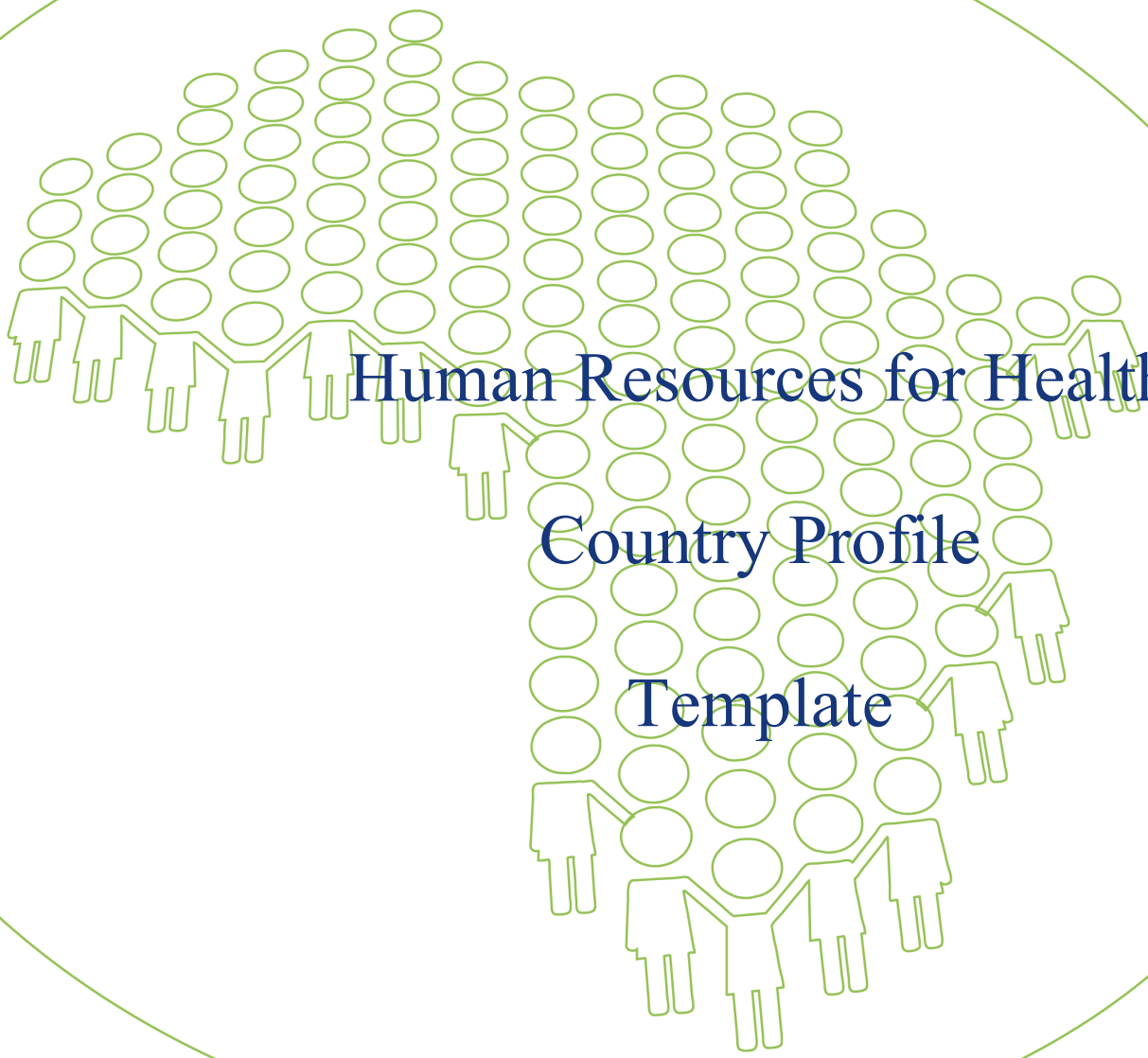


Human Resources for Health

Country Profile

Template

AHWO

AFRICA HEALTH WORKFORCE OBSERVATORY

Human Resources for Health

Country Profile

Country - SIERRA LEONE

Supported by

World Health Organization

AHWO 2011.

Preamble:

The Human Resources for Health (HRH) Country Profile is owned by the Government of Sierra Leone, through the Ministry of Health and Sanitation (MoHS). It was compiled, edited and produced through the technical support of DfID and the WHO under the leadership of the Ministry of Health and Sanitation (MOHS), SL.

Shortages of well trained and experienced health personnel present a crisis of epidemic proportions in both developed and developing countries. In some of the poorest countries such as Sierra Leone, health systems collapsed during the ten year civil war which caused a serious shortage of adequate numbers of health personnel to deliver health care services.

