REVIEW OF THE IMPLEMENTATION OF THE **NATIONAL HEALTH SECTOR STRATEGIC PLAN**

2010-2015

12 February 2016

Government of Sierra Leone

Ministry of Health and Sanitation

Funded by the Grand Duchy of Luxembourg and the European Union and technically supported by the World Health Organization

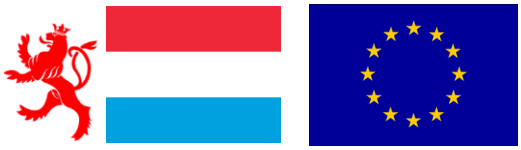


TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ABBREVIATIONS AND ACRONYMS

AIDS	Acquired Immuno-Deficiency Syndrome
ANC	Ante Natal Care
AOP	Annual Operational Plan
ART	Anti-Retroviral Treatment
BEmONC	Basic Emergency Obstetric and New-born Care
BPEHS	Basic Package of Essential Health Services
CAG	Community Advocate Groups
CBHI	Community Based Health Insurance
CCM	Country Coordinating Mechanism
CEBS	Community Event-Based Surveillance
CEmONC	Comprehensive Emergency Obstetric and New-born Care
CHC	Community Health Centre
CHO	Community Health Officer
CHP	Community Health Post
CHW	Community Health Worker
CMH	Commission on Macro-economics in Health
CMO	Chief Medical Officer
CMR	Child Mortality Rate
CMS	Central Medical Stores
COMAHS	College of Medicine and Allied Health Sciences
CPD	Continuing Professional Development
CSO	Civil Society Organisation
CRVS	Civil Registration and Vital Statistics
DACO	Development Assistance Coordination Office
DERC	District Ebola Response Centre
DFID	Department for International Development-UK
DHCC	District Health Coordination Committee
DHIS	District Health Information System
DHMT	District Health Management Team
DHS	Demographic and Health Survey
DHIS	District Health Information System
DOT	Delivery Operational Team
DPC	Disease Prevention and Control
DPPI	Directorate of Policy, Planning and Information
EML	Essential Medicines List
EMR	Electronic Medical Records
EVD	Ebola Virus Disease
FHCI	Free Health Care Initiative (April 2010)
FMC	Facility Management Committee
FP	Family Planning
GOSL	Government of Sierra Leone
HCF	Health Care Financing
HCWM	Health Care Waste Management
HIS	Health Information System
HIV	Human Immunodeficiency Virus

HLTF	High Level Taskforce for Financing
HMIS	Health Management Information System
HR / HRH	Human Resources / Human Resources for Health
HRD	Human Resource Development
HRIS	Human Resource Information System
HSC	Health Service Commission
HSCC	Health Sector Coordinating Committee
HSSP	Health Sector Strategic Plan
HSSG	Health Sector Steering Group
ICCM	Integrated Community Case Management
IDSR	Integrated Disease Surveillance and Response
IHP+	International Health Partnership
IHPAU	Integrated Health Project Administrative Unit
IHRIS	Integrated Human Resource Information System
IP	Implementing Partners
IPC	Infection Prevention and Control
ITN	Insecticide Treated Net
IYCF	Infant and Young Child Feeding
JPWF	Joint Program of Work and Funding
KII	Key Informant Interviews
KPI	Key Performance Indicators
LMIS	Logistic Management Information System
MCH	Maternal and Child Health
MCHP	Maternal and Child Health Post
MDA	Ministries, Departments and Agencies
MDG	Millennium Development Goals
MEST	Ministry of Education, Science and Technology
M&E	Monitoring and Evaluation
mHERO	Mobile Health Worker Electronic Response and Outreach Platform
MLG&RD	Ministry of Local Government and Rural Development
MLSS	Ministry of Labour and Social Security
MMR	Maternal Mortality Ratio
MOFED	Ministry of Finance and Economic Development
MOHS	Ministry of Health and Sanitation
MOU	Memorandum of Understanding
MTEF	Medium Term Expenditure Framework
NAS	National AIDS Secretariat
NERC	National Ebola Response Centre
NGO	Non-Governmental Organisation
NHA	National Health Account
NHAP	National Health Action Plan
NHSSP	National Health Sector Strategic Plan
NHSSC	National Health Sector Steering Committee
NMP	National Medicine Policy
NPPU	National Pharmaceutical Procurement Unit
OOP	Out of Pocket Payment
OPD	Out Patient Department
OPM	Oxford Policy & Management

PBF	Performance Based Financing
PBSL	Pharmacy Board of Sierra Leone
PER	Public Expenditure Review
PHC	Primary Health Care
PHU	Peripheral Health Units (being CHC, CHP and MCHP)
PIRI	Periodic Intensified Routine Immunisation
PMTCT	Prevent Mother to Child Transmission
PPE	Protection through Provision of Equipment
PPP	Public Private Partnership
PS	Patient Safety / Permanent Secretary
QA	Quality Assurance
RCH	Reproductive and Child Health
SAM	Service Availability Mapping
SARA	Service Availability and Readiness Assessment
SECHN	Senior Enrolled Community Health Nurse
SHI	Social Health Insurance
SLA	Service Level Agreement
SLDHS	Sierra Leone Demographic and Health Survey
SLeSHI	Sierra Leone Social Health Insurance
SLL	Sierra Leone Leones (currency)
SOP	Standard Operating Procedures
SWAp	Sector Wide Approach
TB	Tuberculosis
TBA	Traditional Birth Attendant
TFR	Total Fertility Rate
TOR	Terms of Reference
UHC	Universal Health Coverage
UNDP	United Nations Development Program
UNICEF	United Nations Children Fund
UNFPA	United Nations Population Fund
VCT	Voluntary Counselling & Testing
VfM	Value for Money
VPD	Vaccine Preventable Diseases
WHO	World Health Organisation

Exchange Rates, 15 December 2015

10,000 SLL = Euro 2.239 / 1 Euro = 4,682.00 SLL

10,000 SLL = US$ 2.43 / 1 USD = 4,244.00 SLL

ACKNOWLEDGEMENTS

The review team would like to express its gratitude to the Honourable Minister of Health and Sanitation (MOHS), Dr Abu Bakarr Fofanah for meeting the team leader (together with Dr Anders Nordstrom) on the last day of the assignment. We also would like to thank the Chief Medical Officer, Dr Brima Kargbo and Dr Samuel A. Sheku (SAS) Kargbo, Director Health Systems Policy, Planning & Information for the support and advice we received from both of them during the our stay in-country. The review team would like to express its sincere gratitude to all Directors and senior managers of the MOHS for sharing their time and valuable insights with us during our interviews.

We are very grateful for Mr Alhassan Joseph Kanu, Director of the Decentralisation Secretariat at the Ministry of Local Government & Rural Development for his guidance on the issues and challenges of decentralization in the health sector. We would like to thank Mr Kebe, Director Development Assistance Coordinating Office of the Ministry of Finance and Economic Development not only for his time and ideas, but also for providing the review the necessary financing data (government and development partners). We would like to express our thanks to the Ministry of Education, Science and Technology and Dr Mohamed Samai, Provost of the College of Medicine and Allied Health Sciences; Mr Lyntton Michael Tucker, Country Coordinator of the Global Fund Country Coordination Mechanism (CCM); Dr Steven M. Jones, health advisor of McKinsey for the President Ebola Emergency Office (at State House).

The visits of the review team to Port Loko and Kambia districts proved essential to understanding the challenges faced by the district health authorities, members of the District Health Management Teams, the District Hospitals, the training schools and the District Councils in responding to the EVD epidemic while having the responsibility of continuing to provide services and care to the rural populations through the existing Peripheral Health Units. We are grateful for their time and the information they shared with us.

We also would like to thank the development partners that were willing to meet with us at the beginning and at the end of our assignment, providing us with important and relevant information.

Finally, many thanks are due to the IHP+ secretariat for funding this assignment, and to the Head of the WHO Country Office, Dr Anders Nordstrom and the Health systems strengthening team in WHO that made this review possible. Without their inputs and support, our information base would have been much more limited. We would like to thank in particular Ms Sowmya Kadandale, for her proactive guidance to ensure that the review team could understand the background of the performance of the health sector as well as coordinating the overall review process.

The two national colleagues, Mr Lamin Bangura and Mr Melvin Conteh provided essential inputs and support to the international team members to understand the day-to-day operations of the sector.

Mr Jarl Chabot, team leader
Mr Abebe Alebachew
Mr Régis Hitimana
Mr Lamin Bangura
Mr Melvin Conteh

PERFORMANCE NATIONAL HEALTH SECTOR 2008 - 2013: SELECTED INDICATORS

Table 1: Performance of national health sector 2008-2013: baseline, targets and achievements

Indicators	Baseline (DHS 2008)	2015 Target NHSSP	Achievement DHS,
IMPACT INDICATORS			
Infant mortality rate (per 1,000 live births)	89 /1,000	50 / 1,000	92/1000
Under-five mortality rate (per 1,000 live births)	140 /1,000	90 / 1,000	156 / 1000
Maternal mortality ratio (per 100,000 live births)	857 /100.000	600 / 100,000	1,165 /100,000
Prevalence of HIV (% of pop. aged 15–49)	1.50%	1.20%	1.5%
Total Fertility Rate (TFR)	5.1	4	4.9
OUTCOME / OUTPUT INDICATORS: MNCH			
% Births attended by skilled staff (Public and	42%	90%	54%
% Births attended by TBA / CHW	45	NA	35%
% Pregnant Women making 4 ANC visits	> 50	90	76
Contraceptive prevalence rate (% of women 15–	14%	30%	16%
Unmet need among married women for FP	28%	NA	25%
% Children < 1 yr fully vaccinated	40	90	58
OUTCOME / OUTPUT INDICATORS: Nutrition			
Prevalence of Underweight (Wt/Age) among children 6-59 months (2SD)	21%	10%	16%
Prevalence of Stunting (Ht/Age) among children 6-59 months (2SD)	36%	NA	38%
Prevalence of Wasting (Ht/Wt) among children 6-59 months (2SD)	10%	NA	9%
OUTCOME / OUTPUT INDICATORS: Communicable Diseases			
# Health facilities with VCT / PMTCT / ARV	398 / 351 / 111	750 / 1010 / 170	708 / 691 / 136
% children sleeping under LLITN night before	26%	55	49%
TB Case Detection Rate	NA	40	38
TB Treatment success rate	NA	85	87
OUTCOME / OUTPUT INDICATORS Human Resources			
Key health professional staff by cadre per 1,000 population	Doctors: 0.02	Doctors: 0.05	Doctors: 0.04
	Nurses: 0.18	Nurses: 0.5	Nurses: 0.7
	Midwives: 0.02	Midwives: 0.1	Midwives: 0.05
OUTCOME / OUTPUT INDICATORS: Water and Sanitation			
% of population with access to safe drinking water	60%	90%	59%
Percentage of households with improved sanitation	12%	50%	10%
OUTCOME / OUTPUT INDICATORS: Health Financing			
Total public health spending per capita.	$ 12.2	$ 26.6	$ 29.7
GoSL Expenditure on health as % of GDP / total GoSL Expenditure	8.5%	15%	11.2%

Sources: Joint Programme of Work and Funding, Country profile, page vi and pages 18-22; Sierra Leone Demographic and Health Survey 2008 and 2013; National Health Accounts 2013

EXECUTIVE SUMMARY

This Executive Summary provides a brief description of the achievements, challenges and recommendations both from an overall sector perspective and for each 'Pillar' of the National Health Sector Strategic Plan (NHSSP).

A. Overall achievements, challenges and recommendations

Sierra Leone has developed and put in place the right sector polices and strategies (NHSSP, Joint Programme of Work and Funding (JPWF), Health Compact, annual operational plans (AOPs) and joint accountability frameworks), in line with the overall development plan of the country – the Agenda for Prosperity (A4P 2013-2018). The sector was moving in the right direction before the onset of the Ebola Virus Disease (EVD) outbreak. During the 2010-2013 period, it developed the Basic Package of Essential Health Services (BPEHS) and introduced the Free Healthcare Initiative (FHCI) to improve maternal and child health services, ensuring that all the necessary commodities are available. However, despite these efforts, the country was not able to meet the set targets as documented in Sierra Leone Demographic and Health Survey (SLDHS) 2013. None of the impact indicators showed improvement or come close to the target.

On the other hand, although most of the outcome indicators did not meet the set targets, increasing coverage of important services were registered: (i) the target set for the antenatal care (ANC) visits was met; (ii) births attended by skilled staff increased by 53 % from the baseline while those attended by traditional birth attendants (TBAs) and community health workers (CHWs) declined by 22%; (iii) contraceptive prevalence rate increased by 14% while unmet FP needs declined by 11%; (iv) the coverage for fully immunized children increased by 45%; and (v) while prevalence of underweight reduced by about 10%, prevalence of stunting worsened by about 6%.

Unfortunately, the efforts to improve health outcomes were diverted in 2014 and 2015 in order to respond to the Ebola emergency that had a significant negative effect on the gains made before the outbreak. EVD not only hindered the achievement of the sector priorities, but also had a negative effect on the economy, the education sector, the social fabric of the communities and on the various components for health systems, such as human resources, logistics and supplies and Information systems. The country only managed three years of NHSSP implementation, partially explaining the inadequate achievement of the sector targets.

Drawing from the EVD experience, various interventions had positive effects. Under the leadership of the State House, the anti-Ebola campaign established central coordination and monitoring teams (functional and well-funded National Ebola Response Centre (NERC) and District Ebola Response Centres (DERCs)) to refocus strengthening the surveillance and referral systems. In response to the epidemic, Sierra Leone developed the Health Sector Recovery Plan (2015-2020), providing a clear road map (five clear priorities and four well defined phases (Getting to Zero; Early Recovery; Recovery and Functional health system), which is being implemented to respond to the EVD and to shift focus back towards the Agenda for Prosperity. Structures for coordination and consultations exist (although they need to be more functional). Additionally, an adequate number of health

facilities at district level and below are in place and surveillance systems are being installed. The policy and legal frameworks for the health system (decentralization, supply chain, human resources for health) are largely available, but require enforcement and more funding.

There are also important challenges that need to be addressed, both within the sector and beyond. Within, the sector is underfunded by international standards and there are serious challenges around efficiency of resource use and achieving value for money. There appear to be too many facilities for the total number of population and an over-reliance on facility level services rather than using community systems. The revised BPEHS of 2015 does not seem to make services more affordable and efficient. Although the FHCI has improved utilisation, health services are still underutilised, mainly due financial and cultural barriers. Outside the sector, operations are also negatively affected by two overall government policies: devolution and credibility of the budgeting process, as explained below:

Devolution – the functional responsibility of the health sector is fully devolved to the districts, but decision on expenditures remains largely centralized, which makes the Local Councils act only as custodians of funding without any authority to make service providers and managers accountable. For instance, the management of human resources is marred by a lot of inefficiencies (centralized management, inequitable distribution, weak accountability mechanisms, no hiring and firing, overreliance on volunteers). There seems a strong case to re-examine overall government levels and to reform the civil service management.

Budgeting process – Medium-term expenditure framework (MTEF) exists, but in practice, the budget is conducted annually and the medium-term forecasts are weak and poorly linked to policy or plans. Budget ceilings are provided, but often change during the planning process. Furthermore, approved budgets are not released on time, making the practical translation of annual plans at all levels impossible. Additionally, many health workers at primary level (Community Health Centres (CHCs, Community Health Posts (CHPs) and Maternal and Child Health Posts (MCHPs)) are providing services, but have not been paid for a long time and are thus obliged to make ends meet and ask patients contributions for their work.

Coordination – Consultation and coordination of the MOHS with other government offices is less that desired, e.g., (i) between MOHS and Ministry of Finance and Economic Development; (ii) between MOHS and Ministry of Local Government and Rural Development (MLG&RD) in devolving some of its functions and (iii) between MOHS and the Ministry of Education, Science and Technology (MEST). The Ebola-related interventions undertaken by the GOSL have been understandably focused on saving lives and providing emergency response through vertical interventions outside the available structures of the health system. This has reduced the opportunity to strengthen the implementation capacity of the existing national and district structures. These structures should be re-enforced again in 2016.

From the overview above, we suggest ten overarching recommendations to be addressed in the coming two years (2016 - 2017):

- Strengthen leadership and management capacity (leadership training) as a matter of

urgency
- Align the NHSSP II with the objectives and activities of the Health Sector Recovery Plan
- Set realistic targets and priorities for NHSSP II, based on known available resources
- Improve working relations between MOHS and MOFED, MEST and MLG&RD
- Bring DPs 'on plan' and involve them in the drafting of next NHSSP
- Review the performance and functions of the CHC and the distribution of health facilities nationwide
- Align the 'vertical programs' to the new NHSSP II and develop one procurement plan and one supply system for all programs
- Prepare for the transfer of payroll of staff to district levels (appoint human resources managers in DHMTs)
- Restructure and strengthen the health care financing unit within the MOHS
- Expand electronic reporting to all DHMT and CHCs.

B. Performance of the six NHSSP Pillars

Pillar 1: Leadership and Governance

Sector coordination structures have been established at national (Health Sector Coordinating Committee (HSCC), Health Sector Steering Group (HSSG) and Technical Working Groups (TWGs)) and district levels (district coordinating mechanisms) with the intent to meet regularly. Leadership and coordination of the implementation process has been strengthened after the Ebola outbreak through the active engagement of State House. The development of the Recovery Plan and the establishment of NERC, DERC and the Health systems strengthening (HSS) Hub helped to strengthen leadership and coordination. Contrary to the previous experience with the NHSSP, the interventions of the different key objectives of the Recovery Plan are mapped with their cost, contribution of different partners and funding gap. The Service Level Agreements (SLAs) will not only help to streamline and coordinate implementing partners (IPs) at the district level, but to also make their interventions more aligned and cost effective. There good working arrangements appear to exist between the DHMTs and the District Councils within the framework of partial devolution.

