm, size 3 with needle					√
Plain catgut, 75cm, size 30 with needle					√
Plaster of Paris Bandage 10cmx2.7m, Roll					√
Rolls Plaster of paris bandages, 7.5cm x 2.7m (3" x 3yards)					√
Plastic Bags,pcs		√	√	√	√
Polyester braided, 75cm, size 0 with needle					√
Polyester braided, 75cm, size 1 with needle					√
Polyester braided, 75cm, size 2 with needle					√
Polyester braided, 75cm, size 20 with needle					√
Polyester braided, 75cm, size 30 with needle					√
Safety Glasses/Goggles,Pair					√
Sanitary Towels,pcs		√	√	√	√
Suction catheter, 08, sterile disp					√
Suction catheter, 10, sterile disp					√
Suction catheter, 14, sterile disp					√
Surgical Gowns. Washable		√	√	√	√
Sutures Polypropylene 2/0					√
Synth.Sut.abs (polyglycolic acid) 0, 70cm, 1/2 circle 26mm roundbodied needle					√
Synth.Sut.abs (polyglycolic acid) 0, 70cm, 3/8 circle 30mm cutting needle					√
Synth.Sut.abs (polyglycolic acid) 2, 75cm, 1/2 circle 30mm roundbodied needle					√
Synth.Sut.abs (polyglycolic acid) 20, 70cm, 1/2 circle 26mm roundbodied needle					√
Synth.Sut.abs (polyglycolic acid) 20, 70cm, 3/8 circle 30mm cutting needle					√
Synth.Sut.abs (polyglycolic acid) 30, 45cm, 3/8 circle 19mm cutting needle					√
Synth.Sut.abs (polyglycolic acid) 30, 70cm, 1/2 circle 17mm roundbodied needle					√
Synth.Sut.abs (polyglycolic acid) 30, 70cm, 1/2 circle 18mm roundbodied needle					√
Testifren Siems Albustic (Urine) Kit,Pcs					√
Tourniquet, Rubber		√	√	√	√

	Community	MCHP	CHP	CHC	Secondary Hospital
Drugs and Medical Consumables					
Essential Medicines					
Towels, Theatre					√
Trousers. Small. Surg. Washable					√
Tube, Duodenal, Rhyles CH20cm, Disp, Sterile					√
Tube, Feeding (NasoGastric) CH50cm, Disp, Sterile					√
Tunic surgical. Large washable					√
Tunic surgical. Medium washable					√
Tunic surgical. Small washable					√
Urine Dip sticks					√
IV Giving set		√	√	√	√
Urinal drainage bag. 200ml 85cm tube, sterile, with non return valve and tap					√
Resuscitation bag, ambu type, infant, black rubber, with mask					√
Resuscitation bag, ambu type, adult, black rubber, with mask					√
Vaseline Gauze		√	√	√	√
EDTA bottle					√
VTE prophylaxis measures for high risk patients - enoxaparin, 40mg injection					√
Finger lancet				√	√
Syringe with 25-gauge needle for anesthetic administration					
Vaginal speculum					√
Antiseptic surgical scrub wash (iodine/chlorhexidine)				√	√
Antiseptic surgical site prep (iodine/chlorhexidine)				√	√
Anti Human Globulin (AHG)					√
Blood grouping serum Anti A					√
Blood grouping serum Anti B					√
Blood grouping serum Anti AB					√
Blood grouping serum Anti D					√
Rapid test kit for Hepatitis B (HBS Ag)					√
Rapid test kit for Hepatitis C (HCV)					√
Rapid test kit for syphilis (TPHA)					√
Blood bags (450 mls)					√
Blood bags (250 mls)					√
Blood grouping plate					√
Blood giving set					√
Disinfectant chlorhexidine Digluconate - Solution - 5% (1000ml)				√	√
Low Ionic Strength Solution (LISS) 1litre					√
Rapid malaria test kit		√	√	√	√
Rapid HIV/AIDs test kit		√	√	√	√
Cyclophosphamide - Injection - 500mg					√
Cyclophosphamide - Tablets - 500mg					√
Fluorouracil - Injection - 50mg/ml					√

	Community	MCHP	CHP	CHC	Secondary Hospital
Drugs and Medical Consumables					
Essential Medicines					
Methotrexate - Injection - 2.5mg/ml					√
Vincristine Sulphate					√
Tamoxifen tablets - 5mg					√