Years of under-investment in Human Resources for Health development combined with time consuming recruitment – employment procedures and policies; fragmented and little or no HRH funding; in-effective HRH management systems; violent and war prone dirty politics and poverty have resulted in the health workforce being under-paid and demoralized to deliver new health demands in terms of the changing disease pattern, new treatment regimes and the ever changing medical technologies, made it difficult for the remaining skeletal health personnel fail to meet the new health demands for even basic health care services.

Politically stable rich and developed countries have taken advantage of the migration of well trained key health personnel from these poor countries to address their own HRH shortages for their aging populations. At the same time, public health sector spending limitations imposed on poor countries over the past decade have exacerbated the HRH crisis. Although spending limitations were intended to help macro-economic and fiscal goals, they ended up in no expansion of the health workforce and deterioration of the HRH capacity when it was most needed to respond to instant population growth and the increased work-loads caused by the new health demands and trends.

Sierra Leone HRH Country Profile has been compiled to:

- Guide the development of the HRH Strategic Plan in support of the NHSSP 2010 – 2015;
- Guide HRH policy makers, health leaders, directors, and health programme line managers in developing relevant HRH policies plans and procedures;
- Guide the development and establishment of integrated Human Resources for Health Information System for the MOHS, Sierra Leone.

Salaries for health personnel in the developing world have been known to consume a major proportion of the national budget for health services with some countries having HRH employment

costs consuming as high as 84% of the total health budget. In Sierra Leone, this figure has been estimated at 60%. Good information and careful planning are essential to make the best use of the scarce financial and human resources available and to scale-up health services provision without depleting the workforce needed to deliver a complete health package.

This profile is therefore based on both historical and current HRH data which can be used for comparisons of HRH development in Sierra Leone. The profile also initiates future HRH projections thereby laying the foundation for planned and directed growth in health service delivery. The HRH Country Profile will therefore be updated as set periodic intervals so as to present current HRH data at all levels of the health care pyramid.

Prince E. O. Cole

Director Human Resources for Health

MINISTRY OF HEALTH AND SANITATION

SIERRA LEONE

Acknowledgements

The Director Human Resources for Health, MOHS, is grateful for the technical assistance provided by DfID and WHO in the compilation of this profile. The Director would also like to recognize the contributions from the Personnel Unit, the HRH Support Unit, DPI and RCH MOHS.

The Director appreciates the work done by the following individuals: Alfred George Gbla for editing the HRH Country Profile, Mohamed Jalloh for analyzing the gender and age records in the Personnel Unit; Alimamy M. Conte as the Manager of the Personnel Unit; and Elizabeth Lemor for compiling the Staffing lists and the establishment. The Director commends the work done by Emile Ross; Florence Bayo; Thomas Brima and Irene Davies for sparing sometime to provide HRH data and information for the successful compilation of the Sierra Leone HRH Country Profile Template 2011.

Lastly but not least, the Director is grateful for the typing of draft copies done by the HRH Directorate Secretaries, Hannah Bonzu and Margaret Foryoh.

Contents

1. Country context 137
1.1 Geography and demography 177
1.2 Economic context. 187
1.3 Political context 20
1.4 Health status 20

2. Country health system 244
2.1 Governance 244
2.2 Service provision 244
2.3 Health care financing 288
2.4 Human Resources for Health Costs 309
2.5 Health Information System 30

3. Health Workers Situation 3131
3.1 Health workers stock and trends 33
3.2 Distribution of health workers by category/cadre 3434
3.3 Gender distribution by location 35
3.4 Gender distribution by occupation 37
3.5 Age group distribution of Healthwoorkers 37
3.6 Region/Province / District Distribution 39
3.7 Urban/Rural Distribution 39
3.8 Human Resources for Health in CHASL facilities 42

4. HRH Production 43
4.1 Pre-service education 43
4.2 In-service and continuing education 45
4.3 Health workforce requirements 46

5. HRH Utilization 47
5.1 Recruitment 47
5.2 Deployment and distribution mechanisms 47
5.3 The work environment 49
5.4 Employment of health workers in the private sector 49

6. Governance for HRH 50
6.1 HRH policies and plans 50
6.2 Policy development, planning and managing for HRH 50
6.3 Professional Regulation 51
6.4 HRH information 51
6.5 HRH research 51
6.6 Stakeholders in HRH 51

7. Issues for Policy and Strategic Consideration 53

Annex 1: Definitions for Health workforce data.