There is an apparent gap in ownership and commitment to translate NHSSP and JPWF into action. There were not enough consultations and consensus on the priorities, as program priorities were not aligned to and override the NHSSP and JPWF priorities. The investment in dialogue during the implementation seems quite weak or ineffective. The lack of sound fiscal space analysis behind the costed NHSSP and JPWF as well as the non-resource constrained comprehensive annual plans, contributed to the challenge of translating them into action. There is weak coordination and communication between the national directorates and the DHMTs. Coordination by DHMTs with implementing partners remains weak and IPs, by-and-large, continue to implement their own initiatives without involving DHMTs. The signed compact has not been implemented and mutual accountability mechanisms remain weak. Even prior to the EVD outbreak, Sierra Leone was already a challenging operating environment.

The additional burden of the EVD outbreak necessitated the establishment of specialized units staffed with experts who could quickly deliver results. The idea had been that the specialized teams would transfer skills and capacity to the existing MOHS structures, but lessons learned showed that

it is not feasible to build local capacity during an emergency. Consequently, the specialized structures that initially aimed at strengthening systems (HSS Hub, Integrated Health Project Administration Unit (IHPAU), FHCI, performance-based financing (PBF), etc.) have been 'driven' as projects, insufficiently working within and through existing MOHS systems and structures. There exist overlapping and competing plans and priorities at all levels. Although comprehensive planning through resource mapping started during the Recovery Planning process, the limitations of both Government of Sierra Leone (GOSL) to lead and enforce and development partners (DPs)/donors unable to make definitive future resource commitments has made the planning process weak.

There has been inadequate coordination and leadership by MOFED and MOHS in working with DPs during the implementation of NHSSP and JPWF. However, efforts are now being made to improve this relationship during the recovery plan development and implementation. There have been weak review and monitoring mechanisms at all levels of the system, as evidenced by absence of sector performance reports since 2012. The overall weak sector leadership and governance has been further complicated by two overarching government-wide public sector challenges: first, the existing centralized expenditure assignments, hampering the functioning of devolved functions; and second, the weak credibility of the budget process by MOFED that negatively affects planning and implementation of sector and district plans.

In the **short term**, there is a need to strengthen the leadership and management capacity of the MOHS and DHMTs, through providing leadership and practical team-based training. While learning from the recovery planning and implementation process, it is necessary to strengthen planning, including the need to:

a) Undertake a resource mapping exercise (Government, DPs and IPs) before kick-starting the planning process; and for DPs to respond to these requests on time
b) Lead and enforce DPs to share their resource framework using the planning calendar of the government
c) Support the SLA initiative through the development and implementation of the planning and M&E guidelines
d) Sett clear and agreed sector priorities, targets, strategies and resource allocation criteria among different competing programs, by senior and top management of MOHS.

In the **medium term**, there is a need to:

a) Streamline and coordinate different projects to work within government systems
b) Strengthen the functionality of partner coordination mechanisms and enforce all partners to be ‘on-plan’ in the short term and move towards ‘on budget’ in the medium term
c) Strengthen MOFED and MOHS working arrangement to better guide DPs involvement
d) Enforce and possibly revise the mutual accountability framework and enforcement mechanisms

In the **long term,** MOHS should consider the need to:

a) Develop and implement a capacity development plan in line with the six health system pillars with each one focus on the four elements of capacity building: structures and infrastructure, human resources, skills, tools and systems
b) Lobby the government to improve the budgeting and disbursement process (conservative budget ceiling)

c) Lobby the government to allow the functional devolution with expenditure decentralization to foster accountability by district level managers to the district councils; and in this way develop the capacity of the local councils to take more responsibility
d) Ensure the completion of the development of a new comprehensive sector plan that complements the recovery plan

Pillar 2: Service delivery

The SLDHS figures of 2013 indicate that the impact indicators, such as infant mortality rate (IMR), under-5 mortality rate (U5MR), maternal mortality ratio (MMR) and Total Fertility Rate (TFR) have remained at the same level between 2008-2013 (figures from SLDHS). While figures should be looked at with caution (definition of skilled staff, absence of all signal functions), the output / outcome indicators do show improvements, notably in the area of maternal, newborn and child health (MNCH) (Births attended by skilled staff, four antenatal visits and CPR), in HIV/AIDS, TB and malaria and in the increasing number of facilities providing Basic Emergency Obstetric Care (BEmOC) and Comprehensive Emergency Obstetric Care (CEmOC). The Basic Package of Essential Health Services (BPEHS 2010) has been revised in 2015. Since the start of the EVD outbreak in April 2014, the country has been in full 'emergency mode', successfully bringing the epidemic under control. After 17 months, the WHO formally declared the country "Ebola Free" on the 6th of November 2015. But as Yusuf Kamara, a health care worker told the audience that day: "*For us, Ebola is not over. We need your help to treat the many, many health problems we still suffer from*".

During the last 2.5 years, apart from some facility assessment reports, limited reliable information on the performance of the health sector has been provided. From interviews with staff and PHC levels, it is evident that Out Patient visits (OPD) has gone down to even lower levels than the 0.5 visits per person before the epidemic, as people feared visiting the facilities. An unknown number of HIV and TB patients did not show-up for their treatment. The BPEHS 2015 has only been partly costed through the One Health Tool (early 2014) and therefore the feasibility of its implementation remains uncertain. The MOHS is not certain whether it has the resources to implement it in full, or partly, as its costs cannot be linked to the budget made available annually by MOFED. In the districts, there is uneven distribution of the number of PHUs (CHCs, CHPs and MCHPs) and of the human resources to fill the various positions. These are not in line with the available budget for staff. With an average of 1 PHU for 5,500 people, it is questionable whether Sierra Leone can afford such a large number of facilities with the number of staff stated in BPEHS.

In the **short term**, there is a need to:

a) Bring the HIV/AIDS and TB cases back to their original treatment schedules
b) Revisit the costing of the existing BPEHS package
c) Link the costs of the BPEHS with the available budget in collaboration with MOFED
d) Bring it within reach of the MOHS budget ceilings, even if this implies rationalising health facilities and redistributing staff

In the **medium term**:

a) Harmonise service delivery interventions with key priorities of the 10-24 months Recovery Plan
b) Improve coordination between the 'vertical programs'
c) Consolidate / align existing strategic plans while providing guidance and foundation for future strategic plans

d) In consultation with the District Councils, consider the need to review the distribution of health facilities nationwide, increasing the number of CHC (to improve quality), while at the same time reducing the number of CHPs and MCHPs (to reduce costs)
e) Calculate whether the costs of current staffing allows to pay allowances for the CHWs
f) Once the threat from the EVD has been reduced, bring the emergency services back under DHMT responsibility

In the **long term**:

a) Develop a medium-term health sector strategic plan with essential service delivery interventions that is fully aligned to the 10-24 months Recovery Plan;
b) Develop and implement a feasible and affordable community health strategy with realistic and affordable packages

Pillar 3: Human Resources for health (HRH)

Human Resources for Health policy 2012 and Human Resource for Health strategic plan 2012-2016 have been developed. Within the MOHS, there is a Human Resources Directorate, a unit in charge of training and a functional HRH Technical Working Group (HRH-TWG). Staff numbers have increased in the health facilities and rural/urban disparities have reduced. Short-term on-the-job trainings have been provided by the MOHS programs and other implementing partners. Salaries of health staff were increased since 2012; PBF and remote allowances have been established to improve quality and motivation and attract more health staff in remote areas. Standardized training for MCH Aides has been carried on in all districts, which increased MCH Aides numbers from 825 to 2000. Community health workers (CHW) have received trainings from both Government and different implementing partners. The MOHS has put in place an electronic reporting system of staff attendance and an electronic Human Resource Information System (HRIS) in health facilities and DHMTs, however it is still paper based in many of the health facilities. In the early recovery plan, a number of strategies aimed at collecting evidence on current HRH status in the health sector are being undertaken, such as payroll cleaning, survey to complete HRIS and geo-mapping of community health workers.

As already indicated under Service Delivery, the ambitious BPEHS also has important consequences for the human resource (HR) requirements. The major issue is around paying salaries, overtime and other benefits and shifting the volunteer health workers into the payroll. Thus, there is a need to bring HRH requirements for BPEHS into the realities of the health budget. Other challenges around HRH include inefficiencies in HR deployment; persisting shortages of some cadres (mainly midwives and clinical officers); rural-urban disparities; poor human resources management (mainly due to the centralized management system); a weak HRIS information system and the absence of clear and equitable HR allocation criteria. There is limited clarity about the position of the CHWs in the health delivery system. There are many CHWs, but they differ widely in what they do, how long they are trained, what the content of their training and work is, and how they will be motivated/compensated. Lastly, the role and scope of CHWs provided by BPEHS seems unrealistic given that the training is to be completed in only 10 days, while the relation between traditional birth attendants (TBAs) and CHWs has not been clarified, however the on-going revision of community health program is expected to address the above challenges.

In the **short term**, there is a need to:

a) Determine the need for HRH against the BPEHS requirements; then cost them (training and future salaries) against available budget; and revise the BPEHS requirements if the plan is not feasible
b) Develop a medium to long-term HR development plan with budget for training of all cadres
c) Draft a capacity-strengthening plan for training institutions (both public and private) through different contracting arrangements

In the **medium term**, it is recommended to:

a) Progressively undertake the decentralization of HRH management by appointing HR managers in DHMTs to prepare payroll according to budget transferred by central level, accompanied with strong accountability measures
b) Revise remote allowances and PBF systems by addressing implementation challenges
c) Mobilise Government and partner resources for implementation of the above strategies
d) Develop an accelerated training program for critical staff (midwives, clinical officers) to fill the HRH gap

In the **long term**, it is recommended to:

a) Devolve human resources management to the districts
b) Strengthen academic institutions to set up highly needed training programs (including medical specializations, midwife and clinical officer training among others)
c) Link the various existing information systems with each other: HRIS, Payroll, attendance, and performance management.

Pillar 4: Health financing

Although the Abuja target of 15% was not achieved, the percentage share of health expenditure from total government spending increased to 11.2% and government expenditure share from total health spending (all sources) also showed marginal increase from 15% to 17% (NHA 2013). The per capita public health spending set for JPWF was achieved, as it increased from $12.20 to $30. As much as 48% of the cost of the NHSSP was funded, while the resources were available for JPWF to be fully implemented. The share of GOSL in financing NHSSP was 65% while DPs share was 35%. However, 60% of the GOSL health spending was spent on personnel salaries, while the share of resources going to local councils was lower than 10% and the share going to PHUs ranged between 2.8% to 4.7% of the total resources. The FHCI supported by the PBF increased utilization of services by the population, motivated health workers and contributed to the availability of medicines and medical suppliers. The government is also working towards establishing a social health insurance scheme.

There is no clearly articulated health financing strategy that aims at increasing domestic resource mobilization, reducing out pocket (OOP) and external dependence, enhancing efficiency and effectiveness in resource use and pro-actively encouraging Public Private Partnerships (PPP). Despite the increase of public spending, financing of the health sector is overly reliant on out-of-pocket spending (OOPs), which is at a catastrophic level: 62%. At the same time, the potential of OOPs to meaningfully support facility level improvement was not exploited, as there is a complete neglect of the cost recovery program. The per capita available funding from public sources (government and DPs) for essential services is about $30 and is far below what is required for moving towards the Sustainable Development Goals (SDGs). The health care financing unit is understaffed, fully donor funded and preoccupied mainly with producing annual NHAs and managing the PBF program, but not other dimensions of health financing. The opportunity to build capacity /sustain the work by externally-funded staff is being lost due to lack of MOHS funded staff.

The recent move to bring responsibility of risk pooling strategies to the Ministry of Labour and Social Security (MOLSS) should ensure a clear role for the MOHS in the process. The MOHS relationship with MOFED and MLG&RD is, at best, inadequate. Sustainability of the FHCI is an issue, since it heavily relies on external funding. Finally, the financing of PBF remains uncertain after 2017.

The efficiency of resource use and achieving value for money is one important issue in Sierra Leone for a number of reasons: First, it appears that there are too many facilities for the total number of population, leading to over- reliance on facility level service delivery and underutilization of community systems. Second, the management of human resources is marred by many inefficiencies (centralized management, inequitable distribution, weak accountability mechanisms (no hiring and firing, reliance on volunteers). Third, the push system of drugs and medical supplies has also contributed to the supply of unneeded medicines that expire at the facilities as well as a misuse of cost recovery resources. Fourth, there is fragmentation in systems strengthening by programs (human resource, equipment, vehicles, information systems, distribution systems) that could be brought together and rationalised. Finally, the work between those that provide technical guidance for service delivery and those that manage resources (human / financial) is not well coordinated to enhance efficiency and effectiveness.

In the **short term**, there is a need to:

a) Strengthen the cost recovery system by developing and implementing standard guidelines on how to mobilise, plan, use and audit the revenue generated from internal facility revenue, as well as by restructuring its functioning: facilities to have a decentralized fund for both services and medicines
b) Restructure and strengthen the health care financing unit within MOHS as well as build its capacities to undertake resource mapping, resource tracking and management activities.

In the **medium and long term**, MOHS needs to:

a) Undertake a thorough review of the health care financing situation (what works and what does not)
b) Develop a health care financing strategy and its implementation plan with analysis of the potential for mobilizing additional resources and enhancing efficiency and value for money
c) From the overall health financing strategy, develop specific thematic strategies to guide the implementation of the major areas of work in health financing (domestic resource mobilization, innovative financing; risk pooling mechanisms etc.) in the long term
d) Inform the development of thematic area strategies by piloting some of the health financing strategies like community-based health insurance (CBHI), health equity fund, results-based funding, vouchers, etc., to know understand what could work in the context of Sierra Leone.
e) Support, engage and provide the necessary leadership in the establishment of risk pooling mechanisms, especially in defining the benefit package, the provider-payment rates and mechanisms based on a solid costing of services and also identify CBHI scheme designs that will lead to the realization of universal health coverage (UHC) commitments

Pillar 5: Medical products and health technologies

The legal and policy framework for the pharmaceutical sector has been put in place and disseminated. Relevant institutions including the National Pharmaceutical Procurement Unit (NPPU), and Pharmacy Board, with quality control laboratory have been established. There is a Directorate within MOHS in charge of pharmacy and central medical store. Similarly, at the DHMT level, there are pharmacy staff and a district drug store. Availability of medical supplies in the health facilities has improved, mainly with the introduction of the FHCI. An electronic management information system has been initiated and is being rolled out.

The existing legal and policy framework is not well enforced, as evidenced by: (i) the issue that only about 60% of the drugs that enter into the country are registered by the Pharmacy Board; (ii) the existence of non-useful donations and drugs that are close to expiry date, but are accepted by the country. Drug availability in health facilities is a major challenge, as reported in a number of documents and by almost all key informants. The shortage is due partly to the uncoordinated national supply system in the country, as some vertical programs (like HIV and EPI, among others) are using their own channels to procure and distribute medical products. It is also partly due to the weak capacity of the NPPU to coordinate supply systems, the persistent use of the push system, which undermines availability related to incomplete and inaccurate reporting by health facilities, and the failure of the cost recovery system to support the establishment of a revolving fund. Other challenges include inadequate storage infrastructure (space and storage standards), the weak functionality of Logistic Management Information System (LMIS), inadequate prescription behaviour, and irregular drug therapeutic committees' meetings. Maintenance of medical equipment is also an area that needs to be strengthened.

In the **short term**, there is a need to:

a) Develop and disseminate guidelines on cost recovery for drugs at all levels (NPPU, DHMTs, HFs)
b) Set up management structures to organise the sales of drugs at DHMT and NPPU levels
c) Institute a pull system by strengthening quantification and procurement processes from PHUs and hospitals through DHMTs up to NPPU levels

In the **medium term**, it is recommended to:

a) Pull all capacities (staff, money, equipment) related to logistics from vertical programs into the NPPU
b) Establish a procurement plan and one supply system
c) Initiate a national (coordinated) supply system of drugs and consumables based on DHMT procurement plans (shift from push to pull)

In the **long term**, there is a need to:

a) Strengthen the cost recovery system
b) Fully implement an e-LMIS with GOSL ownership
c) Improve storage conditions in health facilities and DHMTs according to norms and standards
d) Establish and equip a strong national maintenance workshop for medical equipment

Pillar 6: Health Information Systems and M&E

As part of the JPWF, a Results and Accountability Framework for NHSSP, with key performance indicators, defining their baselines, targets and data sources, has been developed. DHMTs have data managers and M&E staff who collect data from the PHUs and send them to the central level. They have also computers with internet connectivity. It is important to mention here that computers are not sufficient and the internet is not reliable: the connections are weak and sometimes DHMTs do not have a budget to pay the monthly subscription. The GOSL intends to install solar energy in all health facilities. DHMTs and central level have an electronic DHIS2 web-based system. The MOHS Directorate of Primary Health Care has a unit in charge of vital statistics – birth and death registration takes place; there is staff in the district councils in charge of birth registration, with birth registration also taking place at PHUs. There are also visible efforts to improve data quality from data collection (PHUs) and DHMTs. Integrated Disease Surveillance and Response (IDSR) has improved, mainly as part of response to EVD. The Recovery Plan intends to improve IDSR further and add Community-Based Surveillance.