LABORATORY

	Community	MCHP	CHP	CHC	Hospital	Reference Center
Drugs and Medical Consumables						
Laboratory						
Proteinuria & Glucosuria						
Muti stick for urinalysis		√	√	√	√	√
Malaria RDT	√	√	√	√	√	√
Field stain A&B,		√	√	√	√	√
Normal saline		√	√	√	√	√
HCG		√	√	√	√	√
Sabouraud Agar					√	√
leishman stain					√	√
Rota Kit					√	√
Crypto Kit					√	√
Leishmania Kit					√	√
Giardia Kit					√	√
Cysticercosis Ab					√	√
Amoebiasis Ab					√	√
Leishmania Ab					√	√
Giardiasis Ab					√	√
Cryptosporidium Ag					√	√
Rota Virus Ag					√	√
Immersion oil					√	√
Gram Staining Kit		√	√	√	√	√
Crystal violet Stain					√	√
Mueller Hinton Agar					√	√
MacConkey Agar					√	√
Nutrient Agar					√	√

	Community	MCHP	CHP	CHC	Hospital	Reference Center
Drugs and Medical Consumables						
Laboratory						
Columbia Agar					√	√
Chocolate Agar					√	√
Blood Agar					√	√
Haematocrit Tubes					√	√
Ammonium Oxalate solution					√	√
Hand Sanitizer	√	√	√	√	√	√
Sodium Metabisulphite		√	√	√	√	√
EDTA Anticoagulant				√	√	√
Tulks Solution(WBC)		√	√	√	√	√
Ammonia Solution 35%					√	√
Giemsa Stain Solution		√	√	√	√	√
Retic View Stain Kit		√	√	√	√	√
May Grunwald Stain					√	√
Lugols iodine stain					√	√
Rexoguard Antseptic Disinfectant					√	√
Menthylene Blue		√	√	√	√	√
TB Ziehl-Neelsen Kit				√	√	√
Faecal Occult Blood Kit		√	√	√	√	√
H Pyloric Ab Dip strip			√	√	√	√
Hepatitis A Ag Dipstrip					√	√
HBsAg Dipstrip					√	√
HBsAg Combo IgG/IgM			√	√	√	√
HCV Dipstrip					√	√
Syphilis Rapid Test			√	√	√	√
Determine,SD Bioline,&Unigold		√	√	√	√	√
Haemoglobin Glycated		√	√	√	√	√
Total Thyroxine (T4)					√	√
Triiodothyronine (T3)					√	√
Thyroid Stimulating Hormone					√	√
Lutenizing Hormone (LH)					√	√
Follicle Stimulating Hormone (FSH)					√	√
Prolactin					√	√
Progesterone					√	√
Prostate Specific Antigen					√	√
C- Reactic Protein Latex					√	√
HBV Profile		√	√	√	√	√

	Community	MCHP	CHP	CHC	Hospital	Reference Center
Drugs and Medical Consumables						
Laboratory						
Harris Hematoxylin				√	√	√
Ornge G-6 Solution					√	√
Plychronic Solution EA-50					√	√
Ethanol					√	√
Xylene		√	√	√	√	√
HCL		√	√	√	√	√
Nitic Acid					√	√
Chloroform					√	√
Formalin					√	√
DPX Mountant					√	√
Total Protein					√	√
Albumin Kit					√	√
Bilirubin Total Direct kit					√	√
Bilirubin Direct Kit					√	√
SGOT Kit					√	√
SGPT Kit					√	√
Alkaline Phosphatase Kit					√	√
Glucose Kit / Glucose Strip					√	√
Uric Acid Kit				√	√	√
Creatinine Kit				√	√	√
Urea Kit				√	√	√
Sodium Kit				√	√	√
Potassium Kit					√	√
Chloride Kit					√	√
Calcium Kit					√	√
Acid Phosphatase Kit					√	√
Creatinine Kinase MB Kit					√	√
Creatinine Kinase NAC Kit					√	√
Cholesterol Kit					√	√
Cholesterol HDL Kit					√	√
Cholesterol LDL Kit					√	√
Phospholipids Kit					√	√
Total Lipids Kit					√	√
Triglycerides Kit					√	√
Total Protein Urine					√	√
G6 PDH Kit					√	√
Rheumatoid Factor Kit					√	√