Tables

Table 1.1 Percent Population Distribution by Age Group and year 18
Table 1.2 Population distribution by Sex 18
Table 1.3 Economic indicators 18
Table 1.4 National Indicators.....19
Table 1.4 Main causes of morbidity and mortality 21
Table 1.5 Health indicators 21
Table 1.6 Health Performance Indicators.....22
Table 2.1 Distribution of Health Facilities in Sierra Leone.....26
Table 2.2 MoHS budget versus Government expenditure.....28
Table 2.3 MoHS 2010 / 2011 Payroll.....29
Table 3.1 MoHS Health Professional Establishment & Strength 31
Table 3.2 Administration and Finance Establishment and Strength 32
Table 3.3 Vacancy Analysis for current MoHS Hospitals..... 33
Table 3.4 Distribution of Medical Personnel over the last three years 34
Table 3.5 Gender of Health-workers by location 35
Table 3.6 Gender distribution by Health Occupation 3936
Table 3.7 Age group Distribution of Health Staff 37
Table 3.8 Age group distribution of staff by District.....38
Table 3.9 Medical Doctors stock and trends.....39
Table 3.10 Urban / Rural distribution of Health-workers.....40
Table 3.11 Summary HRH table for CHASL.....42
Table 4.1 Number of Training Institutions by type of ownership 43
Table 4.2 Number of entrants and graduates by year 45
Table 4.3 Projections for health workforce requirements for the coming years..... 46
Table 6.1 National and International Stakeholders in Health in Sierra Leone.....52

Figures

		Page
Figure 1.	Country Map Of Sierra Leone	17
Figure 2.	The Health Pyramid	25
Figure 3.	Health Information System flow	30
Figure 4.	Staff Distribution by sex	37
Figure 5.	Career Progression for Nurses	48
Figure 6.	Abridged Career Progression for Doctors	48

Acronyms:

AIDS.....	Acquired Immunodeficiency Syndrome
ABFP.....	Annual Budget Framework Paper
AHSPR.....	Annual Health Sector Performance Report
ANC.....	Ante Natal Care
BEmONC.....	Basic Emergency Obstetric and Neonatal Care
BPEHS.....	Basic Package of Essential Health Services
CDHP.....	Comprehensive District Health Plan
CHASL.....	Christian Health Association of Sierra Leone
CHC.....	Community Health Centre
CHO.....	Community Health Officer
CHP.....	Community Health Post
CMO.....	Chief Medical Officer
COMAHS.....	College of Medicine and Allied Health Sciences
CSO.....	Civil Society Organization
DFID.....	Department for International Development, UK
DHIS.....	District Health Management Information System
DHMT.....	District Health Management Team
DHS.....	Demographic Health Survey
DLGAs.....	District Local Government Authorities
DMO.....	District Medical Officer
DPC.....	Department of .....
DPI.....	Directorate of Planning and Information
ECOWAS.....	Economic Community of West Africa States
EHO.....	Environmental Health Officer
FBOs.....	Faith Based Organizations
FP.....	Family Planning
GDP.....	Gross Domestic Product
GNI.....	Gross Domestic Product
GoSL.....	Government of Sierra Leone
HFS.....	Health Facility Survey
HIES.....	Household Income and Expenditure
HIS.....	Health Information System
HIV.....	Human Immunodeficiency Virus
HMIS.....	Health Management Information System
HMN.....	Health Metrics Network
HR.....	Human Resources
HRD.....	Human Resources Development
HRH.....	Human Resources for Health
HRIS.....	Human Resources Information System
HSCC.....	Health Sector Coordinating Committee
HSSP.....	Health Sector Strategic Plan
ICT.....	Information Communication Technology
ICU.....	Intensive Care Unit
IDW.....	Integrated Data Warehouse
IEC.....	Information, Education and Communication
IHP.....	International Health Partnerships
LGA.....	Local Government Authorities

M &E	Monitoring & Evaluation
MCH	Maternal Child Health
MCHP	Maternal Child Health Post
MDAs	Ministries, Departments and Agencies
MDGs	Millennium Development Goals
MoHS	Ministry of Health and Sanitation
NGO	Non-Governmental Organization
NHSSC	National Health Sector Steering Committee
OPP	Out of Pocket Payment
PHC	Primary Health Care
PHU	Peripheral Health Units
PSP	Public Sector Partnerships
RCH	Reproductive and Child Health
SAM	Service Availability Mapping
SECHN	State Enrolled Community Health Nurse
SLDHS	Sierra Leone Demographic Health Survey
SLMDC	Sierra Leone Medical and Dental Council
SLNMB	Sierra Leone Nurses and Midwifery Board
SSL	Statistics Sierra Leone
SWAp	Sector Wide Approach
SWOT	Strength, Weaknesses Opportunities and Threats
TBA	Traditional Birth Attendant
USL	University of Sierra Leone
WAHO	West Africa Health Organization
WHO	World Health Organization

Introduction

As the health workforce field involves multiple sectors that include , education , labour, civil service ,faith based sector, the MOHS itself, academia, professional associations, NGOs, regional and international institutions and organizations , the reader should acknowledge the relative importance and role of these legitimate stakeholders and promote their participation to ensure common understanding of HRH issues and consensus on priorities and cooperation for effective planning and implementation.

The HRH Country Profile is guided by the recognition that the development of health workforce policies is a dynamic and continuous process based on a continuously changing and renewed understanding among stakeholders. Therefore, the development of human resources for health policies and the negotiation process implies and should be based on the best available evidence , the production of accurate and relevant information and promotion of transparency and trust.