Routine data collection, management, dissemination and use are faced with many challenges: Currently, there is no reliable source of routine information. Given the low coverage of DHIS2 and the challenges in data quality, there is a general feeling that DHIS2 reports are not accurate. The main reasons for incomplete coverage of DHIS2 include: (i) some programs like HIV, TB have not been included in the DHIS2 reporting tools (although there is plan for integration of all programs) and (ii) District Hospitals have been left out in the implementation of the DHIS2. Despite the investments being made in DHIS2, programs still continue to invest in parallel data collection and analysis. There is little GOSL investment in information systems, starting from the Directorate of Policy, Planning and Information (DPPI), which is under staffed and most of the available staff are externally funded through projects. There is inadequate infrastructure for data management at central and DHMT level (few computers, servers, no reliable internet). Data quality is also compromised, because of: (i) inadequate capacity of reporting staff in PHUs, and (ii) large number of indicators and many forms to fill. The DHMTs which do not have enough data clerks are expected, within a tight deadline, to enter data for around 100 PHUs under their catchment area; HRIS, LMIS and vital statistics are not complete and not regularly updated. IDSR, although it has been strengthened, is not yet integrated with the other information systems. Research capacity within MoHS (one staff in DPPI) and in academic institutions is still weak, and there is no strong coordination of actors involved in health research in the country.

In the **short term**, there is a need to:

a) Collect routine data for the last two years; complete data entry and produce 2014 and 2015 statistical reports to support the on-going planning exercises with accurate baselines
b) Include IDSR in DHIS2, with resources that could potentially help to push the HMIS agenda
c) Draw a roadmap to move from program information systems to DHIS2, including the transfer of data management staff and equipment
d) Develop new data management Standard Operating Procedures (SOPs) to clarify the roles and responsibilities for each player with respective timelines

In the **medium term**, there is a need to:

a) Strengthen central level DPPI and DHMTs (with new staff, trainings, IT equipment) for regular data analysis
b) Use dissemination and data quality checks in coordination with other departments
c) Set up a data analysis Technical Working Group (with M&E officers from all programs and relevant stakeholders), which will meet on a quarterly basis and analyse data from DHIS2 & other systems
d) Institute data dissemination and use (bulletins, review meetings, performance reports)
e) Develop a research agenda for the health sector, based on most needed evidence for policy and coordinate all actors involved in the health research

In the **long term**, it is recommended to:

a) Create an one-stop centre for health information from health facilities using the DHIS2 platform by pulling all resources from programs to strengthen that system
b) Initiate electronic reporting in CHCs and empower them (provide training of key staff, electronic tools) to be an extra layer for data synthesis and supervision for the lower CHPs and MCHPs
c) Improve community health reporting through health facilities and incorporate their reports in DHIS

1. INTRODUCTION: NHSSP AND THE RECOVERY PLAN

1.1. BACKGROUND

The Ministry of Health and Sanitation (MOHS) in collaboration with key stakeholders prepared the National Health Sector Strategic Plan (NHSSP 2010-2015), the Joint Program of Work and Funding (JPWF 2012-2014) and the Basic Package of Essential Health Services (BPEHS) as a framework for guiding the delivery of health services in Sierra Leone. The NHSSP has been implemented over the last five years and is nearing completion at the end of 2015.

The National Health Sector Strategic Plan (NHSSP 2010-2015)

The goal of NHSSP is to reduce inequalities and improve the health of the people, especially mothers and children, through strengthening national health systems for improved health-related outcomes and impact indicators. The NHSSP has been developed to provide a common strategic framework for the period covering 1st January 2010 to 31st December 2015; a framework that will guide ALL interventions by ALL parties at ALL levels of the national health system in Sierra Leone. The general objective of the NHSSP is to improve:

1. Access to health services (availability, utilisation and timeliness);
2. Quality of health services (safety, efficacy and integration);
3. Equity in health services (disadvantaged groups);
4. Efficiency of service delivery (value for money / VfM);
5. Inclusiveness (partnerships).

These five strategic objectives will be realized through the implementation of the six Pillars below that have been formulated in line with the six WHO building blocks:

- Pillar 1: Leadership and governance
- Pillar 2: Service delivery
- Pillar 3: Human resources for health
- Pillar 4: Health care financing
- Pillar 5: Medical products and health technologies
- Pillar 6: Health information systems

For each Pillar, several key issues and challenges were identified that provided the basis for setting an overall policy statement that expresses the MOHS commitments; this is then followed by a set of specific objectives. In addition, the NHSSP provides a detailed overview of the various levels of care, each with their respective functions and staffing. Details have been provided in the Basic Package of Essential Health Services (BPEHS) that was drafted in 2010 and revised in 2015. The Joint Program of Work and Funding (JPWF 2012-2014) that was developed in January 2012 intended to operationalise the NHSSP and provide more detailed targets for each of the Pillars and budgetary information to understand the costs of NHSSP implementation and the gaps that needed additional support.

The Health Sector Recovery Plan 2015-2020

The outbreak of Ebola Virus Disease (EVD) in Sierra Leone and the neighbouring countries in April 2014 has had a major impact on the health status of the population and on the already fragile health systems. At the end of the epidemic, the country counted 14,061 confirmed EVD cases of which 3,955 died (mortality rate 28%), while the impact on the professional staff of the MOHS was even higher, with 296 EVD infections among health workers with 221 deaths (mortality rate 74%). In order to address the vulnerabilities of the health system that the EVD had exposed, the Government of Sierra Leone (GoSL), in collaboration with the Development Partners (DPs), prepared a Health Sector Recovery Plan 2015 - 2020 (in June 2015). This plan is aligned to the broader national recovery plan that has been initiated by the President and is overseen by the Office of the President. Within the MOHS, a Delivery Operational Team was established with strong linkages to the Delivery Team in the Office of the President.

The Delivery Operational Team of the MOHS is tasked with oversight in the implementation of the health sector recovery plan through:

i. *The 6-9 months Recovery Plan* (Phase I) that is monitored through weekly 'dashboards' with progress and challenges of a limited number of indicators: IPC, Triage, IDSR, WASH, RMNCH, Nutrition, EPI, TB, HIV, malaria, EVD Survivors, supply chain management and HRH.
ii. After March 2016, a new *10-24 months Recovery Pla*n will become operational (Phase II), with a new set of indicators. This Early Recovery plan will be implemented from early 2016 till December 2017. The President has asked the MOHS to focus its Recovery Plan on RMNCAH and Resilient zero, with a focus on some of the most important components of health systems – supply chain and human resources.
iii. It is expected that after the Early Recovery Plan, Phase III (Recovery) and Phase IV will become operational, which together, will bring the country in December 2020 back to the Agenda for Prosperity (A4P), having put in place a resilient and functional national health system. Each Phase is expected to address the five key priorities of the Recovery Plan:
    1. Patient and Health Worker Safety
    2. Health Workforce
    3. Essential Health Services
    4. Community Ownership
    5. Information and Surveillance

1.2. RATIONALE AND OBJECTIVES OF THE REVIEW

After the development of the 2015-2020 recovery plan, the MOHS is exploring whether a new five-year National Health Sector Strategic Plan (NHSSP II 2016-2020) will be required to comprehensively guide the country in building a resilient national health system with functional coordination and management structures to deliver safe, efficient and quality health care and to effectively respond to future outbreaks of epidemics and other emergencies. It is recognised that any new strategic plan development process needs to be informed by the achievements and the challenges of the 2010-2015 NHSSP. This calls for the review of the strengths and weaknesses of the implementation of the strategic plan, as well as its health systems, against the effects of the recent Ebola epidemic and the Health Sector Recovery Plan.

Thus, the overall objective of the review is to support the MOHS in documenting successes and challenges of NHSSP implementation. The review:

- Documents achievements and best practices in the implementation of the NHSSP;
- Documents reasons for inadequate implementation and causes of system vulnerabilities;
- Proposes strategic recommendations to complement the recovery plan and/or other implementations plans, including the new NHSSP.

1.3. METHODOLOGY AND LIMITATIONS

The review team strictly followed the steps to conduct this NHSSP review as stipulated in TORs (Annex 1), including:

- **Conducted a preparatory meeting** to agree with the MOHS and development partners (DPs) on the inception report that outlines the major deliverables, the timeline, the sampling of the field visits and national level interviews and the tools to be used during the review process.
- **Undertook Desk Review** to enable the team to collect secondary national and international information that will inform the review process.
- **Conducted Key Informant Interviews (KIIs):** The team undertook KIIs at national, district, facility and community levels to collect qualitative information and informant views on the performance of the various pillars during NHSSP and against the back ground of the EVD and the Recovery Plan. The interviews were conducted by using a questionnaire developed on the basis of the format of the JPWF and submitted to MOHS.
- **Organised a Consultative Workshop** to share findings and integrate inputs from all stakeholders at the end of the assignment.
- **Submitted Draft review report** to the DPPI within two weeks after the conclusion of the in-country visit.
- **Submitted final review report:** The draft report was revised and submitted based on the comments, as given by the MOHS, the DPs and other stakeholders.

The team conducted its interviews on the basis of a work plan (Annex 2) that was adapted every day to the realities on the ground. The senior management of the MOHS was kept informed of the main findings and observations during the process. The names of people met and interviewed during the review are provided in Annex 3. The background documents that were used for the desk review by the team are brought together in Annex 4. The questionnaire used during the various interviews has already been shared with the MOHS in the Inception Report. If required, the team is happy to provide the MOHS with an extra soft copy. Finally, to collect financial information on the contributions by the various DPs, another questionnaire (Annex 5) was sent out to all DPs asking for their budget contributions over the last five years for each of the six Pillars.

Limitations

There are several limitations when conducting a review of such a large and complex sector plan, especially given the background of the Recovery Plan. The main limitations among others are:

- Two weeks is limited to conduct such a broad sector review with all six pillars and systems;
- Two days of field visits is also minimal to understand the dynamics between the centre and the districts and find a good overview of what happened in the last five years;
- There was inadequate information and evidence due to lack of annual performance reports over the last three years that analyses the causes of the system vulnerabilities.

1.4. TEAM MEMBERS

The team was composed of three international and two national team members. Their areas of expertise and their contribution in the writing of the review report are shown below. Both the international and national colleagues worked as a team and reached common understanding on the findings and recommendations.

Table 2: Team members with their areas of expertise and specific responsibilities

NAME CONSULTANTS	AREAS OF EXPERTISE	SPECIFIC RESPONSIBILITY	NATIONAL Colleagues
Jarl Chabot	Public Health Specialist	Pillar 2: Service Delivery	Lamin Bangura
Abebe Alebachew	Health Economist / Finance Specialist	Pillar 1: Governance & Leadership Pillar 4: Health Care Financing	
Régis Hitimana	Health Systems Specialist	Pillar 3: Human Resources for Health Pillar 5: Medical Products/ Technologies (Ch 5) Pillar 6: Health Information Systems and M&E	Melvin Conteh

2. LEADERSHIP AND GOVERNANCE

The NHSSP and JPWF set leadership and governance as one of the basic pillars of health systems development in Sierra Leone. The main objectives set to be realized through this pillar, among others, were to review the legal framework and put in place capacities for better sector stewardship; strengthen the capacity of health managers at all levels; establish results-based management systems; put in place viable oversight and coordination process for sector coordination; strengthen alignment and harmonization of partners; and strengthen Public-Private Partnerships.

Table 3: Major targets and achievements of the leadership and governance

Indicator	Baseline (2008)	Target (2015)	Achievement (2013)	Performance level
% of partners who sign up to Sierra Leone Country Health Compact	Dec 2011 – first signing	90%	No follow up	Very weak performance
% of jointly agreed and approved Central & Local Council annual operational plan	First in 2011	100%	AOP 2010-2012	
% of jointly reviewed & approved National & Local Council performance reports	First in 2011	100%	AOP 2011-2013	
Number of parallel project implementation units	2012 mapping result	Reduced by half	No evidence	

2.1. ACHIEVEMENTS

The sector coordination structures exist at national and district levels. The HSCC is meant to meet quarterly under chairmanship of the Hon. Minister of Health and Sanitation, while the health systems steering group (HSSG) meets every month under the leadership of the Chief Medical Officer. There are six TWGs at the national level along the health systems pillars. The TWGs bring together staff from the MOHS and stakeholders to agree on the respective system issues and make

recommendations to the HSSG then to HSCC. There are also district coordination mechanisms, which bring together DHMT, implementing partners, NGOs, CSOs and the Local Councils every month.

The coordination of implementing partners and ensuring that they work closely with DHMTs has been a challenge during the implementation of the NHSSP and JPWF. However, the leadership and coordination of the implementation process has been strengthened after the Ebola outbreak. There was leadership provided by State House to get EVD under control. The development of the Recovery Plans (6-9 months and the 10-24 month plan) and the establishment of NERC and DERC to assist the recovery process were instrumental in this endeavour. The establishment of the HSS Hub helped to guide and steer the HSS development process and fill some of the capacity gaps observed (see below). The establishment of IHPAU, if properly led and managed, is likely to lead to better credibility of the financial management system that may bring more alignment and harmonization among partners.

There is good coordination and alignment in the implementation of the recovery plan. The interventions of the different 'key objectives' of the recovery plan are mapped with their cost, contribution of different partners and funding gap. This is good step forward, as compared to the implementation of the NHSSP and JPWF, which was guided by need-based planning, but that was not resource constrained. Therefore, it is essential to scale up the experience of the recovery plan planning process to other HSS priorities and develop and implement ‘one sector annual plan’.

In addition, Service Level Agreements (‘SLA’) have been initiated which is likely to streamline and coordinate IPs implementation at the district levels. The SLA requires that IPs implementation is in line with NHSPP and JPWF priorities, its implementation should also be within the framework of the Compact and the NGO policy, developed by MOFED. It also sets the maximum indirect cost that IPs can use to 25% for infrastructure development projects and 30% for advocacy and other types of interventions. So far 57 IPs have submitted their interventions plans; of which about 51 have been approved (Dec 2015). Concerted effort by MOHS and DHMTs is required to enforce SLA implementation. There is a need to scale-up the recovery plan mapping format to be used by DHMTs to assist them to know and include partners’ contributions in their annual planning and monitoring processes. To the extent possible, the SLA processes should be aligned to the government planning and budgeting calendar. The national level Directors and the two districts visited have a fairly good knowledge and capacity to undertake a resource constrained planning process.

There exist good working arrangements between the DHMTs and District Councils within the framework of partial devolution. Monthly and quarterly review processes take place at district level, in which DHMTs, District Councils and PHU facility in-charges participate. It is reported that there are open discussions about the challenges, although arriving at solutions is sometimes beyond their mandates. Similarly, weekly and monthly meetings are held at the national level with the respective Technical Directors on a regular basis.

2.2. CHALLENGES

Although the NHSSP and JPWF were developed through a consultative process, there is an apparent gap in ownership and commitment to translate them into action. Many directors reported that there was not enough consultations and consensus on the priorities and there is a clear gap in the alignment of different program priorities to the overall strategic plan. There are incidences of non-involvement and weak consultations both during NHSSP and JPWF, but also in the recovery plan preparations and implementation. It seems that the limited investment in dialogue and weak implementation of the Compact resulted in inadequate alignment of different plans and different stakeholder's activities. The NHSSP and JPWF were costed, but they were not accompanied by a sound fiscal space analysis, especially on the feasibility of the government budgetary allocations. The comprehensive annual plans developed to translate them into action were not based on a resource mapping and resource constrained process, which made it difficult to implement them.

There is weak coordination and communication between the national directorates and the DHMTs. The coordination by DHMTs with different implementing partners is far short of what is desired. As a result, partners are implementing on their own without involving DHMTs. The SLA is likely to address these challenges.

Performance reviews based on committed and mapped resource envelopes are yet to be institutionalized. Although there is a clear Compact that outlines how implementation should be managed by government and partners, mutual accountability mechanisms were not implemented as desired. The additional burden of the EVD outbreak necessitated the establishment of specialized units staffed with experts who could quickly turn deliver results. The idea had been that the specialized teams would transfer skills and capacity to the existing MOHS structures but lessons learned showed that it is not feasible to build local capacity during an emergency. As a consequence, the specialized structures that initially aimed at strengthening systems (HSS Hub, IHPAU, FHCI, PBF, etc.) that show better performance have been driven as projects, rather than working within and through existing MOHS systems and structures. There exist overlapping and competing plans and priorities, as districts develop two plans (one for MOFED based on the provided budget ceilings and another comprehensive one for the MOHS). They mainly follow and implement activities that are supported by resources. Programs also have their own plans that are not necessarily aligned, but contribute towards the realization of NHSSP and JPWF objectives and results. Most of these programs are financed by development partners and their efforts are generally geared towards meeting the interests of financiers. According to some program staff interviewed, they might have implemented 30% of NHSSP activities through their program specific plans. Only 19% of the HIV/AIDS program was funded and just 3% of the funding came from domestic sources. The underlying factors for all this have been inadequate coordination and leadership by MOFED and MOHS in working with DPs during the implementation of NHSSP and JPWF. This has started to change now as part of the recovery plan implementation. But these efforts need to be scaled up and become sector-wide in scope.

The other gap in translating the NHSSP and JPWF into action has been the weak review and monitoring mechanisms at all levels of the system. The review team accessed only two performance

reports of the NHSSP implementation: 2011 and 2012. There was no performance report showing the progress of the sector since then. Although a review of the implementation of the JPWF was carried out, the current review team was not able to access or look at it. Systemic review meetings that bring together government, DPs and implementing partners once a year for mutual accountability have not taken place since 2012. These have helped some countries to perform better in terms of results and achieving better value for money.

Overarching public sector management constraints

The translation of NHSSP and JPWF into practical operations has been held back partly due to two important overarching government public sector management issues, which are beyond the MOHS. First, while the functional responsibility of the health sector is fully devolved, its implementation is heavily affected by the centralization of the expenditure assignments. The Local Councils function only as a custodian of funding and do not have any authority to make service providers and managers accountable to them. The Councils have no control over the human resources. Payroll and personnel continue to be centrally managed and the staff is fully accountable to MOHS. They do not have discretion to allocate resources for other priority areas, as resources are provided as earmarked grants. The development grant which was flexible to address district priorities was discounted with the completion of the World Bank project. The revenue collection responsibility of the Local Councils is very weak and the compliance to these local taxes is largely not enforced. As a result, the Councils and DHMTs visited, reported that by-and-large Local Councils are unable to finance health from their own revenue, and that was one of the reasons for not being able to response to EVD immediately.