	Community	MCHP	CHP	CHC	Hospital	Reference Center	
Drugs and Medical Consumables							
Laboratory							
CSF Protein					√	√	
Blood Grouping A B O &RH(D E e C c)					√	√	
Viral load testing package (kits and reagents including QC)					√	√	
Cancer marker test kits					√	√	
Laboratory Glassware							
Conical Flask (250ml,500ml, 1000ml)					√	√	
Beakers (50ml, 250ml, 500ml, 1,000ml)		√	√	√	√	√	
Measuring Cylindres (10ml,50ml, 500ml, 1,000ml)		√	√	√	√	√	
Test Tubes (5ml, 10ml)		√	√	√	√	√	
Microplate					√	√	
Culture Flask (250ml, 500ml, 1,000ml)					√	√	
Culture Tubes with screw caps					√	√	
Grouping Tiles					√	√	
Volumetric Flask (250ml, 500ml, 1,000ml)					√	√	
10ml Container with screw cap					√	√	
Graduated Bottles with screw cap		√	√	√	√	√	
Lab Tests							Public Health Lab
HAEMATOLOGY							
RED CELL INDICES							
Full Blood Count					√	√	
Haematology (Hb)		√	√	√	√	√	
Haematocrit or Packed Cell Volume (PCV)					√	√	
White Blood Cell Count (WBC)		√	√	√	√	√	
White Blood Cell differential count (diff count)					√	√	
Erythrocytes Sedimentation Rate (ESR)					√	√	
Red Blood Cells Count (RBC)					√	√	
Reticulocytes (RETICS)					√	√	
Blood Films		√	√	√	√	√	

	Community	MCHP	CHP	CHC	Hospital	Reference Center
Drugs and Medical Consumables						
Laboratory						
BLOOD COAGULATION TESTS						
Prothrombin time (PT)					√	√
Platelet					√	√
Bleeding and clotting time					√	√
ANEAMIA (Heamolysis)						
Malaria Parasite (MP)		√	√	√	√	√
Sickle cell disease (sickling)				√	√	√
Hb Electrophoresis					√	√
G-6-PDH					√	√
GROUPING						
Blood Group typing		√	√	√	√	√
Rhesus antibodies (COOMBS)					√	√
BIOCHEMISTRY/ CLINICAL CHEMISTRY						
Blood Glucose Level (Diabetes Monitoring)						
Random Blood Sugar (FROM POCT TO LAB BASED)		√	√	√	√	√
Glucose Tolerance tests					√	√
Glycocolated Haemoglobin (HbA1c)					√	√
Urine glucose level		√	√	√	√	√
Kidney Function Test (Kft)						
Urea				√	√	√
Creatinine					√	√
Uric Acid					√	√
Creatinine Clearance Tests					√	√
Electrolytes						
Sodium					√	√
Potassium					√	√
Calcium					√	√
Phosphorous					√	√
Chloride					√	√
Magnesium					√	√
Liver Function Test (Lft)						
Liver Function Tests					√	√
Total Protein, Albumin, Globulin					√	√
Total Bilirubin					√	√
Direct Bilirubin					√	√
SGOT					√	√

	Community	MCHP	CHP	CHC	Hospital	Reference Center	
Drugs and Medical Consumables							
Laboratory							
SGPT					√	√	
Alkaline Phosphatase					√	√	
Gamma Glutamyl Transferase (GGT)					√	√	
Lipids							
Cholesterol					√	√	
Triglycerides					√	√	
LDL Cholesterol					√	√	
HDL Cholesterol					√	√	
VLDL Cholesterol							
Cardiac Enzymes Tests							
Troponin (Cardiac Marker)						√	
CK-NAC					√	√	
CKMB					√	√	
Lactate Dehydrogenase (LDH)					√	√	
Pancreatic And Gastrointestinal Function							
Serum or plasma amylase					√	√	
Feacal occult blood				√	√	√	
Helicobacter Pyloric (H.Pylori)				√	√	√	
Pregnancy test		√	√	√	√	√	
MICROBIOLOGY							
Routine test for biological specimen		√	√	√	√	√	
Culture and Sensitivity					√	√	√
NTD Bacterial detection					√	√	√
TB Sputum Routine for AAFB		√	√	√	√	√	√
Skin snip (Oncho)			√	√	√	√	
Leishmania diagnosis			√	√	√	√	√
Blood microcopy (Tryp, Filaria)			√	√	√	√	√
Yeast and mould identification			√	√	√	√	
Yeast/mould MIC susceptibility testing					√	√	
Molecular Parasitology/Mycology						√	√
Other specific parasite detection						√	√
SEROLOGY/IMMUNOLOGICAL ASSAYS							
Bacterial Antigen						√	√
C-Reactive Protein						√	√