The HRH Country Profile Template is important as it includes a component on HRH research and analysis both at local and national levels. National level studies will be carried out according to the research priorities of the Republic of Sierra Leone. These studies will be undertaken by relevant and interested members of the national network of stakeholders who look at the impact of strategies and HRH implications of disease-based health programmes.

Purpose

The purpose of the HRH country profile is to serve as a tool for:

- Providing a comprehensive picture of the Health Workforce situation, (identifying available capacities and gaps) in the country.
- Systematically presenting the HRH profile against which performance of the sector can be measured;
- Identifying the major players of the health system, their roles, mandates and support;
- Provoking debate and interaction with and between policy-makers and stakeholders;
- Strengthening the HRH information system by establishing evidence for baselines and trends;
- Facilitating information sharing and cross-country comparisons

Methodology

A detailed desk review of the MOHS existing HRH information, policies, proposals, drafts, reports , WHO guidelines and the internet was conducted within a period of three (3) months. Meetings with MOHS Directors of Departments, Programme Managers and the HRMO were undertaken. HRH problem areas were noted and sometimes immediate action taken to solve urgent HRH challenges. Those HRH issues that required medium and long term interventions were recorded and incorporated into the HRH work plans within the current NHSSP period. HRH data was captured from the DHMT records, M & E reports and from the existing HIS.

A situational analysis (SWOT analysis) was conducted based on the information collected and observations. Informal interviews with Directors and Programme Managers were carried out. An HRH retreat was conducted in April, 2011 to assess the HRH profile and map out the way forward. Participants were from various stakeholders who included MOHS decision makers, NGOs and partner organizations.

Final editing, testing and compilation was done through a meetings with the HRH Working Group, the HRH Taskforce and a one day Stakeholders' workshop.

Scope of the HRH profile

The following areas are covered in the profile:

- Comprehensive picture of the Health Workforce situation in the country
- Geography, demography, and economic situation.
- Country's health services system, its governance and policies
- HRH stock and trends;
- HRH production including pre-service and post basic training processes;
- HRH utilization
- Stake-holder Assessment

Executive Summary

Sierra Leone is a country with a total landmass of 71,740 square kilometres located on the western coast of West Africa with a climate that is predominantly tropical with two distinct seasons; the rainy season from May to November, and the dry season which runs from December to May.

Freetown, the national capital, is home to the world's third largest natural harbour.

The latest population estimates put the population of Sierra Leone at 6,000,000 with an annual growth rate of 2.1%. The population is considered rural with an estimated 63% of the population living in the rural areas. The population is however experiencing significant rural to urban migration leading to an estimated urbanisation rate of 2.9%.

The Sierra Leone Health System

The Ministry of Health and Sanitation is the government ministry responsible for the provision of health and sanitation services to the people of Sierra Leone. The country faces some of the lowest health indicators in the world and current observations do-not give courage on how these indicators can be improved. However the IMF and the UNDP note that there are some improvements which could help the country turn around its status on the Human Development Index. Currently Sierra Leone is ranked as a Low Development Index country with a ranking of 180.

The poverty levels are still high with more than 70% of the population under extreme poverty and less than 50% of the population having access to basic sanitation services and good clean water. The country, like most Sub-Saharan countries faces a lot of developmental challenges which put public service ministries under a lot of pressure.

The country adopted Primary Health Care in the early 80's and recently reaffirmed its commitment to the same. With a population that is predominantly rural, it is only fitting that the majority (above 90%) of its health institutions are in the rural areas. The physical location of these institutions suggest a fairly robust system that responds to poor communities needs. The system is however not sufficiently capacitated to respond adequately especially considering that whilst most of the facilities are in the rural areas, most of the well qualified staff are found in the urban centres.

The Sierra Leone Health service is dominated by the Ministry of Health which has more than 85% of the health facilities closely followed by the Church-related facilities and the private and NGO sector taking up small percentages of the sector. Information availability is however a major challenge. There are various sources that have some health information and invariably all these sources have different statistics. In a majority of cases the information is incomplete, making it difficult to have a consistent source for a particular period. The current statistics available at the moment are based on projections from the last census of 2004 and a few surveys like DHS that produced statistics for 2008.

Human Resources for Health

The public health sector's HRH is led by the Ministry's HRH department. This department is headed by a Director who reports directly to the permanent secretary and is ably qualified and experienced to manage at that level. The challenge is however that there is no internal capacity to manage HRH as a strategic function of the MoHS. At the moment, whilst the department's name is HRH, it is more of a personnel administration office that spends the majority of its time on transactional processes of personnel administration. By his own admission, the HRH director is overwhelmed with expectations for higher level performance yet there is no support system that he can rely on.

The staff in the department show signs of disillusionment and there is no sense of purpose in performance. The department faces challenges in the numbers employed there (the bulk are registry

clerks) and also the skills availability. The members are reportedly not trained in managing HR let alone HRH.