Second, there is a challenge of credibility of the overall MOFED budgeting process. Ceilings are provided for budgeting, but often these ceilings change during the planning process. The approved budget is not released on time, due to fiscal constraints at the national level: all implementing units reported that they have only received one and half (1 1/2) quarters of the 2015 budget. In 2014, the government budgeted 1.7% of the total government capital expenditures for health, but managed to implement only 0.7% of it (MOFED. Economic Bulletin 2014). According to PEFA 2014, MTEF exists, but in practice the budget is annual and the medium term forecasts are weak and poorly linked to policy or plans. There are no costed sector strategies linked to MTEF resource ceilings and investment is not linked to its recurrent expenditure implications. The establishment of a Public Investment Unit in MOFED may improve public investment management (PIM) in the future. There are weaknesses in the MOHS financial management and accounting systems: in some interviews it is reported that health sector implementing units only account as low as 10% of the resources received. This issue needs to be streamlined and invested up on, re-looking at and strengthening the overall government budgeting process, as it is paramount to link fiscal frameworks to sector results.

2.3. RECOMMENDATIONS

Table 4: Recommendations for Governance and Leadership

Period	Recommendations
Short term (2016)	Fast track the implementation of the leadership and management capacity of the MOHS and DHMTs initiated by World Bank-supported project through providing leadership training and team-based practical assignments in line with their respective functions
	Strengthen the planning process to (i) undertake a resource mapping exercise (Government, DPs and IPs) before the start of the planning process that sets the limits of available resources for a year; (ii) support the SLA initiative by the development and implementation of the planning and M&E guideline that is aligned to the DHMT planning and review process; and (iii) set clear and agreed sector priorities, targets, strategies and resource allocation criteria among different competing programs, within the MOHS and by the senior and top management of MOHS
Medium term (2016-2017)	Streamline and coordinate different project to work with each of the different HSS building blocks. Develop and implement measurable performance milestones for transfer skills to MOHS by the different projects to ensure sustainability of capacity building efforts and systems strengthening
	Strengthen the functionality of the partner coordination mechanisms and enforce all partners to be 'on-plan' in the short term and move towards to 'on budget' and 'on account' over the longer term. MOHS and MOFED need to strengthen their working arrangement and leadership and guide DPs to align and harmonize their interventions. HSCC should develop a mutual accountability performance framework to make government and partners accountable, based on the targets set in the annual plans.
	Enhance coordination and communication within MOHS directorates and with DHMTs, including to bring all the senior and top management to agree on the sector priorities and work towards realizing the targets set
	Develop a compressive new strategic plan that integrates the recovery plan within it
	Support SLA with resource mapping by making it part of the annual routine planning and M&E process
Longer term- Up to 2020	Lobby Government, including MOFED and Ministry of Local Government, to implement public sector reforms that aims at (i) improve the budgeting and disbursement process (conservative budget ceiling); (ii) complement the functional devolution with expenditure decentralization to foster accountability at district levels of managers to the councils; and (iii) develop the capacity of the local councils to take this responsibility.
	Develop and implement a HSS Capacity Development Plan that takes into account streamlining structures, put the right human resources at the right post; build skills, processes and systems.

3. SERVICE DELIVERY

The NHSSP 2010-2015 provides a short situational analysis around service delivery, summarising ten major issues and challenges that face the sector, the most important being: poor access, low quality, inadequate provision of drugs, minimal involvement of communities in health service delivery and major shortages in human resources at all levels.

As a response, the service delivery pillar of the NHSSP targeted to achieve, among others, increased access to quality health services, including specialized medical services; increased coverage and access to essential health services, especially for children, the poor and vulnerable groups through

the implementation of BPEHS; establishment of effective referral system; increased involvement of communities in the management of health service delivery; and strengthened blood transfusion and laboratory services.

3.1. ACHIEVEMENTS

Impact Indicators of the sector are stable

Overall, none of the 2015 impact targets were achieved. From a public health perspective, the impact indicators of the health sector in Sierra Leone over the last five years, as documented through the SLDHS have been stable between 2008 and 2013, remaining below the stated targets for 2015 (Table 5 below), but not worsening. Also the MMR, that appears to have been worsened between 2008 and 2013, has not changed statistically during these five years or as mentioned in the SLDHS 2013:

*"This ratio is not statistically significantly different from the ratio reported in the 2008 SLDHS" (*as the confidence intervals overlap).

Table 5: Impact indicators NHSSP: baseline, targets and achievements from SL-DHS

Indicators	Baseline (DHS 2008)	2015 Target NHSSP	Achievement DHS,
IMPACT INDICATORS			
Infant Mortality Rate (per 1,000 live births) / IMR	89 /1,000	50 / 1,000	92/1000
Under-five Mortality Rate (per 1,000 live births) / U5MR	140 /1,000	90 / 1,000	156 / 1000
Maternal Mortality Ratio (per 100,000 live births) / MMR	857 /100.000	600 / 100,000	1,165 /100,000
Prevalence of HIV (% of pop. aged 15–49) / HIV	1.50%	1.20%	1.5%
Total Fertility Rate / TFR	5.1	4	4.9

Outcome / output Indicators of MNCH, HIV/AIDS and Malaria show improvements

When looking at the five years figures for various MNCH output / outcome indicators, the picture is definitely more positive (see Table 6). While figures should be looked at with caution (different definitions of skilled staff between SL-DHS and WHO), output / outcome indicators such as birth attended by skilled staff (SBA) has gone up from 42% to 54% and births attended by TBAs have gone down substantially. A remaining 10% is likely to have their births at home with support by family. Similarly, the required four visits to ANC has gone up from around 50% to 76% and the percentage of children fully vaccinated has increased from 40% to 58%, perhaps not enough when looking at the target of 90%, but certainly a good achievement. FP services have remained stagnant, despite a very high unmet need among women between 15-49 years. Nutrition indicators (Stunting and Wasting) remained stable, but prevalence of children underweight went down from 21% (2008) to 16% (2013).

Table 6: Outcome and output indicators NHSSP: baseline, targets and achievements

Indicators	Baseline (DHS 2008)	2015 Target NHSSP	Achievement DHS,
OUTCOME / OUTPUT INDICATORS: MNCH			
% Births attended in health facilities % Births attended by nurse-midwife / MCHA	25% 42%	90%	54% Midwife 44% /
% Births attended by TBA / CHW	45%	NA	35%
% Pregnant Women making 1 / 4 ANC visits	?? / > 50	90	97 / 76
Contraceptive Prevalence Rate (% of women	14%	30%	16%
Unmet need among married women for FP	28%	NA	25%
% Children < 1 yr fully vaccinated	40	90	58
OUTCOME / OUTPUT INDICATORS: NUTRITION			
Prevalence of Underweight (Wt/Age) among children 6-59 months (2SD)	21%	10%	16%
Prevalence of Stunting (Ht/Age) among children 6-59 months (2SD)	36%	NA	38%
Prevalence of Wasting (Ht/Wt) among children 6-59 months (2SD)	10%	NA	9%
OUTCOME / OUTPUT INDICATORS: COMMUNICABLE DISEASES			
# Health facilities with VCT / PMTCT / ARV	398 / 351 / 111	750 / 1010 / 170	708 / 691 / 136
% children sleeping under LLITN night before	26%	55	49%
TB Case Detection Rate	NA	40	38
TB Treatment success rate	NA	85	87

Source: SL-DHS 2008 and 2013; HIV/AIDS and TB program records.

Whereas the prevalence of HIV has remained stable at 1.5% between 2008 and 2013, the HIV services have definitely expanded in all three areas: The number of health facilities providing HIV/AIDS related services increased: (i) for HCT from 398 to 708, (ii) for PMTCT for pregnant women from 351 to 691 and (iii) for ART treating people living with HIV or AIDS from 111 to 136. Their respective targets for 2015 being 750, 1010 and 170, shows that the HIV program seems well on track to achieve its targets (prevalence of 1.2%) in the coming 2-3 years.

The SL-DHS does not provide prevalence figures for Malaria, but the Malaria Indicator Survey 2013 mentions a prevalence of 43%. The use of Long Lasting Impregnated Bed Nets (LLITN) has doubled over the last five years from 26% to 49%.

The Basic Package of Essential Health Services (BPEHS) defines not only the services to be provided at each level of care from community up to district hospital, but also sets the norm for the required staffing and the necessary equipment needed to provide these services. Content-wise the 2015 BPEHC is an improvement compared with the 2010 version. It is widely known in the sector, comprehensive and ambitious in what it wants to achieve.

Another positive feature is the presence of CEmOC in all 13 district hospitals and the possibility of BEmOC in 65/266 Community Health Centres (CHC). While not all signal functions were always available (equipment and staffing), most CHC can perform normal deliveries. Referral to the District

Hospital (DH) is only possible, if 1-2 ambulances are available. Mobile connectivity varies with some districts have less that 50% coverage and others are relatively well covered.

Finally, an extensive inventory (geo-mapping) has been made of the available Community Health Workers (CHW + TBA) and a policy for this important cadre (some 13.000 CHW in the country) was first developed in 2012 and is now being revised for re-launching in 2016. The new strategy is expected to address CHWs' future roles, responsibilities, their remuneration, their relation with the PHU staff,- and community structures such as the Community Health Committees, Village Development Committees, and Facility Management Committees. Coverage and catchment areas need to be defined for all the district facilities to ensure equal access and an equal distribution of service provision through the BPEHS.

3.2. Challenges

Utilisation: The use of Out Patient services (OPD) has been low even before the EVD epidemic at 0.5 consultations per person per year (NHSSP 2010-2015, ch. 2, para 2). Although no recent figures could be found for 2014 or 2015, it is safe to assume that attendance has gone down, given the reluctance of the population to visit the health facilities out of fear for contamination with EVD. Even a substantial number of HIV/AIDS and TB patients is reported to have stopped their ambulatory treatment out of fear to become contaminated when visiting their nearby health facility. Unfortunately the extent of discontinuing their treatment has not yet been documented, but the respective program managers have started to try and find back their patients.

The BPEHS: Another reason for the inadequacy of the implementation of the NHSSP has been that the BPEHS has only partially been costed in the 2015 version by the One Health Tool. The BPEHS document expanded the functions and staff of the PHU, whereas it should have been defined as a **'minimal standard** of services and quality' that will support equitable access to care and improved health outcomes, with a focus on vulnerable populations. The BPEHS is at the core of what the country aims to deliver, but did not take into consideration what the country can reasonably afford. This has implications also for the other health systems, such as HRH (being the main cost driver of the budget), the provision of the relevant medicines and equipment by level and the use of the Health Information System. Costs for all these systems have become overrated, because the BPEHS did not use an indicative ceiling (provided by MOFED?) to determine reasonable costs of the package within the reasonable financial limitations of the country.

Costing the BPEHS should thus look at (i) what services and interventions are needed / essential and have the greatest positive impact; (ii) what is already available and functioning (staff, resources, medicines); (iii) what are the costs of implementation and what can we reasonably afford; and (iv) suggest a time-based roadmap for implementation.

To complicate matters, it is possible that depending the costing exercise of the staff in the PHU (district and below), it becomes necessary to reduce not only the number of staff by level of services, but also to reduce the number of CHP and MCHP in areas where catchment areas overlap.

On the other hand, the role of the Community Health Centre (CHC) within the PHU (including also the CHP and the MCHP) seems rather undervalued in terms of service provision, reporting and staffing. That is why, the review team suggests - in line with recent MOHS decisions to provide

BEmOC services in the CHC - to upgrade the functions of the CHC, and stepwise include features such as electronic collection of HMIS data and availability of an ambulance to be managed by a fleet manager at the DHMT or by the in-charge of the CHC.

Limited system strengthening. During the epidemic: As part of the Ebola response, both PHU and district health facilities have been renovated and sometimes even expanded, including IPC units and Ebola Treatment Centres, both inside or outside the district health premises. Similarly the number of vehicles and ambulances have been greatly expanded together with provisional admin facilities for the logistics and information collection by the special teams under the leadership of NERC and DERC (respectively at national and district levels). All this is quite positive, as it served to combat the epidemic. The functions of NERC and DERC are likely to end by 31 December 2015 or in the first few months of 2016. However, when looking from the angle of system strengthening, doubts can be raised about the sustainability of all these initiatives that did contribute little to the strengthening of the available skills and capacity within the MOHS or the DHMT. At the moment of finalising our assignment (Dec 2015), it was unclear what part of all these valuable resources will be handed over to central and / or district levels. It also remains to be seen whether the district authorities now have the capacity and skills to manage and maintain these resources. The choice for the 'verticalisation' of the EVD response at the start of the epidemic is very understandable given the emergency at the time, but might now prove a challenge to smooth and full handover, as limited capacity has been passed to the DHMTs, the District Councils and other national stakeholders. In short, it is likely that existing systems have not sufficiently been strengthened to take over the various (management) tasks that are part of the DHMT.

Hygiene and sanitation, environmental health and waste disposal are all important features of a resilient health system. Hygiene and Sanitation fall under the responsibility of the MOHS, but water falls under its own ministry, thus providing challenges of inter-sectoral collaboration and coordination. While these activities are mentioned in the BPEHS, they received little attention in the NHSSP. Fortunately, a Directorate for Water and Sanitation has been recently established in MOHS and the Recovery Plan pays adequate attention, especially to WASH and general hygiene and IPC. M focus and resources will be needed to provide for a safe environment where interpersonal contamination cannot happen anymore.

Distribution of PHU facilities: Looking at the PHU from a wider 'district perspective', the impression is fragmentation of the peripheral health services, where lines of responsibility are not clearly defined and the flow of information upward (through HMIS information) and downward (through supervision) leaves much to be desired. Findings are a low utilisation of MCHP and CHP services (sometimes 3-4 consultations per day and a few deliveries per month) and services of poor quality. Fortunately, there are also good exceptions to this, where facilities attend a good number of people.

In order to find answers to questions related to coverage of PHU, table 7 below shows the number of the three different PHU facilities for the population they serve in all the districts of the country.

In the next chapter on HRH, the available staff for each of the three PHU levels is presented together with the number of staff required according to the BPEHS. In this way the gap of staff still needed in the PHU facilities has been made visible (Table 9).

Finally, once the available distribution of PHU facilities over the country and the distribution of their recommended and real staffing of MCHA, SECHN and midwives is known, we have the information needed to reply to the question whether there is a need for CHW in the provision of services.

Table 7: Distribution of DH and PHU facilities (CHC, CHP, MCHP) by population and district.

Province	Districts	CHC	CHP	MCHP	(District) Hospitals	PHU	POP.	PHU/Pop
Northern	Bombali	20	50	36	4	106	493.000	4.651
	Kambia	17	16	33	1	67	341.000	5.090
	Koinadugu	11	29	29	1	69	335.000	4.855
	Port Loko	21	25	60	4	106	557.000	5.255
	Tonkolili	16	15	75	3	106	434.000	4.094
	Totals	**85**	**135**	**233**	**13**	**454**	**2.160.000**	**4.758**
Eastern	Kallahun	11	45	25	2	81	465.000	5.741
	Kenema	30	30	60	2	121	653.000	5.397
	Kono	16	25	45	2	85	323.000	3.800
	Totals	**57**	**100**	**130**	**6**	**287**	**1.441.000**	**5.021**
Southern	Bo	32	28	65	7	120	655.000	5.458
	Bonthe	15	25	17	3	57	168.000	2.947
	Moyamba	22	23	55	3	99	277.000	2.798
	Pujehun	17	18	40	1	74	336.000	4.541
	Totals	**86**	**94**	**177**	**14**	**350**	**1.436.000**	**4.103**
Western	WA Rural	12	15	15	4	41	764.000	18.634
	WA Urban	26	13	13	12	53	701.000	13.226
	Totals	**38**	**28**	**28**	**16**	**94**	**1.465.000**	**15.585**
National	**TOTALS**	**266**	**357**	**568**	**49**	**1185**	**6.502.000**	**5.487**

Source: *UNICEF, Number of PHU with their facilities (being CHC+CHP+MCHP).*

Note: There are in total 49 hospitals in the country that include both Public and Private. Some of them are tertiary or specialised hospitals (TB, Maternal health); all are included in the table.
The staffing for the 111 (private) clinics (2010) has not been included, as their norms have not been spelled out in the BPEHS.

A. Coverage by PHU facilities nationally, by province and by district

When looking at the available infrastructure (PHU with CHC, CHP and MCHP) / population, we find:

a) National: A total of 1185 PHU for 6.3 million people, being an overall coverage of 1 PHU per 5,487 people (or 2.2 HF/10.000 population; Zero Fact Pack). Internationally, this seems quite an acceptable national figure for the coverage of PHC facilities. Therefore, there are enough PHU, but their geographic distribution within the provinces and districts can be made more equitable by defining catchment areas and increase or reduce PHU facilities, depending the coverage information to be provided by the relevant DHMTs. There are also enough MCHA for the available PHUs if the volunteers will be included (and paid).

b) **Provinces**: However, when looking at the distribution of PHU over the Provinces, there is unequal distribution among and within provinces, partly due to differences in population (catchment areas) and terrain (roads, rivers). The Southern Province has the highest number of PHU per population (1/4,100), followed by Northern Province (1/4,760), and Eastern Province (1/5,020).