	Community	MCHP	CHP	CHC	Hospital	Reference Center	
Drugs and Medical Consumables							
Laboratory							
Thyroid Function Tests						√	√
Chlamydia Antigen						√	√
VIROLOGY /STI'S SCREENING							
VIRAL Hepatitis Profile (HBV) (Rapid and ELISA PCR)		√	√	√	√	√	
Hepatitis C Virus (HCV) (Rapid and ELISA PCR)		√	√	√	√	√	
HIV I and II (Recombigen)		√	√	√	√	√	√
CD4 Count (POCT)				√	√	√	√
Viral load						√	√
Viral sequencing							√
Syphilis		√	√	√	√	√	√
CANCER MARKERS							
Prostate Monitoring ACP/PACP and PSA				√	√	√	√
CEA						√	√
AFP						√	√
CA 15-3						√	√
CA 19-9						√	√
CA 125						√	√
HCG						√	√
SURVEILLANCE							
ENTERIC BACTERIA						√	√
HIV						√	√
INFLUENZA						√	√
TB culture (MDR/XDR)						√	√
MEASLES AND RUBELLA						√	√
YELLOW FEVER						√	√
PBM						√	√
VHF						√	√
ROTA VIRUS						√	√
QUALITY ASSURANCE						√	
EQA PT						√	√
ACCRDIATION (SLMTA/SLIPTA)					√	√	√
Equipment							
Essential equipment							
Multifocal light microscope		√	√	√	√	√	
Fluorescence microscope					√	√	
Inverted Microscope						√	

	Community	MCHP	CHP	CHC	Hospital	Reference Center
Drugs and Medical Consumables						
Laboratory						
Automated Biochemistry analyzer					√	√
Automated Hematology analyzer					√	√
Coagulation machine					√	
Embedding machine					√	
Tissue weighing scale					√	
Automated erythrocytes sedimentation rate					√	
Water distillation unit / deioniser		√	√	√	√	√
Spectrophotometer					√	
Microtome					√	
Refrigerator					√	√
Solar refrigerator		√	√	√	√	√
Deep freezer (-20°C)					√	√
Deep freezer (-80°C)					√	√
Hand centrifuge		√	√	√		
Centrifuge				√	√	√
Micro centrifuge					√	
Ultracentrifuge						√
Incubator		√	√	√	√	√
Cooling Incubator					√	√
Anaerobic culture jar glass					√	√
Autoclave		√	√	√	√	√
Sterilizer		√	√	√	√	√
Biosafety cabinet Class II					√	√
Bio safety Cabinet III						√
Glove box						√
Cytometer						
Quantitative PCR machine					√	√
Conventional PCR machine					√	
GeneXpert machines					√	√
Automated Hormone profile analyzer					√	√
Haemocue machines		√	√	√		
WHO Haemoglobin colour match		√	√	√		
Water bath		√	√	√	√	√

	Community	MCHP	CHP	CHC	Hospital	Reference Center
Drugs and Medical Consumables						
Laboratory						
Electrophoresis apparatus					√	√
Gel electrophoresis apparatus					√	√
Thermometer		√	√	√	√	√
Shaker					√	√
Hot/Magnetic stirrer plate					√	√
Balance		√	√	√	√	√
Microbalance					√	√
Bunsen Burner		√	√	√	√	√
Gas Burner with cylinder		√	√	√		
Stopwatch		√	√	√	√	√
Serological pipette sets					√	√
Micropipette sets		√	√	√	√	√
pH tester		√	√	√	√	√
Hot air oven					√	√
UV Torch					√	√
Transilluminator					√	√
Spirit lamp		√	√	√	√	
Pipette stands		√	√	√	√	√
Vortex					√	√
Automated pipette pump					√	√
Manual pipette pump		√	√	√	√	√
Test tube washer		√	√	√	√	√
Glassware						
Wire loops					√	√
Nitrile disposable gloves		√	√	√	√	√
powdered-disposable gloves	√	√	√	√	√	√
protective eye goggles		√	√	√	√	√
Face shields		√	√	√	√	√
Laboratory coats		√	√	√	√	√
Sharps container	√	√	√	√	√	√
Dustbin	√	√	√	√	√	√
laboratory shower					√	√
Fire extinguisher		√	√	√	√	√
Fire blankets		√	√	√	√	√
First aid kit	√	√	√	√	√	√
laboratory boots		√	√	√	√	√
laboratory head gear		√	√	√	√	√