For that department to play its strategic role, some adjustments to the structure and the way things are done would need to be done. The department would need to have departments such as HRD, HR Planning, Conditions of Service, Discipline, Establishment Control and Personnel Management, to mention a few. These units would need to manned by staff who are able to deal with HRH issues across the whole breadth of the service. These units would provide the expertise required to allow the technical departments to focus on disease and other conditions management. Key to this professionalization however are relationship issues with the other major stakeholders such as PSC and HRMO.

The MoHS's HRH department is reduced to a personnel function for the primary reason that control of the establishment, terms and conditions and other related issues are resident outside the MoHS. The MoHS cannot create, abolish or fill any post without recourse to HRMO and PSC. What further makes the situation worse is that the HRH staff have no guarantee of remaining in the MoHS as they can be transferred anytime to another government ministry. This breeds a sense of detachment as no attachment is cultivated.

There is no functional relationship between the Health Information system and the HRIS. The two exist on paper but on the ground the HIS collects HI from the facilities without necessary inclusion of HR. With the DPI having staff out in the field, they could do well to include HRIS as part of their mandate. However for this to happen, the local peripheral level needs to be adequately trained on what HR information to gather and how often. As described, the HRIS is by and large manual and relies on hand deliveries yet the HIS is computerised and information transmission is electronic from the Hospital level upwards. This is further evidence that the HRH department needs to be strengthened not only at central level but all the way to the facilities. The department also needs a computer based system that would improve the transmission of data and improve on the quality as local level analyses may be done. This all adds up to the training requirements of the HRH department.

There is no HRH Policy in place, save for the one page reference in the NHSSP. Consequently there is no strategic Plan in place to drive the HRH function. The HRH ship is therefore rudderless at the moment.

Management and Distribution of the Health workforce

The little evidence gleaned during this profiling points to the picture that very few managers at Head Office are ever exposed to management training. There seems to be a belief that once a person is a good technically, it follows that they will also be good for management. There is a lot of scope for management development at the head office level and this also would touch the other levels of care. Staff should not be promoted to the management level when they do not have the requisite qualifications. This leads to the often seen mistake by Head Office when they still operate at service provision level when they are in management. This is primarily because often times, technical managers at central level are not able to separate service level behaviours from strategic management activities.

A look at the draft scheme of service for all grades gives the fear that staff will be promoted to management levels if they excel technically. What this means is that the system will continuously rob the service area of good technical performers and putting them in management some of them may not be suited.

The biggest number of health-workers is to be found in the district hospitals. More than 95% of all specialist grades are found in the hospitals and there is a slightly higher concentration of these in the

Western area where the capital Freetown is and where the biggest training school is. The College of Medicine and Allied Health Sciences (COMAHS) is found in Freetown where the three major teaching hospitals are found. There are more (15) Public Health Specialists in the Western Area than the other three regions combined (11). Similarly there are more State Enrolled Community Health Nurses in the Western Area (710) than in the other three regions.

The distribution of health-workers by age shows that a lot more staff in the age ranges 28 years to 37 years and 38 to 47, most likely as a result of the time it takes to train most of the health professionals.

Health workforce production.

This area needs to be addressed urgently if the government is to protect its investment in HRH. At the moment those training schools that train, government, CHASL, FBO or private cannot guarantee their graduates employment after qualification. What this means is that as soon as a student completes training, they can go wherever there is a job for them, even if it means outside the country. There is no training plan in place to service the needs of the sector. Each training school trains whenever they have the resources and they determine their class sizes outside the participation of the MoHS. The MoHS has no control whatsoever on training, there is no evidence of any dialogue with such colleges as COMAHS and Njaga who produce a wide range of health professionals. The regulation of schools is practically non-existent except for the Nurse and Midwifery Board that has an interest in setting and moderating examinations. The quality of tutors is determined by the individual schools hence there is no standard quality of graduates in the various disciplines.

From the schools that were identified, it emerged that the only post basic training that is done in Sierra Leone is midwifery. There are no other post basic or postgraduate training schools in the country such that the country only accesses these from the region. This has meant that the country has continuously faced the challenges of high vacancy rates as some of the qualified staff go on privately sponsored post basic training after which, they may not necessarily be employed where they are needed most.

The schemes of service recognise this painful fact and have specified the membership of some of the regional professional bodies as pre-requisites for entry into certain grades.
The free health care system for mothers and children led to the review of the remuneration of the technical grades in these institutions. The administrative staff who do the clerking and provide support services to the technical were left out for fear of taking them out of the line of the rest of the civil. This however is a seed for disharmony.

The none-availability of data from the other health sector players is cause for concern, especially in the CHASL institutions who have a significant number of seconded from the MoHS. The Ministry of Health needs to strengthen its regulatory function so that the sector could be refocused to serve the community in a unified approach.

Health workforce utilisation

There is no policy in place that guarantees the graduates of even the government training schools a job. When the students qualify, they have to compete for the approved vacancies that may exist in the Ministry of Health and Sanitation. The majority have to look for work outside government and in some cases have had to leave the country. The investment thus put on developing the health-worker is not immediately recovered.