By far the lowest coverage is in Western Area (1/14,000). This could be compensated by a high number of private practitioners, as this is very much an urban environment. The distribution of the 49 hospitals has been included in the table, but their staffing levels has not been assessed.

c) **Districts**: There are 13 health districts, including Western Area (that is subdivided in an urban and rural part). Useful information comes from a comparison of the PHU coverage over the various districts. The highest / lowest coverage in Northern Province is Tonkolili / Port Loko; in Eastern it is Kono / Kailahun; in Southern it is Moyamba / Bo and in Western it is WA Urban / WA rural. To improve accessibility the MOHS should therefore consider expanding its coverage through building CHC (or CHP and MCHP) in those districts with the lowest coverage and based on more detailed figures of population, catchment areas, distance, road infrastructure and poverty index.

Suggestions related to coverage of PHU facilities:

a) Enforce and strengthen work of CHC: Bring the provision of part of the minimal package down from district capital to the Community Health Centre (all CHC to have BEmOC)). The CHC will become responsible for comprehensive service delivery, such as maternal and child health, communicable disease control and outreach services (EPI, ANC) to the CHP and MCHP. It should also undertake comprehensive, regular supervision of the CHP and MCHP. In order to make this feasible, the CHC should receive the required staff (midwives and lab technicians amongst others), be strengthened with the computerised HMIS and - to the extent possible - have an ambulance available to undertake the necessary referrals for emergency cases, such as women with complicated deliveries and young children with severe malaria complications. If well prepared and provided with the additional skills and equipment, utilisation will increase, as services will be closer to the people, a full minimum package will become available in the CHC and quality is improved.

b) Define catchment area of PHU facilities: For all districts, detailed information on catchment areas of the various PHU facilities is to be collected by the DHMTs in order to (i) define the areas with low coverage where additional infrastructure is to be increased (CHC, CHP or MCHP) OR (ii) define areas where too many PHU are placed close to each other (with overlapping catchment areas). Where there are too many PHU facilities for the existing population, PHU facilities need to be reduced and staff brought together in one of the places, perhaps with some expansion of rooms and equipment. The current PHC Handbook is to provide the rules and criteria for the location and distribution of PHUs (taking special features such as rivers and mountains into account).

c) Link infrastructure / staff with budget: With the relative high density of PHUs in the country and with serious budget limitations, it is possible that various PHUs (in particular CHP and MCHP) have to be closed and staff redistributed over the remaining PHUs. The reasons for such a decision is to make PHC services in the districts affordable within the existing budget constraints of each of the districts. Another option could be to change all CHP into MCHPs and use them all as outreach for the CHC to provide basic preventive services (including Vaccination, ANC, PNC) MCH Aides on scheduled days. The strategy, although it requires investments in transport

(motorbikes), it might make efficiencies in human resources, maintenance, cold chain equipment and strengthen CHC as the central hub for primary health care (PHC).

3.3. Recommendations

Table 8: Recommendations for Service Delivery

Period	Recommendations
Short term (2016)	Recapture HIV+ and TB patients, address possible drug resistance issues
	Complete the ongoing process of developing a costed CHW strategy to decide if they can become part of formal MOHS service delivery, include GoSL funding commitment, career structure, supervision etc.
	Initiate training of DHMT staff to take over the tasks of the DERC, such as fleet and storage management, IDSR and supervision of infection prevention and control (IPC). Ensure the availability of human, equipment and financial resources
Medium term (2016-2017)	Develop a costed roadmap for BPEHS implementation with fiscal space analysis.
	Enforce MOHS leadership and coordination over the various Vertical Programs: (such as HIV/AIDS, TB and Malaria) and use their resources for HSS strengthening.
	Make an inventory of PHU catchment areas for each of the districts to determine where too many or too few PHU are operational.
	Harmonise Service Delivery interventions with key priorities of the Recovery Plan, with focus on MNCH, FP and EPI.
Longer term Up to 2020	Develop a full mapping of available district PHU infrastructure that will rationalise distribution of available infrastructure and respond to equity criteria that will improve access. Implement the recommendations of the mapping exercise.
	Prioritise and implement environmental health, WASH and waste disposal interventions as part of the new NHSSP.
	Ensure the provision of electricity (solar) in all PHU facilities for EPI cold chain, drug conservation, sterilisation etc

4. HUMAN RESOURCES FOR HEALTH (HRH)

The main objectives of the NHSSP under the HRH pillar were:

1. To develop a comprehensive HRH policy and strategic plan to guide HR development and management;
2. To fast track the recruitment process and improve retention for HRH, including putting in place special packages for hard to reach areas;
3. Strengthen institutional capacity for HR policy, planning and management;
4. To set up an integrated HRH information system as part of the HMIS
5. To strengthen the capacities of health worker training institutions and introduce a continuous training programme and on-job training, mentoring and skills development schemes.

4.1. Achievements

Policy and Institutional capacity for HR policy: The health sector has developed a "Human Resources for Health (HRH) policy 2012", a "HRH strategic plan 2012-2016" and a HRH Profile. Both policy and strategic plan highlight strategic directions and specific strategies for improvement of availability and quality of HRH. There is a human resources department under the Permanent

Secretary, which is mainly in charge of management of human resources for health across the country. There is also a Directorate of Training.

As part of the health sector coordination mechanism, there is the HRH Technical Working Group (TWG), which is functional. It is bringing together major players to discuss progress, issues and solutions around HR management and HR Development. There are however continuity issues when some members leave the country; this needs to be addressed in the TWG.

During the implementation of the NHSSP, staff numbers have increased in the health facilities and rural/urban disparities have been reduced (table 9). The cadres that have observed most increase in staff are Nurses (SECHN and SRCHNs), and MCH Aides, while availability of medical doctors, medical specialists and Clinical Officers have not improved much.

Many of the staff from the health facilities visited acknowledged that they receive regular trainings from the MOHS programs, mainly EPI, Malaria, HIV and from implementing partners. Those trainings are short-term and targeted to improve specific service provisions or reporting (like DHIS2). Short term, on-the-job training is also mentioned in the Joint Program of Work and Funding (JPWF) and in program specific strategic plans and budgets. However, apart from interviews, we were not able to find information on how those plans have been implemented. Since the two health sector performance reports of 2010 and 2011, there appears no progress in the provision of short in-service trainings; what is available focuses on the numbers of HR staff trainees and their distribution across the provinces.

The MOHS, together with its development partners, have put in place a PBF system. They initially piloted PBF "light" approach, which has achieved encouraging results, including motivating health workers, strengthening systems, and improving coverage with essential interventions. In health facilities visited, health professionals revealed that PBF is one of the sources of motivation, mainly for those who are employed as volunteers, waiting for their appointment by the Government.

However, there are design challenges, such as the weak capacity to hire and fire, verify performance of staff in health facilities and the unclear separation of functions between regulation and contracting. A review of these pilot efforts has been undertaken and plans to pilot an expanded 'PBF Plus' scheme are going on. In addition, "Remote or hardship allowances" have been established to attract more staff to remote areas and reduce rural-urban disparities in the distribution of HRH.

Salaries of health staff were increased over-time. Specifically following the introduction of the "Free Health Care Initiative (FHCI)" - which increased the workload of health staff - there was a subsequent salary increase. Another strength is that the staff we met in MOHS and in DHMTs have capacity and experience. They understand the various bottlenecks and have suggestions for appropriate solutions.

Training of MCH Aides, which has started some years before the start of NHSSP implementation, has continued during the last five years. There is a standard curriculum, practical laboratory and experienced teachers. Training centers are distributed in all health districts, with advantages of enrolling mostly local trainees who are ready to serve in their communities. As the result of the concerted effort, the number of MCH Aides has increased from 825 in 2010 (NHSSP 2010-2015) to 2000 in 2015 (Resilient Zero fact pack_v1).

Community Health Workers (CHW) have received trainings from both Government and different implementing partners. Some CHW are trained on community case management while others are trained on different community mobilization and sensitization strategies. The MOHS and UNICEF developed a standard training package for CHWs as part of the 2012 policy which has been used to train CHWs during the last three years by most implementing partners. This training package is being revised and upgraded as part of the ongoing CHW program revision. The revised training package will be rolled out in 2016.

MOHS has put in place an electronic reporting system of staff attendance in health facilities and DHMTs. This is used as a management tool to base payroll on attendance of staff. It has also initiated an electronic Human Resource Information System (HRIS) to collect information on the number and composition of staff in facilities and in administration. In the early recovery plan (9 to 24 months), a number of strategies aimed at collecting evidence on current HRH status is being considered, including payroll cleaning, a survey to complete HRIS and geo-mapping of CHW among others.

4.2. Challenges

Table 9: Staff at PHU and DH, based on BPEHS versus currently available cadre

STAFF Norms / available	CHC	CHP	MCHP	District Hosp	Need of HF (BPEHS)	Available now	Gaps/ Surplus
MCH Aides/HF	4	2	3				
MCH Aides total	1.064	714	1.704	-	3.482	2.000	1.482 (Gap)
Nurses/HF	2	1	0	59			
Nurses total	532	357	0	2.537	3.426	4.213	787 (Gap)
SECHN/HF	2	1	0	12			
SECHN Total	532	357	0	588	1477	2815	1338 (Surplus)
CHOs & Assistants /HF	3	1	0	1			
CHOs & Assistants Total	798	357	0	49	1204	598	606 (Gap)
Midwives/HF	2	1	0	8			
Midwives total	532	357	0	344	1.233	291	942 (Gap)
Drs/HF				13			
Drs Total				559	559	275	284 (Gap)

Source: *BPEHS, Resilient Zero fact-pack and NHSSP*

Note: There are in total 49 hospitals that include both Public and Private. Staffing for the 111 (private) Clinics (2010) has not been included, as their norms have not been spelled out in BPEHS.

The BPEHS appears very ambitious compared with what is described as 'basic' by many other developing countries. Human resources is the main cost driver of the health budget and therefore need to be carefully thought through, when assessing the feasibility of BPEHS. When looking at the human resource requirements for health, the major issue is not the training, but most importantly, (i) the payment of salaries and other benefits and (ii) shifting the volunteer PHU health workers into the health sector as employees. There is thus a need to have a balance of HRH requirements according to expected service delivery and budget realities.

Table 9 shows that producing the required HRH to comply with BPEHS is very challenging. Working with the training providers, MOHS would have to double the number of doctors, to quadruple the number of midwives and train 1,500 more MCH Aides. Most importantly, there is an enormous gap in the number of available midwives for the PHU. Creative solutions have to be found to increase their numbers at CHC and DH levels to accelerate the reduction of the extreme high MMR figures.

On the other hand, it seems there is a surplus of nurses, but more detailed figures on the different types of nurses is needed e.g. SECHNs (State Enrolled Community Health Nurses), and SRN (State registered Nurses). Some of these nurses are being trained by private training institutions, but they are not absorbed by the health system. MOHS claims that private training institutions train cadres who are less needed by the health system; there is also a feeling of poor quality of the training because there is no coordinated accreditation or standardization system in place.

Another challenge around HRH is inefficiencies in human resources deployment and management. There are instances where CHPs staffs are fully occupied only 2 days/week (mostly by ANC and EPI services), the remaining days they work a small portion of their time (4-6 consultations/day) as witnessed in some PHUs visited. Given that health facilities visited are not representative of all facilities, it is advised to carry out a nation-wide workload assessment for health staff.

Community Health Workers, scope and future

Currently there are nearly 13.000 CHW, trained and supported by (inter) national NGOs / CSOs, all providing volunteer services, some with linkages to Community Health Committees (CHC). Most often they report technically to the MCH Aide at the MCHP, CHC or CHP, as these are closest to their villages. There is limited clarity about the position of the CHW in the health delivery system. From the recent inventory, it is clear that there are many CHW, but that they differ widely in what they do, how long they are trained, the support they receive from the NGO's and CSO's operating in their area, the content of their training and work and how they are going to be motivated/compensated: (i) should they remain volunteers or (ii) receive some minimal salary from the GOSL? The BPEHS provides an extensive list of topics the CHW is expected to provide to his/her community. This list cannot realistically be taught in the proposed period of 10 days. As the BPEHS states on page 21:

Box 1. Package of essential services to be provided by the CHW (BPEHS, 2015)

Under the national CHW program, CHWs will be trained in the services that are in the policy and manual: promotion of ANC, skilled facility delivery, and PNC; detection and referral of danger signs; iCCM (diagnosis and treatment of simple malaria, diarrhoea, and respiratory infections for children under 5); promotion of IYCF; screening and referral of acute malnutrition; reproductive health counselling and referral; and distribution of limited family planning commodities. Supplementary services could be added on to their workload as and when appropriate.

Note: In the BPHS all the tasks for the CHWs takes almost 4 pages.

In finalizing the community health strategy that is currently being developed, it is important that clear agreement will be reached on the role and scope of the CHW in the health system strengthening. The following major elements need consideration:

1. Where should their station of work be: in a CHP / MCHP versus in the community / village?

2. How should they be motivated and compensated: volunteer services, some stipends or on government payroll (minimal fee)?
3. Who should be recruited to bring more people to services?: should they be male, female or both
4. Defining training entry levels, selection criteria and duration / quality of their training needs?
5. What should be the service package they will offer?: would they provide treatment? If yes, only children or older children or adults as well?
6. Will all TBAs become CHWs, if not what will happen to the TBAs?

The preparations for the decision on the scope and future of the CHW depends in the first place on documented most cost-effective interventions and on the available GOSL financial resources to pay for the existing staff, including those that are volunteers at the moment.

4.3. Recommendations

Table 10: Recommendations for HRH

Period	Recommendations
Short term (2016)	Determine HRH requirements for BPEHS and cost them (training and future salaries) against available budget; if they are not feasible, revise them and/or mobilize more money. Develop, long-term HR Development plan with budget for HRH training (all cadres)
	Identify training requirements and available training institutions (both public and private) and their capacities; analyze different contracting arrangements to strengthen their capacities that will produce the required numbers Put in place accelerated training for critical staff (Midwives, clinical officers…)
	Define the scope of Work for community health workers, training requirements and remuneration packages Strengthen the MOHS /HRD department to coordinate the development and management of HRD.
Medium term (2016-2017)	Initiate partial decentralization of HRH management: appoint HR managers in DHMTs to prepare payrolls according to budget transferred by central level. (Appointments of HRH remains responsibility of MOHS at this stage) Put in place accelerated training for critical staff (midwives, clinical officers…)
	Put in place, communicate and implement a continuous professional training and career progression system. Train CHCs and DHMTs for routing HRIS data collection and updates
	Analyze the challenges of implementing remote allowances and PBF systems, revise them accordingly, and mobilize GOSL and partner resources to implement Train community health workers according to defined scope of work
Longer term- Up to 2020	Fully devolve human resources management, use budget and other control mechanisms to ensure equitable distribution. Government should develop an equitable human resource deployment criterion with transparent accountability mechanisms. Strengthen academic institutions, set up training programs including specializations, clinical officer training.
	Improve the use of technologies in HR management and integration of existing information systems: HRIS, Payroll, attendance and performance management.

5. HEALTH CARE FINANCING

The NHSSP set a strategy to secure adequate level of funding needed to achieve national health development goals, including the MDGs from central government and other innovative resource

mobilization strategies, including cost recovery (medical service fees). It also aimed at introducing pro-poor health financing strategies, strengthening financial and procurement systems that will enable the sector to establish a sector wide approach.

Table 11: The major health financing targets and their achievements

Indicator	Baseline (2008)	Target (2015)	Achievements (2013)	Performance level
% share of health expenditure from the total GOSL health expenditure	8.5%	15%	11.%	77%
Total public health spending per capita (US$)	12.2	$29.60	$30	100
Total Health Expenditure (Le billion)	Le 266.5	Le 715	Le 966.5	

Source: *JPWF and NHA 2013*

5.1. Achievements

The percentage share of health expenditure from total government spending increased to 11.2%, but has not reached the set target of 15%; its share from total health spending show a marginal increase from 15 to 17% (NHA 2013). The per capita public health spending set for JPWF of $29.6 is achieved as it has increased from $12.2 to $30.0

According to the information received from MOFED, 823.6 million of Leones for four years and 612.3 million Leones for three years has been used for financing the NHSSP and JPWF respectively. As can be seen from Table 12 and 13, while NHSSP had funded 48% of its cost, the JPWF was fully funded to realise its objectives and targets. Between 2012-2014, the expenditure by DPs has been close to three times more than what was projected in the JPWF.

Table 12: NHSSP and JPWF costs, budget and expenditure, 2010-2014 (Millions of Leones)

	2010	2011	2012	2013	2014
NHSSP Cost estimates	343,981.2	422,194.2	460,856.9	462,159.3	478,197.0
JPWF cost estimates			154,660	163,020	155,920
JPWF projected external funding	0	0	75,995	63,825	65,325
Government budget	90,548.7	150,988	122,668	205,115	199,919.6
Government Expenditure	128,898.2	164,516.6	174,220.6	145,945.3	56,988.5
External resources-Health except HIV/AIDS	72,430	46,696	60,668	69,280	105,263
External resources: Health + incl. HIV/AIDS	75,151	50,725	62,243	69,739	107,263
Total expenditure (Health)	201,328.30	211,212.70	234,888.05	215,225.36	162,251.80
Total expenditure (Health + HIV/AIDS)	204,048.70	215,241.90	236,463.15	215,684.66	164,251.80

Source: MOFED 2015

Table 13: Level of funding of NHSSP and JPWF compared to their estimated cost

	2010	2011	2012	2013	2014	Totals
% of NHSSP cost funded	59%	51%	51%	47%	34%	48%
% of JPWF cost funded			153%	132%	105%	130%
% external resources available from JPWF projections			311%	338%	251%	300%

Source: *MOFED data 2015*

When the composition of health spending is looked into, close to 60% of the government health spending was spent on personnel salaries. The issue of poor efficiency and limited personnel accountability has been raised before as one of the cause of weaknesses in the leadership and governance section of this report.

The other major category of spending was central level good and services, which accounted for more than 25%. But the share of resources that is going to local councils is lower than 10%, and what is going to PHUs range between 2.8% to 4.7%. (table 14). This could have contributed to low realization of output targets as lower level facilities are not providing decent quality of care.