	Community	MCHP	CHP	CHC	Hospital	Reference Center
Drugs and Medical Consumables						
Laboratory						
laboratory nose mask		√	√	√	√	√
Aprons		√	√	√	√	√
Lab log books		√	√	√	√	√
Essential Consumables						
Petri dish					√	√
Slide racks		√	√	√	√	√
Tube racks		√	√	√	√	√
Pasteur pipette		√	√	√	√	√
Glass slides		√	√	√	√	√
Coverslips		√	√	√	√	√
Cryovial tubes		√	√	√	√	√
Blood collection tubes (Plain, EDTA, Heparin, Gel, Citrate, Fluoride)		√	√	√	√	√
Westergren tube and stand					√	√
Wintrobies					√	√
Capillary tubes		√	√	√	√	√
Centrifuge Tube (Conical)					√	√
Sterile loops/forceps					√	√
Microwell plate					√	√
Pipette Tips					√	√
Filtered pipettes tips					√	√
Glass dryer			√	√	√	√
Hair dryer					√	√
Plastic cuvettes					√	√
Glass cuvettes		√	√	√	√	√
Blood Lancet		√	√	√	√	√
Cotton wool		√	√	√	√	√
Needles and syringes		√	√	√	√	√
laboratory tissues (absorbent)		√	√	√	√	√
Autoclave bags					√	√
Biohazard bags (small medium and large)	√	√	√	√	√	√
Butterfly needles					√	√
Shipping boxes			√	√	√	√
Tourniquet			√	√	√	√
Haemocue cuvettes		√	√	√		
Blood transfusion						

	Community	MCHP	CHP	CHC	Hospital	Reference Center
Drugs and Medical Consumables						
Laboratory						
Paediatric blood giving set					√	
Adult blood giving set					√	
Thermal Blood Refrigerator					√	
Solar Blood Refrigerator					√	
Consumables (cotton wools, syringes & Needle, Plaster, Examination/Surgical Gloves, Alcohol Wipe, Chloroxidine, PPEs, etc)					√	
ABO and Rh (D, E, e, C, c) grouping sera					√	
450mls Single Blood Bag					√	
250mls Single Blood Bag					√	
Double Blood Bag					√	
Triple Blood Bag					√	
Quadruple Transfer Pack (Container with Male Luer Adapter)					√	
HIV rapid test					√	
12 X 75mm Glass/Plastic Test Tube					√	
10 X 75mm Test Tube					√	
Vacuum Test Tube Plain					√	
Vacuum Test Tube with EDTA					√	
Anti human globulin					√	
LISS (Low Ionic Strength Solution)					√	
Carrier boxes (for 2-3 units of blood)					√	
Scales for weighing blood					√	
Crossmatching Centrifuge					√	
Wet Incubator					√	
Bathroom Weighing Scale for Blood Donor					√	
Haemoglobin Meters (Haemocue Machine)		√	√	√	√	
Complete Automated ELISA Machine					√	√
ELISA reader and washer software					√	√

	Community	MCHP	CHP	CHC	Hospital	Reference Center
Drugs and Medical Consumables						
Laboratory						
ELISA Assay for HBsAg (Screen for both Igm and IgG Antibody)		RST ⁹	RST	RST	√	√
ELISA Assay for HCV (Screen for both Igm and IgG Antibody)		RST	RST	RST	√	√
ELISA Assay for HIV I & II (Screen for both Igm and IgG Antibody)		RST	RST	RST	√	√
ELISA Assay for Syphilis (Screen for both Igm and IgG Antibody)		RST	RST	RST	√	√
Dry Incubator		√	√	√	√	
Microlitre Pipet (10 - 100μ, 100 - 1000μ and 100 - 200μ)						√
Data Collection Tools (Patient Register, Donor Register, Blood Group Certificate, Donation Certificate for 3th and 10th Donations, etc)		√	√	√	√	
IEC and BCC Materials (Information Leaflet, Posters, Badges, Stickers, Banners, PA System, Shields etc)		√	√	√	√	√
Water Distillation Plant		√	√	√	√	√
Bleeding Couchers and Bleeding Chairs				√	√	√
7.5 KVA Standby Generator		√	√	√	√	√
Laboratory accessories and furnitures						
Computers and accessories					√	√
Uninterrupted power supply (UPS)		√	√	√	√	√
Air conditioners					√	√
Incinerators		√	√	√	√	√
Air extractors					√	√
laboratory stools, chairs, tables,		√	√	√	√	√
Couch (NTBS)						√
Beds					√	√

⁹ Rapid Screening Test

	Community	MCHP	CHP	CHC	Hospital	Reference Center
Drugs and Medical Consumables						
Laboratory						
Patient sampling adjustable chair		√	√	√	√	√
laboratory manual		√	√	√	√	√
Stationery		√	√	√	√	√

TRANSPORTATION

	Community	MCHP	CHP	CHC	Hospital	
Transportation					District	Regional
Transportation for outreach services						
Motor bikes			√	√	√	√
Bicycles	√	√	√	√		
Vehicles					√	√
Transportation for Referral services						
Ambulances					√	√

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