Some members of the health stakeholder community have recommended the improvement of retention schemes for staff and some have gone as far as suggesting that bonding of those trained through public support should be introduced, whilst others have advocated for the introduction of a national service scheme of one kind or the other.

Those candidates that are lucky to be recruited have to go through the Human Resources Management Office and the Public Service Commission before they are sent to the Ministry of Health and Sanitation for final placement.

Governance for HRH

The Human Resources for Health Directorate in the Ministry of Health and Sanitation is one of the three that are under the direct supervision of the Permanent Secretary. This unit however finds itself performing more of the functions of a personnel administration unit as most of the policy issues are developed elsewhere within the HRMO and the PSC. With the introduction of the Health Service Commission that will oversee the management of the professional workers, it becomes difficult to see this HRH unit growing to a strategic position within the Ministry of Health Sanitation.

Within the NHSSP, the Human Resources function gets a mention on what role it would be expected to play in support of the National Health Strategic Plan. The HRH unit that is at the Ministry's Head Office is not replicated at the local levels for effective management of the health workforce. The unit is thus incapacitated both in terms of numbers of staff and also in the capacity to deal effectively with strategic HRH issues. This may emanate partly from that the members of this unit may be transferred from the Ministry of Health and Sanitation to any other government department. As a result, these staff do not find any motivation in developing themselves for HRH when they could be transferred to another Ministry which has nothing to do with health.

There are only three Boards that are in place to support the professional standards of their members. These are:

The Medical and Dental Council
The Pharmacy Board and
The Nurses and Midwifery Board.

These Boards provide regulation to the qualified members on their registers and they are ones that issue practicing licences. The Nurses Board is particularly involved in the setting of national examinations for the Nursing schools and upholding professional standards. Questions have however been asked on the effectiveness of a Board if its Registrar is an employee of the Ministry of Health and Sanitation. Therefore there no clear separation of functions between the Ministry and the Professional Board.

1. Country context

Administratively, Sierra Leone is divided into four (4) major areas, namely Northern, Southern, Eastern regions and the Western Area where the capital city Freetown is located. The regions are divided further into twelve (12) districts, which are in turn sub-divided into chiefdoms, governed by local paramount chiefs. With the recent devolution of health services to local communities, the country has been divided into 19 councils that have been further sub-divided into 392 wards. Each ward is headed by an elected councillor.

Figure 1.: Map of Sierra Leone

1.1 Geography and demography

Sierra Leone is located on the western coast of Africa, bordered by Guinea to the north and northeast, Liberia to the south and southeast, and the Atlantic Ocean to the west.

Sierra Leone has a total area of 71,740 km^2 (27,699 sq mi), with land area taking up 71,620 km^2 (27,653 sq mi) whilst water covers a total of 120 km^2 (46 sq mi). The national capital, Freetown is home to the Sierra Leone Harbour, the world's third largest natural harbour.

The climate is predominantly tropical with two distinct seasons; the rainy season from May to November, and the dry season which runs from December to May. According to the Human Development Report of 2011, Sierra Leone has a population of about 6,000,000 people annual growth rate of 2.1%. The country's population is mostly young, with an estimated 44.6% under 14 years of age and 51.2% between the ages of 15 and 64years. The population is also considered rural with an estimated 63% of the population living outside the cities. The population is however experiencing significant rural to urban migration leading to an estimated urbanisation rate of 2.9%.

There are about 20 distinct language groups in Sierra Leone, reflecting its diversity of cultural traditions.

Table 1.1 Percent Population Distribution by Age Group and year (2006 to 2011)

Age Group	Year 2006	Year 2007	Year 2008	Year 2009	Year2010	Year2011
0–14 years	2,305865 (44.2%)	2,372,380 (44.4%)	2,441,194 (44.6%)	2,506,744 (44.7)	2,574,566 (44.8%)	2,626,975 (44,6%)
15–64 years	2.6898,284 (51.56%)	2743733 (51.35%)	2802994 (51,21%)	2867895 (51.14%)	2965348 (51.6%)	3,192,181 (51.26)
65+ years	218066 (4.18%)	222277 (4,16)	226604 (4.14)	223867 (4.09)	233320 (4.06)	237959 (4.04)
Total population	5,216,890	5,343,200	5,473,530	5,607,930	5,746,800	5,890,080

Source: The population of Sierra Leone medium variance summary indicator (2005-2014)

Of the total population of nearly 6 million people, in 2011, 44.2% are estimated to be male although in the years between 2008 and 2010, males constituted around 48.8% of the population.