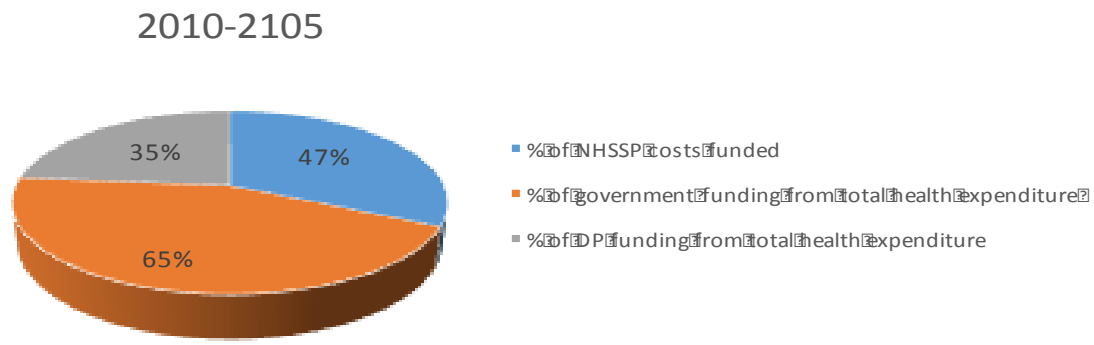
Table 14: Composition of GOSL expenditure by major expenditure categories

		2,010	2,011	2,012	2,013	2,014
Personnel Expenditures (Wages and Salaries)		49.2%	46.4%	51.3%	72.7%	57.1%
Central Ministry Good and services		21.4%	19.7%	28.4%	25.1%	28.9%
Development projects		9.7%	15.9%	1.1%	2.2%	5.7%
Transfers to local councils	PHUs (all three)	3.2%	4.7%	4.5%		2.8%
	Secondary level care	5.0%	4.6%	4.8%		5.5%

Source: MOFED data 2015

When the share of Government and Development Partners in financing NHSSP is explored, government share was 65% while DPs share was 35% (figure 1).

Figure 1: Percentage share of GOSL and DPs from NHSSP financing

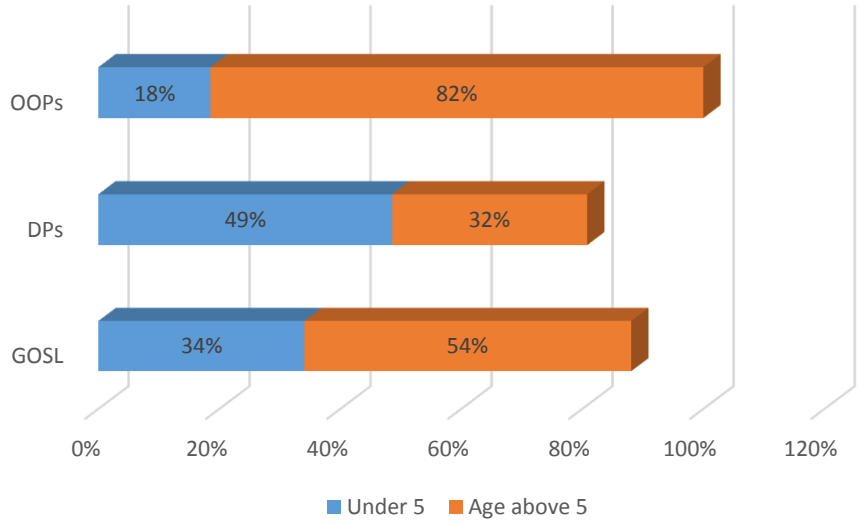


Source: *MOFED data 2015*

During the NHSSP period, the Free Health Care Initiative (FHCI) supported by the PBF has increased utilization of services until the EVD struck. The OPM 2015 report documented that free health care and PBF have increased utilization of services by the population, motivated health workers and

contribute to the availability of medicines and medical supplies. The 2013 NHA data clearly documented that most of the DP resources are going to finance services, targeting under five (Figure 2). The NHA also documented that 33% of the total spending on health went to reproductive health and family planning. In addition, there is evidence that the OOPs financing of under-five is about 18 percent of the total cost. However, there are also reports that the exempted population categories are paying (informally) for services. Furthermore, although the PBF is trying to motivate health workers to perform better, due to the large number of volunteers, especially in the various PHUs, DHMTs reported that demotivated staff have negatively affected the impact of the free health care initiative.

Figure 2: Resources allocated to under-five and above five by sources of funding



Source: *MOFED data 2015*

There have been efforts to establish risk sharing mechanisms through SLESHI initiative, but this has not progressed as yet. SLESHI is now being pushed to further the establishment of a social health insurance scheme. The role of designing the scheme has shifted from MOHS to the Ministry of Labour and Social Security (MLSS). It is reported that the MLSS is considering to establish (i) a social health insurance for the formal sector employees and (ii) a community based health insurance scheme for the non-formal sector. It is advised to study the design of the non-formal sector pre-payment schemes in successful countries, like Rwanda where the coverage of informal sector is close to 80%.

5.2. Challenges

There is no clearly articulated health care financing strategy yet. Indeed, the government has introduced free health care and performance based financing during the NHSSP period. But a long term strategy and plan for increasing domestic resource mobilization, reducing out pocket (OOP) and external dependence, as well as enhancing efficiency, effectiveness in resource use - and proactive public partnership that requires a long term view and proactive action - are not yet in place. This has resulted in under-financing and other financing challenges that are presented below.

The financing of the health sector is heavily dependent on out of pocket payment (OOP). According to recent NHA (2013), about 62% of the total spending in the health sector was financing through out of pocket spending. Public spending (both external resources and government finances) account only for 31.6%. The over-reliance on the OOPs as a means to finance health will continue to be one of the serious challenges for Sierra Leon to realize its SDG goals that have been agreed upon in September 2015. According to WHO standards, OOPs that are more than 30% of the total health spending are considered 'catastrophic', meaning that spending on health by households is pushing the people below the poverty line. Recognizing this challenge, the government is considering through the Ministry of Labour and Social Security to develop and implement a national health insurance scheme. There are also currently some isolated but important initiatives that try to reduce the burden of OOPs. For Instance, funded through DFID and other agencies, Partners in Health (PIH) is funding in-patient costs that are provided in Port Loko Hospital. According to the interview with PIH staff in the hospital, the payment to the hospital on average amounts to 13-15 million Leones per week.

Table 15: Sources of total health spending in Sierra Leon, 2013

Total per capita expenditure	Percentage of share from THE	USD 96
Share of OOPs from TPE	61.6%	58.52
External Resources	24.40%	23.18
NGOs	7.20%	6.84
GOSL	6.80%	6.46

Source: *NHA, 2013. TPHE = Total Per capita Health Expenditure.*

Given these data, it is clear that the health sector is underfinanced compared with the international standards. In 2013, the government allocated about 11% of its total government spending on health. The per capital available funding from public sources (government and DPs) for essential services is about $30 and is far below what is required for moving towards SDGs (table 15). According to the Port Loko Hospital, the resources allocated from the government is not reaching the hospital as planned and on time and the only resource available to finance operations comes from the payments made by PIH for the inpatient services and the cost recovery resources collected from outpatients OOPs.

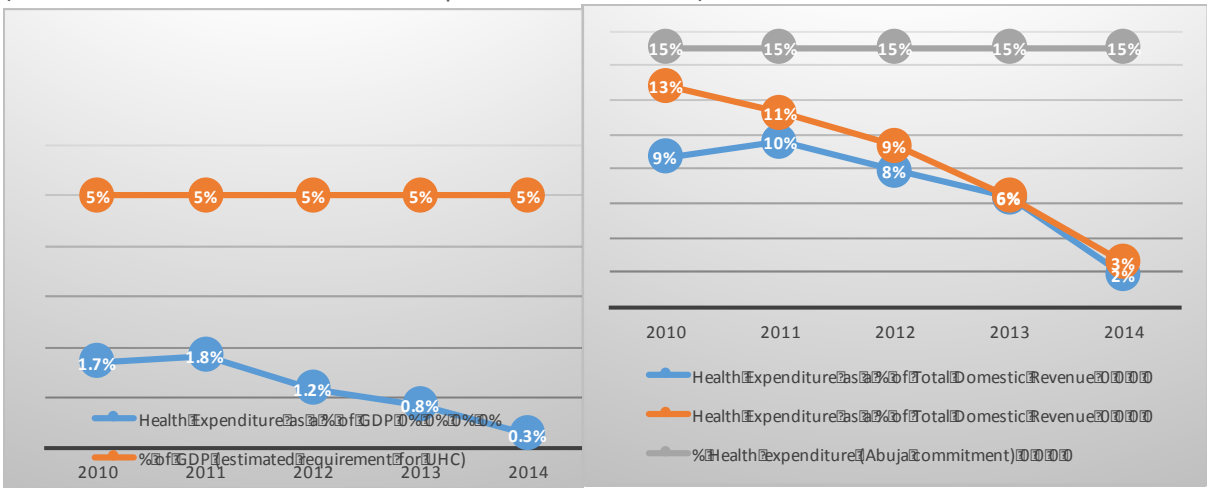
Table 16: Public Funding in Sierra Leone compared to international benchmarks

	GOSL 2013	DPs (2013)	Total public spending	International Benchmarks
Spending on health per capita	$ 6.5	$23.2	$29.7	CMH 2012 prices = $71 HLTF for innovative Fin = $86 WHO for UHC-government: 5% of GDP

Source: MOFED;
Note: CMH = Commission on Macro-Economics in Health; HLTF = High Level Taskforce for Financing

The trend of government health expenditure is not only far below the international benchmarks set to finance basic health expenditure, but also below the resources required to allow the country to realise UHC in the medium term. As can be seen from Figure 3, the trend of GOSL spending as a percent of GDP, government revenue or total government expenditure is declining over-time.

Figure 3: Share health expenditure as %% of GDP.
(domestic revenue and GOSL total expenditure 2010-2014)



***Source**: Calculated from MOFED data 2015*

Another challenging area is the credibility of the budgeting process. Budget ceilings are provided by MOFED to sectors to guide them in their planning process. Unfortunately, these ceilings change during the planning process, bringing additional transaction costs to the planning process to fit into the changing fiscal space available from MOFED. Once the budgeting process is approved, there is also significant variance between what is allocated as budget and what is disbursed to sectors. For instance, all the directors and local councils and DHMTs visited in December 2015 reported that they received less than 50% of their 2015 allocations. As a result of narrow overall fiscal space, there is inadequate funding for implementation of planned activities. Examples most of the human resources currently running PHUs are largely volunteers that do no have incentives and accountability to provide services timely, which is reducing the effectiveness of the service delivery mechanisms. Since volunteers also have a tendency of informally charging patients, this has also impacted negatively on the FHCI and is contributing to the catastrophically high OOP costs in the country. The other challenge in accessing funds is the weak capacity of the financial management system within MOHS to account for what is released to the MDAs.

Another significant challenge is the neglect of the cost recovery scheme: GOSL has clearly defined which services are provided free and which ones should be funded through fee for services. It also established at central level, service fees and prices for medicines and medical supplies, which will help protect users from unfair charges by the facilities. These services have a big potential to generate additional resources that could cover a significant portion of recurrent cost of the health facilities. The service fees that are established at the central level are seen in table 16:

Table 17: Service fees for various types of services

Services Types	Fee for Service charges in Le's
Outpatient registration	7,000/day
Registration and consultation fee	14000/day
Inpatient admission for a week	15000
Admission after one week	1000 per day
Laboratory services	2000-15,000/case
Theatre	20,000-100,000/case
Maternity	free

***Source**: From posted prices at Kambia hospital, but set at the national level for all hospitals*

The cost recovery together with the upcoming social health insurance scheme could help facilities move towards self-financing for non-free health services. Unfortunately, the system is too centralized and not well structured. Facilities do not have adequate incentives to create and work for innovative financing mobilization strategies, like outsourcing, private wings/ward in public facilities. They sell drugs and medical supplies from the cost recovery and send the money to the central medical stores. The facility prescribers do not have any incentive to limit their prescription to generic and what is available in the health facilities. There are no guidelines and procedures on how to record, use and report the resources generated through cost recovery by health facilities. Despite the fact that significant resources are being mobilized through OOPs in visiting public PHUs and hospitals, tracking their use is inadequate at best. According to our interviews at DHMT and council levels, It was reported that the financial management capacity of the PHUs is not strong enough at the moment. They do not have their monitoring and auditing mechanisms in place. The cost recovery system is thus overshadowed by the FHCI which needs to be corrected.

The health financing system up till now has not been given the attention it deserves. The Health Care Financing (HCF) unit is preoccupied mainly with producing annual NHAs which are not well disseminated and not well used in policy dialogue, planning and programming and with designing and managing the PBF program. The three employees in the unit within DPPI are fully funded externally and there is no government staff taking ownership and leadership of the function. The unit is not working closely with MOFED. The senior economist position in the unit remains vacant. Because the unit is not strong enough, most of the health care financing initiatives (costing of recovery plan, and its resource mapping and possibly the development of the health financing policy/strategy) are being supported/initiated by the HSS Hub or external partners. While this assists the MOHS to fill its existing capacity gaps, it is necessary to ensure that skills and knowledge is transferred to the HCF unit in the long term to ensure sustainability of the system.

Sustainability of the FHCI is an issue, given its reliance on external funding in general and on funding by DFID in particular. The initiative has achieved good results (OPM report), but the contribution of the GOSL in its financing is weak. The fiscal space of the government is too narrow as evidenced by the low allocation to health and its inability to disburse funding to units. Diversifying domestic resource mobilization through some sort of innovative financing (sin taxes on tobacco, alcohols and/or mining) is yet to be explored. The potential of sustaining health services if and when external resource declines remains a challenge. This is compounded by the fact that the financing of PBF+, which complements the free health care by motivating the supply side, remains uncertain after 2017.

Prioritization: GOSL financing mainly goes to general curative care, while DPs and IPs funding target preventive services. The efficiency of resource use and achieving value for money is one important issue in Sierra Leone. Many countries in Africa have better health impacts such as MMR and CMR with similar or lower levels of public spending in the health sector (examples are Ethiopia, Burundi, and Benin).

First, although there is a standard for different levels of facilities to the population ratio, there might be too many facilities for the total number of population. There is more reliance on facility level service delivery than using community systems. The management of human resources is centralized

and there is an inequitable distribution of human resources as most them are deployed in urban centres, which leave most of the rural areas underserved. Hiring and firing of human resources, based on performance appraisal systems is not a common practice. The payroll audit is reported to have evidenced a number of challenges in finding the human resources absent in their deployment area. The reliance on volunteers is not likely to encourage performance or achieve value for money.

Secondly the push system of drugs and medical supplies have also contributed to the supply of un-needed medicines that expired at the facility levels, as there is no system to collect and redistribute them on time to facilities where they are needed. There is a misuse of cost recovery resources. There is fragmentation in systems strengthening by programs (human resource, equipment, vehicles, information system, distribution systems) that could be pulled and rationalised. Finally, the team work between those that technical guide service delivery and those that manage resources (human and financial) are not coordinated enough to enhance efficiency and effectiveness.

5.3. Recommendations

Table 18: Recommendations for Health Financing

Period	Recommendations
Short term (2016)	Rethink and strengthen the cost recovery system to ensure that the sector benefits from the risk pooling mechanisms that will be established and from the OOPs that are being paid at the moment through: (i) developing and implementing standard guidelines on how to mobilise, plan, use and audit the revenue generated from internal facility revenue; (ii) enabling facilities to have a decentralized Fund for both services and medicines that they can manage[1]; (iii) facilities to become self-financing units in the long-term with clear management arrangements.
	Strengthen the capacity of DPPI management and staff (administrative, programme, and technical) to have a common goals and ability to undertake resource tracking activities, and (b) enable the vision of DPPI management to support the revitalized Unit towards such goals? Restructure and strengthen the health Care Financing Unit within the MOHS to be the driver of financing in the health sector. Build its capacities by putting the right people and skills to drive and lead resource tracking activities. Government needs to invest in recruiting staff and provide funds to the unit with initial support and technical assistance from the development partners
Medium term (2016-2017)	Undertake a thorough review of the health care financing situation and develop a health care financing strategy and implementation plan. The strategy should set policies on free services, cost recovery, risk pooling strategies, resource mobilization, enhancing efficiency of resource use. The implementation needs to specify the targets and timeframe for the policy implementation, as well as the various implementation arrangements (structure at all levels).
	Support the effort being made by the Ministry of Labour and Social Security to establish risk pooling mechanisms. The MOHS should be active in defining the benefit package, the provider payment rates and mechanisms based on a solid costing of services. If the scheme is going to establish Community Based Health Insurances, as a means to UHC specially for the informal sector, the schemes should be: • Government led; • Government should be committed to pay the premiums of the very poor, • The scheme should be large scale with different schemes paying different levels of health service delivery. • It should aim towards making membership 'mandatory' rather than voluntary
Longer term (Up to 2020)	Design and implement innovative health financing strategies to diversify domestic funding of health and reduce external dependency

[1] Rwanda and Ethiopia allowed facilities to generate, retain and use these resources.

6. MEDICAL PRODUCTS AND HEALTH TECHNOLOGIES

The objectives and strategies in the Medical products and technologies pillar of the NSSP were to:

- Review existing policies and develop new policies and guidelines with respect to medicines, medical supplies and equipment, vaccines, health technologies and logistics
- Improve access to good quality, efficacious, safe and affordable medicines, medical supplies and equipment, vaccines and health technologies
- Establish the National Pharmaceutical Procurement Unit (NPPU) and Pharmacy Board
- Establish and maintain a pharmaceutical management information system at all levels (LMIS)
- Construct/expand/rehabilitate and equip CMS, DMS (hospitals and PHU facilities)
- Promote rational and cost effective use of medicines, medical devices, biological and other medical supplies at all levels of the health care delivery system.