Table 1.2. Population distribution by Sex

Year	Total	Male	Female	Male/Female (%)	Growth rate (%)
2008	5,473,530	2,674,750	2,798,780	48.8%	2.98
2009	5,607,930	2,743,540	2,864,370	48.9%	2.98
2010	5,746,709	2,814,620	2,932,180	48.9%	2,97
2011	5,890,090	2,602,049	2,761,600	44.2%	2.97

Source: The population of Sierra Leone medium variance summary indicator (2005-2014)

1.2 Socio-Economic context.

The proportion that the Government of Sierra Leon has spent on has between 2003 and 2004 hovered around the 15% mark which is what the Africa Leaders had agreed to in the Abuja declaration. However in 2010, this figure has slightly gone down to 13.1%. Income per capita has been on the increase with a registered $4.72 billion in 2010. Figures on unemployment, which has been reported as a problem, are however not available.

Table 1.3. Socio-Economic indicators

Indicators	**Year & value**	**Year & value**	**Last year available**
GDP	6,1% (2008)	6,3% (2009)	4.0% (2010)
National debt as % of GDP	-	-	57,3%(2009)
Economic aid as % of GDP		>50%	>50%
Proportion of budget spent on health as % of GDP	15,5% (2003)	15,9%(2004)	13,1%(2010)
Income per capita (in PPP)	$4,27 billion (2008)	$4,45 billion (2009)	$4,72 billion (2010)
Proportion of population living under extreme poverty	70% (2003)	-	70% (2010)
Proportion of population with malnutrition	-	-	20.2% (2010)
Unemployment rate	Not Available	NA	Not Available
Inflation rate	-	-	17,8% (2010)

Source: *Economy Watch Web June, 2011.*

The Human Development Report of 2011 estimates the national population of Sierra Leone to be at 6 million people, of whom from the population projections, 41.7% are under the age of 15 years. This would ensure that there will always be a pool of locals who may be taken into health-worker training should the need arise.

Critical indicators such as under 5s mortality, remain significantly high at 286 per 1,000 live births together with maternal mortality which is at a high of 1,600 per 100,000. Life expectancy at birth has been calculate at 47.5 years for both ages. A lot of work still needs to be done to improve the very high national indicators which are among the worst in the world. GDP per capita has seen an increase from around $600 in 2008 to $808 in 2010.

Table 1.4. National Indicators

Demography & Population	**National Indicator**	**Comments and source**
Population Number	6.0million	Human Development Report 2011
Population Under the age of 15 years	41.7%	2008 Population Census
Urban Population %	37%	2008 projection
Population Growth Rate %	2.18%	2008 Projections
Contraceptive Prevalence Rate %	14%	Joint report 2010
Infant Mortality rate (per 1,000 live births)	89/1,000	DHS 2008
Under-fives Mortality rate (per 1,000 live births)	286/1,000	Sierra Leone MDG Progress Report 2010
Maternal Mortality Ratio (per 100, 000)	1600/100,000	Sierra Leone MDG Progress Report 2010
Life Expectancy – Both sexes	47.5 years	Human Development Report 2011
Income & the Economy	**Indicator**	**Comments and Source**
GDP Per Capita ($)	US$ 808	Human Development Report 2011
Annual GDP Growth rate	6.3%	World Bank 2009
Population living under extreme poverty (%)	70%	Sierra Leone MDG Progress Report 2010
Country Income Classification	Low	Human Development Report 2011
Government Allocation to Health	5.4billion Leones (2010 budget)	IMF Sierra Leone PRSP 2011

Source: See comments column .

1.3 Political context

Sierra Leone is a constitutional republic with a directly elected president and a unicameral legislature. The current system of government in Sierra Leone, established under the 1991 Constitution, is modelled on the following structure of government: the Legislature, the Executive and the Judiciary.

The president is the head of state, the head of government and the commander-in-chief of the Sierra Leone Armed Forces and the Sierra Leone Police. The president appoints and heads a cabinet of ministers, which must be approved by the Parliament. The president is elected by popular vote to a maximum of two five-year terms. The president is the highest position within the government of Sierra Leone.

The Parliament of Sierra Leone has 124 seats. Each of the country's fourteen districts is represented in parliament. Sierra Leone's elected Government has provided political stability and civil liberty and political rights. The Government is a multi-party House of Representatives.

There are various Parliamentary Committees in-charge of the main sectors of service provisions that include the Health Sector Committee responsible for health, both public and private. There is Executive commitment to provide Primary Health Care and the Reproductive Child Health championed by His Excellence the President of Sierra Leone evidenced by the provision of Free Health Care programme for under fives and pregnant mothers.

As indicated above, the local government, through District Councils, plays a pivotal role in providing various services closer to the communities. The District Council leaders are elected the same way as those in the Central Government for a given period.

1.4 Health status

Sierra Leone has some of the poorest health indicators in the world, with life expectancy of 47.5years for both sexes; an infant mortality rate of 89 per 1,000 live births, an under five mortality rate of 286 per 1,000 live births and a maternal mortality ratio of 1,600 per 100,000 births (Human Development Report 2011).

A majority of causes of illness and death in Sierra Leone are preventable, with most deaths attributable to malaria, diarrhea, Acute Respiratory Infections (ARI) and neonatal conditions.