6.1. Achievements

The legal and policy framework for the pharmaceutical sector has been put in place and is disseminated. Those include Pharmacy and Drug Act 2001, related guidelines and the drug policy.

There are institutions that have been established to manage and guide the system including the National Pharmaceutical Procurement Unit (NPPU), and the Pharmacy Board, responsible for the quality control laboratory. The NPPU has benefited from the technical assistance/mentorship by an international company over a period of 3 years. Within MOHS there is a Directorate of Drugs and Medical Supplies in charge of pharmacy and central medical store (CMS). Similarly, at the DHMT level, there is pharmacy staff and a district drug store. Availability of medical supplies in the health facilities has improved, mainly due to the introduction of the Free Health Care Initiative. An electronic management information system (LMIS) has been initiated and rolled out.

6.2. Challenges

The existing legal and policy framework is not well enforced, as evidenced by the following;

(i) The Pharmacy Board of Sierra Leone (PBSL) managed to register only about 60% of the drugs that enter into the country, creating possibilities for the entry of counterfeit drugs or medicines of substandard quality;

(ii) There is entry of non-useful donations and drugs that are close to expiry date; those drugs use the already limited space and consume the money needed to dispose them, while the population has not benefited from them.

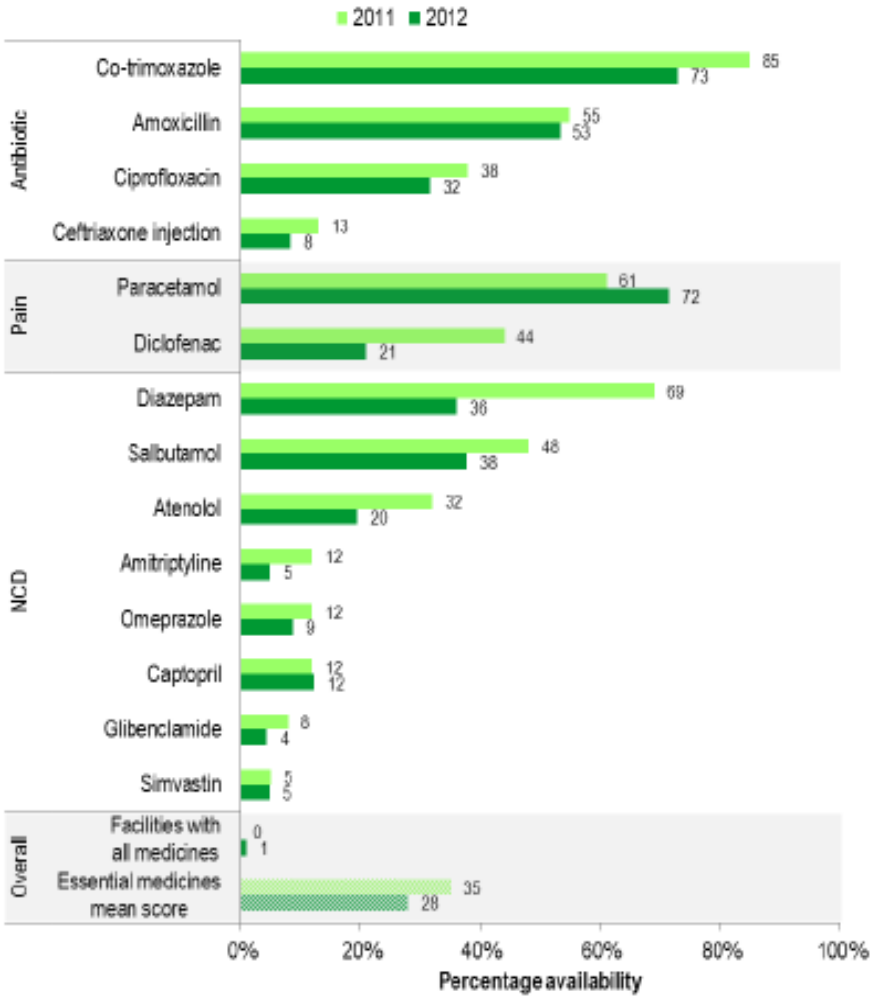
(iii) Drug availability in health facilities is a major challenge as reported in a number of reports (including Service Availability and Readiness Assessment reports (SARA 2011 and 2012), Annual FHCI evaluation, 2015) and by almost all key informants.

Figure 4 from the SARA 2012 summarizes the availability of the 14 essential medicines in health facilities (HF). Availability was reduced for 11 drugs out of 14. The mean score was reduced from 35% in 2011 to 28% in 2012. It would be interesting to show the trend after the introduction of the FHCI; unfortunately there is no recent SARA or any report on (current) drug availability.

There are a number of factors behind the shortage of drugs in health facilities.

First, there is **no coordinated national supply system** in the country, as some vertical programs like HIV, Malaria among others, are using their channels to procure and distribute medical products. Those programs are mainly donor-funded and the sustainability of such parallel systems after the funding is always an issue. This implies high transaction costs, missed opportunity of gaining from economies of scale and scattered efforts resulting into weakening further the national supply system.

Figure 4: Percentage of HF with valid essential medicines in stock (2011 and 2012)



Second, **NPPU**, which has been created to coordinate supply system, has not been sufficiently supported and facilitated to play its intended role.

Third, the NPPU does not have sufficient budget to procure all essential drugs in needed quantities, mainly because the cost recovery is not performing well, and GOSL does not provide enough to fill the gap. Thus, supply is not sufficient and sometimes does not match with demand; there are a lot of avoidable wastes and frequent stock-outs of essential drugs and consumables in health facilities. Fourth, the supply system is still a **push system**. Central level procures and distribute to DHMTs pharmacies, and these ones distribute to PHU health facilities. Health facilities are not financially independent to procure what they need, which is also related to weak cost recovery system.

The cost recovery system does not function well to support the revolving fund for medical products. Little money is collected compared to the potential collection capacity and PHU's money collected is sent to central level without mentioning the source. Therefore, there are few incentives to collect more money, since those who collect and those who do not collect are served equally.

Logistic Management Information System (LMIS) is not fully functional and is not used to keep track of stock levels or make orders. DHMTs have not been given much attention to the roll-out of LMIS, while they are supposed to be a link between the central procurement unit and the health facilities in terms of coordinating quantifications and procurement plans and coordinating the supply within the districts. ICT infrastructures to support electronic reporting of drug information in health facilities are often not available.

The storage infrastructure is also not adequate: the space in some District pharmacies is too small, and not necessarily responding to medical storage standards. The review team witnessed when medicines were being stored in an agriculture store in Port Loko district.

Inadequate prescription behavior was also reported as a major problem. Rational Drug Use (RDU) is not included in the health worker's curricula, however some NGOs have done trainings at PHU level on Rational Drug Use. Some clinical staffs prescribe in brand names, while the central procurement supplies mainly generic drugs. Drug therapeutic committees (DTC), which are supposed, among other tasks, to mitigate the above problematic in health facilities, are not regularly meeting. This might also be one of reasons of high volumes of expired drugs.

Finally, another area that has many challenges is the **maintenance** of medical and equipment. All health facilities rely on MOHS in case of damage of any equipment. MOHS itself does not have enough capacity to respond to requests of HFs in this area.

6.3. Strategic recommendations

Table 19: Recommendations for Medical Products

Period	Recommendations
Short term (2016)	Develop and disseminate guidelines on cost recovery of drugs at all levels (NPPU, DHMTs, HFs)
	Set up management structures for funds from sales of drugs at DHMT and NPPU levels: specific accounts for drugs in DHMTs, financial software enabling to identify Health Facilities' sub-accounts.
	Put in place national, district and CHC quantification committees for all drugs (FHCI, Cost recovery drugs, HIV, Malaria, TB…) and train them in quantification and procurement planning.
	Develop, disseminate and enforce guidelines on rational drug use
	Conduct an assessment of storage conditions at Central (CMS), DHMTs, District hospital and CHCs levels
	Develop, disseminate storage norms / standards for HFs DHMTs and NPPU
Medium term (2016-2017)	Pull all capacities (staff, money, equipment) related to logistics from vertical programs to NPPU and make one procurement plan and one supply system.
	Set up a revolving fund for drugs and consumables at central and DHMT and facility levels and related management structures.
	Initiate a national (coordinated) supply of drugs and consumables based on DHMT procurement plans (shift from push to pull)
	In collaboration with other relevant institutions, set up mechanisms to track all drugs entering the country and force all importers to comply with available policies and guidelines.
	Revive drug therapeutic committees and include their functioning in the performance appraisal system for PBF
Longer term- Up to 2020	Fully implement e-LMIS with GoSL ownership, use it as a tool for tracking stock levels, basis for quantification and procurement planning by DHMT, ordering, with DHMT involvement and use.
	Improve storage conditions in HFs and DHMTs according to norms and standards (renovation, expansion…)
	Put in place a national maintenance workshop for medical equipment and an electronic equipment tracking (where HFs report broken equipment, and central maintenance centre).

7. HEALTH INFORMATION SYSTEM AND M&E

The key objectives and strategies in the Health information systems pillar of the NHSSP were to:

7. Provide a policy framework for establishing a functional HIS by developing, producing and disseminating a HIS policy, review utilization of the HIS for planning and M&E
8. Strengthen institutional framework for implementing a functional HIS; Improve the capacity of DPI and DPC and district HIS units, revitalize the HIS steering committee and establish a TWG)
9. Improve routine data collection quality, management, dissemination and use: Establish an integrated data warehouse (IDW), Integrate data collection systems, improve capacity of staff at all levels to follow HIS standards, guidelines and SOPs for data collection, analysis and reporting
10. Produce quarterly and annual health statistics for both operations and strategic management
11. Conduct a comprehensive assessment of the vital registration system and develop a plan to strengthen it
12. Establish a logistics management information system (LMIS), human resource Information system (HRIS), strengthen and integrate IDSR into the national HIS

13. Strengthen data collection at community level and from private service providers.
14. Strengthen monitoring and evaluation (M&E), research and knowledge management capacity.

7.1. Achievements

After the development of NHSSP, a Results and Accountability Framework for NHSSP have been developed, with key performance indicators, their baselines and targets, as well as data sources.

DHMTs have data managers and M&E staff who gather data from the PHUs and send them to central level. They have computers and modem for Internet connectivity. The GoSL has a project to install solar energy in all health facilities. This will be a precious opportunity to initiate electronic data collection in PHUs. As part of improving routine data collection and analysis, DHIS2 has been established: PHUs gather data from registries and report them on the summary sheets to DHMTs as hard copies. DHMTs and central level have an electronic DHIS2. Birth and death registration takes place, there is a staff in the council in charge of birth registration and the MOHS department of Primary health care has a desk in charge of vital statistics.

There are visible efforts to improve data quality from data collection (PHUs) and DHMTs. Programs like Malaria, EPI, and HIV have been more proactive in this process. IDSR has been improved, mainly as part of response to EVD; there are plans to improve it further in the recovery plan. Community Based Surveillance (CBS) will be rolled out in early 2016.

7.2. Challenges to implement NHSSP

Routine data collection, management, dissemination and use are faced with many challenges: there was no reliable source of routine information. Given the low coverage of DHIS2 and problematic data quality, there is a general feeling that DHIS2 reports are not accurate. The main reasons of incomplete coverage of DHIS2 is that (1) some programs like HIV, TB have not been included in the DHIS2 reporting tools and in the software itself, (2) District hospitals have been left out in the implementation of the DHIS2.

Despite DHIS2, programs continue to invest in parallel data collection and analysis for them to be able to respond to reporting requirement by donors. For example, the national HIV program has its reporting system (separate reporting forms, CS Pro software, separate data managers). The parallel systems funded by projects, though they respond quickly to reporting requirements, they cannot be expected to be sustained after the project lifetime, and they are expensive. There is a missed opportunity to use project funding to strengthen the national information system.

Lastly, the information system does not capture activities performed in the community health program. Sometimes, the reduction of consultations of under-5 children in the PHUs can be wrongly interpreted as low use of services, while there is a substantial number has been treated in the community.

Human Resource Information System (HRIS) and Logistic Management Information System (LMIS) are also not complete, not regularly updated and so far no report has been generated out of them.

DHMTs were not engaged and involved in the roll-out of the 2 electronic systems, despite the fact that they have a strategic role in synthesis of information from its PHUs and use it first (for the planning of human resources and the procurement plan) and share it with central level.

There is a plan to improve the coverage of HRIS in the recovery plan through a countrywide survey. which will generate credible evidence on current status of Human Resources in the country. However, the survey system will no be enough to provide real time information needed for day-to-day decisions, given the dynamic nature of human resources (new people are appointed, there are internal movement from one health facility to another, others leave jobs for many reasons including pursuing further studies)

There is little Government investment in information system, starting from the MOHS department, Policy, Planning and Health Information systems. It is under staffed and the majority of available staff are funded through projects. There is inadequate infrastructure for data management at central and DHMT level (few computers, servers, no reliable internet)

Data quality is problematic mostly because of (i) inadequate capacity of reporting staff in PHUs, and (ii) large number of indicators and many forms to fill, whereas DHMT which is supposed to enter data for around 100 PHUs under its catchment area within a tight deadline, doesn't have enough data clerk. Therefore, there is high probability of errors and backlog of data to be entered in the system. Vital statistics are not complete, as 70% of birth registration and about 20% of death registration is only captured according to the international classification. Data use and feedback from central level to District and from DHMTs to PHUs is still very poor which again affects data quality. IDSR, though it has been strengthened, is not yet integrated with other information systems.

7.3. Strategic recommendations

Building a strong health information system requires substantial investment both in infrastructures, in human resources capacities and in systems. Moving from fragmentation to integrated information system is a step-by-step process. We propose to first improve DHIS2 coverage and make reports out of it that can be used for planning and monitoring, thus making it attractive

Table 20: Recommendations for Health Information Systems

Period	Recommendations
Short term (2016)	Develop new data management Standard Operating Procedures (SOPS) to clarifying the roles and responsibilities for each player with timelines.
	Recruit short term data clerks and statisticians to support DPPI and DHMTs to complete DHIS2 by working on backlogs at least from 2014-2015 information from all HFs including District Hospitals, and do preliminary analysis and reports for 2014 and 2015.
	Draw a roadmap for migration from program information systems to DHIS2 including transfer for data management staff and equipment
	Contract TA to develop modules for all Programs in DHIS2 to be ready for migration
	Instruct all new programs and projects to be implemented on a national scale (like FHCI for example) to commit a % allocated to HIS and M&E
	Lobby to GoSL to expand electricity and internet services in remote areas,
Medium term (2016-2017)	Strengthen (recruit new staff, trainings, IT equipment) the central level department of planning and DHMTs to be able to do regular data analysis, use dissemination and data quality checks in coordination with other departments.
	Contract long term (3-5 years) TA to mentor DPPI staff in data analysis and dissemination (with clear capacity transfer mechanism and evaluation).
	Set up data analysis Technical Working Group bringing together M&E officers from all programs and relevant stakeholders at least on a quarterly basis, to analysis data from DHIS2 and other systems
	Institutionalise data dissemination & use (bulletins, review meetings, performance reports). Start from 2014 and 2015 bulletins
	Put in place accountability mechanisms for data quality at all levels using PBF and other mechanisms.
	Put in place infrastructures and capacity for IDSR at all levels and integrate it in DHIS2. Train District hospitals and integrate the in the electronic reporting.
	Initiate reporting of all programs within DHIS2
Longer term- Up to 2020	Finalise the creation of one-stop center for health information from health facilities using DHIS2 platform by pulling all resources from programs to strengthen that system
	Initiate electronic reporting in CHCs, and empower them to be a layer for data synthesis and supervision for lower PHUs: It implies to provide IT equipment, and related trainings.
	Initiate community health reporting in DHIS2 through CHCs: design simple reporting tools, develop module within DHIS2, train community health workers and data management focal persons in CHCs.

ANNEX 1. TERMS OF REFERENCE (TOR) TO REVIEW THE IMPLEMENTATION OF THE NHSSP

1. Background

The Ministry of Health and Sanitation (MOHS) in collaboration with key stakeholders prepared the National Health Sector Strategic Plan (NHSSP) and the Basic Package of Essential Health Services (BPEHS) as a framework for guiding the delivery of health services in Sierra Leone. The NHSSP (2011-2015) has been implemented over the last five years and is nearing its completion.

The outbreak of Ebola Virus Disease (EVD) in Sierra Leone and the neighbouring countries has had major impact on the health status of the population and on the already fragile health systems. In order to address the vulnerabilities of the health system that the EVD has exposed, the Government of Sierra Leone, in collaboration with the development partners, prepared a 9 months Emergency Recovery Plan and 2 year Transition Plan for building a resilient health system in Sierra Leone.

2. Rationale

Before the completion of the NHSSP and the 9 months Emergency Recovery Plan, a new five-year National Health Sector Strategic Plan (NHSSP II 2016-2020) will be developed that will comprehensively guide the country in building a resilient national health system with functional coordination and management structures to deliver safe, efficient and quality health care and to effectively respond to outbreaks of epidemics and other emergencies.

The preparation of the new 2016-2020 NHSSP will require an analysis of the strengths and weaknesses in the implementation of the first NHSSP.

3. Objectives

The overall objective is to support the MOHS in conducting a review/stock-taking of the implementation of the NHSSP to: 1) document progress made, strengths, weaknesses and challenges and lessons learnt from its implementation, and 2) propose recommendations for the new strategic plan.

4. Methodology

The review/stock-taking of the implementation of the NHSSP will be undertaken through a consultative process, engaging all key stakeholders. The review team will use the following approaches to assess the progress of implementation of NHSSP:

a. Desk review of all relevant resource documents in particular the National Health Sector Strategic Plan, Emergency Recovery Plan, yearly performance reports on the implementation of the NHSSP, programme and sector reviews and reports, etc.;
b. Field visit reports and assessments;
c. Conduct structured interviews with all relevant stakeholders in particular MOHS, other key government ministries, departments and agencies; civil society partners; development partners and districts etc.; and
d. Consensus meetings and a final workshop with stakeholders to discuss the review/stock-taking findings and recommendations.

The tool and process utilized in the Joint Assessment of National Health Strategies (JANS)[2], conveniently adapted to the review's objectives, will help operationalize the methodology.

A Team of Consultants will be recruited to provide TA to the MOHS in the review/stock-taking of the NHSSP implementation.

5. Scope of Work

The team will be required to perform the following tasks:

a. Review/stock-take the implementation of the NHSSP to assess the progress achieved, identify its strengths and weaknesses, the challenges experienced in its implementation and propose recommendations for improving the new strategy.
b. More specifically, the review will focus on the strengths and weaknesses of the:
    i. systems for implementing and managing the programmes included in the national strategy,
    ii. alignment of sub-sector operational plans to the overarching strategic priorities of the NHSSP,
    iii. criteria for allocation of resources to the districts,
    iv. financial management,
    v. procurement and support systems,
    vi. monitoring, evaluation and review arrangements and mechanisms.

6. Deliverables

The team will be expected to produce the following deliverables:

a. An inception report with the methodology, the consultative process and timeline;
b. A draft report with preliminary findings that will be circulated to the key stakeholders involved in the process for comments, and
c. A final report that will include relevant inputs and comments from relevant stakeholders.

7. Reporting and Accountabilities

The Technical Assistance Team will work with a team composed by staff of the Directorate of Health Systems, Planning, Policy and Information and other key MOHS Directorates, programmes and departments, appointed by the CMO. The Team Leader will be reporting to the CMO through the Director of Health Systems, Planning, Policy and Information.

8. Qualification and work experience

The MOHS is seeking the services of a Team of consultants (Technical Assistance) – maximum of 3 - 4 person, with each having at least Masters Degrees in either Public Health, Health Planning, Policy and Management, Health Economics, Financial Management, organization development with at least over 10 years working experience. The team should have the following skills

a. Proven track record in the conducting similar reviews. Conducting such reviews or having worked in developing countries would be an added advantage.
b. Excellent planning and management skills
c. Excellent communication and writing skills
d. Good interpersonal relationships

[2] http://www.internationalhealthpartnership.net/en/tools/jans-tool-and-guidelines/

9. Timing and duration of assignment

The task is expected to take a maximum of 30 days and to start as soon as possible during the last trimester of 2015.

The mission will take place from 23 November – 4 December 2015.

10. Resources Documents

The following are some of the key documents that will be reviewed:

a. National Health Policy
b. National Health Sector Strategic Plan I (2010-2015)
c. National Ebola Recovery Strategy for Sierra Leone (2015 – 2017)
d. Recovery and Transition Priorities (April 2015)
e. Basic Package of Essential Heath Services (2015)
f. Human Resources Strategic Plan
g. National Health Compact
h. Service Level Agreements
i. Mid Term Review Reports
j. Annual Health Sector Performance Reports for Years 2011, 2012, 2013, 2014, and Report on Mid Year Review of the performance of the health sector in 2015
k. Recent needs assessments or situation analysis.
l. Health sector performance reports, joint annual review reports, mid-term reviews, consultant
m. Sub-sector strategies and plans for specific diseases/vertical programmes such as AIDS or child
n. National Health Accounts and health financing analysis or reviews.

ANNEX 2. WORK PROGRAMME IN SIERRA LEONE

Sunday, 22 November 2015

Arrival in Freetown

Monday, 23 November 2015

8:00	Arrival in WHO Country Office (WCO)
9:00 – 10:00	Meeting with WHO Country Office Representative (WR)
10:00 – 12:00	Preparatory meeting with WCO health systems strengthening (HSS) and Basic Package of Essential Health Services (BPEHS) teams and national consultants
13:00 – 13:30	Courtesy meeting with Chief Medical Officer (CMO)
13:30 – 14:30	Meeting with MOHS, Director, Directorate of Policy, Planning and Information (DPPI)
15:00 – 17:00	Meeting with HSS Hub
17:00 onwards	Preparation for stakeholders briefing

Tuesday, 24 November 2015

9:00 – 10:00	Briefing of Health Development Partners
11:00 – 12:00	Meeting with MOHS RMNCH Directorate
13:00 – 14:30	Meeting with College of Medical and Allied Health Sciences (COMAHS)
14:30 – 16:00	Meeting with Global Fund Country Coordinating Mechanism (CCM)

Wednesday, 25 November 2015

8:30 – 9:30	Meeting with MOHS TB programme
9:00 – 10:00	Meeting with MOHS HIV programme
9:30 – 10:30	Meeting with MOHS Human Resources for Health Directorate
10:00 – 11:00	Meeting with Ministry of Local Government
11:00 – 12:00	Meeting with MOHS donor coordination unit
13:00 – 14:00	Meeting with Ministry of Education, Science and Technology
15:00 – 17:00	Meeting with NPPU and MOHS Directorate of Pharmaceutical Services

Thursday, 26 November 2015

Visit to Port Loko district: each level of the management and health facilities-from the community to hospital levels as well as local councils

Friday, 27 November 2015

Visit to Kambia district: each level of the management and health facilities-from the community to hospital levels as well as local councils

Saturday, 28 November 2015

9:30 – 10:30	Meeting with MOHS Primary Health Care Directorate

Monday, 30 November 2015

9:00 – 10:30	Meeting with HSS Hub
10:45 – 11:30	Meeting with WR
13:30 – 15:00	Meeting with H4+ partners/UN agencies
15:00 – 16:30	Meeting with bilateral partners/World Bank
16:30 – 17:30	Meeting with CSOs/NGOs

Tuesday, 1 December 2015

9:00 – 10:00	Meeting with MOHS M&E focal points
10:00 – 11:00	Meeting with MOHS health financing unit
12:30 – 14:00	Meeting with McKinsey/TBAGI on 10-24 month plan
14:00 – 15:30	Meeting with Ministry of Finance, Education and Economic Development
15:30 onwards	Consolidation and synthesis of findings

Wednesday, 2 December 2015

Consolidation and synthesis of findings

Thursday, 3 December 2015

9:00 – 10:00	Discussion of preliminary findings with Director, DPPI and CMO
17:00 – 17:30	Meeting with the Honourable Minister of Health and Sanitation

Friday, 4 December 2015

9:00 – 13:00	Debriefing meeting with stakeholders
13:00 – 14:00	Debriefing with WR
14:00 – 15:00	Debriefing with WHO BPEHS team

Saturday, 5 December 2015

Departure from Freetown

ANNEX 3. LIST OF PEOPLE MET

NAME	ORGANISATION / FUNCTION
Ministry of Health and Sanitation (MOHS)	
Dr. Brima Kargbo	Chief Medical Officer / MOHS
Dr. SAS Kargbo	Director Policy, Planning and Information (DPPI), MOHS
Dr Santigie Sesay	Director Reproductive and Child Health
Dr Sulaiman G. Conteh	Manager Reproductive Health Program
Ms Claudia Shilumani	HSS Hub / Team Lead and Advisor to the Minister
Ms Regina Bashtaqui	HSS Hub / Policy and Recovery Plan
Ms Meredith	HSS Hub / Systems
Dr Mohamed Kanu	HSS Hub / PH and Training
Mr Philip Amara	IHPAU
Dr MOHSamed Samai	Acting Provost College of Medicine and Allied Health Sciences (COMAHS) & Director Training MOHS
Dr Joseph Edem-Hotah	Manager Nurse Training at COMAHS
Mr. Lynntton Michael Tucker	CCM / GF Country Coordinator
Dr Sarti Kenneh	Head of the National HIV/AIDS Program
Mr Alhassan Joseph Kanu	Ministry of Local Government & Rural Development / Decentralisation Secretariat
Dr Yayah Conteh	Head Health Partner Coordination Office
Ms Alice Bonzu	Health Partner Coordination Office
Ms Aminata Issa Kamara	Health Partner Coordination Office
Mr Saffa Kamneh	Health Partner Coordination Office
Mr Bassie S.R.Turay	Director Drugs & Medical Supplies (MOHS) and Chairman Pharmacy Board
Mr Maurice Yusuf	Staff member Drugs and Medical Supplies
Mr Ipune Kur	Staff member Drugs and Medical Supplies
Mr Kawusu Kebbay	Director Development Assistance Coordinating Office (MOFED DACO)
Ms Mary Nyelenkeh	Ministry of Finance and Economic Development, Policy Coordinator
Ms Tanya Philip	Health Financing Unit, MOHS
Dr Steven M. Jones	McKinsey Office in Freetown / Cognoveritas consulting
Mr Audric Mitraros	Tony Blair Africa Governance Initiative, advisor to Dept CMO
Mr Lebbi	Ministry of Education, Science and Technology (MEST)
Dr. Joseph Gagba Kandeh	Director Primary Health Care

Development Partners	
Dr Anders Nordstrom	WR of the WHO Office
Ms Sowmya Kadandale	WHO
Dr Grace Murindwa	WHO
Dr Akinjeji Adewale	WHO
Dr Heidi Jalloh-Vos	WHO
Dr Tejshri Shah	WHO
Ms Saira Khan	WHO
Dr. Mohamed Yassin	UNFPA
Mr. Francis Smart	UNFPA
Mr. Jason Lee	UNDP
Ms Kiyomi Koroma	JICA
Mr Everett Torrence	USAID
Ms Nancy Godfroy	USAID
Mr Michael Friedman	CDC
Ms Alix Bonargent	World Bank
Ms Gilian	DFID
Dr Sinéad Walsh	Irish Aid Ambassador Sierra Leone and Liberia
Ms Eimeaor Murphy	Irish Aid
Ms Emoet Warwick	Irish Aid
Ms Melissa Mazzeo	CHAI associate
Ms Whitney Long	Health Poverty Action
District Health Services / Port Loko (26.11)	
Mr Collins Owili	WHO Field Office Port Loko
Dr Tom Sesay	District Medical Officer Port Loko, Chair DHMT
Dr Isaac Sesay	Hospital Director (130 beds)
Ms Hawa Kallon	District Health Sister 1
	Visits to Training School, Pharmacy & Warehouse, Finance, M&E, Maternity
Ms Matilda Jenkins	Midwife Rogbere CHC (7 staff, 2 not on the payroll)
Ms. Susan Lebbie/Jeneba Vandy	MCHP Mamusa (2 MCHA, one on payroll)
Mr. Ibrahim S. Bangura	Deputy Chair Port Loko District Council
District Health Services / Kambia (27.11)	
Mr. John Ndyahikayo / Abimbola	WHO Field Office Kambia / epidemiologists
Dr Foday Sesay	District Medical Officer Kambia, Chair DHMT
Dr. Kakay	Medical Superintendent Kambia Hospital

Ibrahim Koroma / Idrissa Kargbo	M&E Unit / Information Officer
Osman Barrie	Disease Surveillance Officer
Ms. Kadiatu Kamara	District Health Sister
Mr. Sarah Simbo	Public Health Officer
Mr. Sheku Samba, James & Amara	TB Unit Kambia
Mr Abdul Bangura	DHMT Pharmacist
Mr Tejen Saidu	District logistics officer
Ms Hawa Fofanah (Sister)	MCHA Training Coordinator Kambia Training School
	Visits to Training School, Pharmacy & Warehouse, Finance, M&E, Maternity TB Program and SRH Program (Malaria not present)
Mr. Foday M. Bangura	Deputy Chair Kambia District Council
Mrs. Tonia Jarrett	In-charge of Gbalamuya CHP (6 staff, none on the payroll)
Mr. Joseph Kanu	In-charge Barmoi Luma CHP (8 staff, 5 not on the payroll)

ANNEX 4. DOCUMENTS CONSULTED

Author & Date	Title of the document
MOHS, 2002	National Health Policy
GOSL, undated	Agenda for Prosperity, Road to Middle Income Status, (AfP, first five years 2013-2018), 216 pages.
MOHS, 2008	Sierra Leone Demographic and Health Survey, key findings (20 pages)
MOHS, Nov 2009	National Health Sector Strategic Plan (NHSSP 2010-2015)
MOHS, Jan 2010	Basic Package of Essential Health Services for Sierra Leone (82 pages)
WB, Oct 2010	Public Expenditure Review (PER) WB Report No. 52817-SL
MOHS, 2010	2010 Health Sector Performance Review, published Jan 2012
GOSL/MOHS, Dec 2011	Health Compact
MOHS, 2011	Service Availability and Readiness Assessment 2011 Report (SARA 2012)
MOHS 2011	2011 Health Sector Performance Review published Dec 2012
MOHS, Jan 2012	Joint Program of Work and Funding (JPWF 2012-2014)
MOHS, Jan 2012	Results and Accountability Framework 2010-2015
MOHS, June 2012	Policy for Community Health Workers in Sierra Leone (40 pages)
DFID, Oct 2012	Business Case to improve quality and equitable access to BPEHS
MOHS 2012	Service Availability and Readiness Assessment 2012 Report (mini SARA)
MOHS, undated	National Health Accounts (NHA, 2007-2010)
GAVI, GF, WB, undated (?2014)	TOR for a follow-up mission on the August 2012 Joint Financial Management Assessment (JFMA) to assess PFM and FM and JFA within the health sector.
MOHS, July 2014	Sierra Leone Demographic and Health Survey 2013 (515 pages)
DFID, Oct 2014	Notice 6588 to tender for improving quality and equitable access to BPEHS with Draft Terms of Reference Oct 2014
MOHS, Nov 2014	Sierra Leone Rapid Health Systems Assessment
McKinsey, Nov 2014	Resilient Zero Fact Pack_v 1
UNICEF, Dec 2014	SL Health Facility Survey, assessing the impact of the EVD outbreak on the health systems in SL, survey conducted in Oct 2014 (62 pages)
HEART / OPM, Jan 2015	Evaluation of the Free Health Care Initiative (FHCI), Annual Report
MOHS, 2015	Sierra Leone Basic Package of Essential Health Services (BPEHS, 73 pages)
MOHS, August 2015	Report and presentations of Mid Year Performance reports by a variety of stakeholders within MOHS such as: HRH, COMAHS, Env Health, Finance, HSS/WB, RCH, internal audit, PHC, Supervision, FIT, Blood, Food and

	Nutrition, Malaria, Service Level Agreements (SLA) and Support Services (Admin),
RECOVERY PLANS	
MOHS, June 2015	Health Sector Recovery Plan 2015-2020
GOSL, July 2015	National Ebola Recovery Strategy for Sierra Leone, 2015-2017
McKinsey, 2015	Resilient Zero Fact Pack, 169 pages / slides
McKinsey, Nov 2015	Example of weekly dashboard for feedback to MOHS senior management
Central Recovery Team	Work Plan and budget of the 6-9 months Recovery Plan, July 2015
Central Recovery Team	Work Plan of Recovery Plan, Sept 2015
GOSL, April 2015	SL Recovery and Transition Priorities (Executive Summary)
SYSTEMS	
MOHS August 2012	HRH Policy for five years
MOHS, undated	Human Resources Strategic Plan 2012-2016
Health Metrics Network, undated	Health Information Systems Strategic Plan 2007-2016 (31 pages)
WHO Febr 2011 (Ties Boerma et al)	Strengthening the M&E component of the NHSSP, brief situation analysis and road map.
WHO Febr 2015	Situational Analysis of the Sierra Leone Health Information System (10 pages)
J. Pharmaceutical Policy and Practice, Oct 2014	Building the capacity of Sierra Leoneans in Supply Chain Management in the NPPU Project (a case study)
PROGRAMS	
MOHS, July 2011	Reproductive Newborn and Child Health Policy
MOHS, July 2011	Reproductive, Newborn and Child Health Strategy, 2011-2015
MOHS/FIT, July 2015	Facility Improvement Team (FIT), assessment report for RCH, with support from Options and WB.
WHO et al, 2015	Trends in Maternal Mortality 1990 to 2015, estimates.
African Union, 2015	Review Report of the Maputo Plan of Action on HR and Rights of the African People 2005 to 2015 (draft)
MOHS, April 2011	National Strategic Plan on HIV/AIDS 2011-2015
MOHS, undated	Sierra Leone Malaria Control Strategic Plan 2011-2015
MOHS, May 2013 draft	National Leprosy and Tuberculosis Control Program, (NLTCP Jan 2013 - Dec 2017) with Log Frame and Work Plan 20113-2017
GFATM/CCM, undated	Transitional Funding Mechanism (TFM for TB), to start Jan 2014
MOHS, Jan 2014	Comprehensive EPI multi-year Plan (cMYP 2012-2016)

ANNEX 5. FORMAT FOR COLLECTING DPS CONTRIBUTIONS TO THE NHSSP

NAME OF THE DEVELOPMENT PARTNER: .....

	Allocation/Budget in million USD						
	Y2010	**Y2011**	**Y2012**	**Y2013**	**Y2014**	**Y2015**	**Total**
Financing							0
HMIS							0
Human Resources for Health							0
Leadership and Governance							0
Medical Products and and technologies							0
Service Delivery							0
Total for NHSSP 2010-2015	**0**	**0**	**0**	**0**	**0**	**0**	**0**

	Actual Expenditure In Million USD						
	Y2010	**Y2011**	**Y2012**	**Y2013**	**Y2014**	**Y2015**	**Total**
Financing							0
HMIS							0
Human Resources for Health							0
Leadership and Governance							0
Medical Products and and technologies							0
Service Delivery							0
Total for NHSSP 2010-2015	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Note: Please fill your contribution to the NHSSP 2010-2015 financing, excluding your investment for the Ebola response.