Malaria, diarrheal diseases, acute respiratory infections and malnutrition are also major causes of outpatient attendance and illness in the country. The greatest burden of disease is on rural populations, particularly the females within the rural population. Women are more likely to stop their economic activities due to illness than men. Malaria remains the most common cause of illness and death in the country. Over 24% of children under five (5) had malaria in the two weeks preceding the latest household survey in 2008 (SLDHS, 2008). The survey also reported that 26% of the under-five and 27% of pregnant women slept under ITNs, while only 15% of children with fever receive an anti-malarial within 24 hours of onset of symptoms, and less than 2% of under-fives received the drug within 24 hours.

Table 1.5. Main causes of morbidity and mortality

Main causes of morbidity	2011 Value (%)	Main causes of mortality	Value (%)
1.Malaria	54.3%	1.Malaria	27%
2.ARI	22.7%	2.Diarrhoea	25%
3. Diarrhoea	8%	3.ARI	20%
4.Malnutrition	4%	4.Neonatal mortality	20%
5.Other Causes	11%	5. Other Causes	8%

Source and year: MoHS DPI 2011

In contrast to some of the very poor indicators that have been recorded in Sierra Leone, the HIV prevalence has been put at 1.5% with more than 60% of the population having access to safe water and 30% with access to basic sanitation. The water and sanitation situation can be seen as a contributor to the diarrheal diseases which are significant contributors to both mortality and morbidity.

Table 1.6. Health indicators

Indicators	Rate	Source and year
Life expectancy	47.8 years	Human Development Report 2011
Crude mortality rate	17/1,000 population	SLDHS 2008 /IMF Sierra Leone PRSP
Under-5 mortality rate	286/1,000 population	Sierra Leone MDG Progress Report 2010
Maternal mortality rate	1600/100,000 population	Sierra Leone MDG Progress Report 2010
HIV/AIDS prevalence among ante-natal attendances	1.5%	Human Development Report 2011
% with access to safe water	60%	Joint Report 2010
% with access to sanitation	30%	Joint Report 2010

Source: See Source and Year column

Sierra Leone seems well on track to achieving its targets for 2015 other than under 5s mortality and maternal mortality. HIV prevalence is close to the 2015 target of 1.2%, children receiving penta-3 before 12 months is also close to the target of 90% at 82%. The country however continues to struggle in as far as having the required health professionals on the ground.

Expenditure on health as a % percentage of total government budget remains subdued at 7.8% chasing a 2015 target of 15%

Table: 1.7. Health Performance Indicators.

	Indicators	Baseline (2010)	NHSSP 2015 Target
1	Infant Mortality rate	89/1,000 live births	50 / 1,000 live births
2	**< 5** mortality rate	286/1,000 live births	90 / 1,000 live births
3	Maternal mortality rate	1600/100,000 live births	600/100,000 live births
4	HIV Prevalence (15 -49)	1.5%	1.2%
5	Institutional deliveries	57%	90%
6	Population coverage of health insurance	0%	50%
7	% of chn receiving Penta-3 before 12 months of age	82%	90%
8	Key health professionals by cadre per 1,000 population	Drs = 0.02 /1,000 popn Nurses = 0.18/1,000 popn Midwives =0.02 /1,000 popn	0.05 / 1,000 popn 0.5 / 1,000 popn 0.1 / 1,000 popn
9	% of popn living within 5 km of a health facility.	73%	90%
10	% of popn with access to safe drinking water	50%	90%
11	% of h/holds with access to improved sanitation	13%	50%
12	Prevalence of underweight children 6 – 59 months	21.1%	10%
13	% of PHUs reporting uninterrupted supply of essential drugs	39%	90%
14	Number of primary care or outpatient visits per person to health facilities per year	0.5 contacts per year	3 contacts per year
15	Contraceptive use Prevalence (% of women aged 15 – 49 years)	12%	30%

16	Total fertility rate (average number of births during a woman's life).	4.7	4
17	Percentage of children under-five years of age who sleep under an insecticide treated net.	26%	80%
18	Total public health spending per capita	3.6 USD	10 USD
19	Government expenditure on health as % of Total Government Budget	7.8%	15%

Source: IMF PRSP 2010 and Human Development Report 2011

2. Country health system

2.1 Governance

The MOHS, SL is headed by the Minister of Health and Sanitation, and two Deputy Ministers. The organization is currently operating on a proposed structure that has two divisions, – the Professional and Administrative divisions.

Currently**, the Professional wing** is headed by a Chief Medical Officer (CMO) who coordinates seven (7) directorates, namely : Disease Prevention and Control (DPC), Reproductive and Child Heath (RCH), Primary Health Care (PHC), Hospital and Laboratories, Nursing, Planning and Information (DPI), Drugs and Medical Supplies. Each directorate is headed by a Director who coordinates health programmes and activities under their responsibility.

The **Administrative wing** is headed by a Permanent Secretary (PS) who coordinates three (3) directorates which include: Support Services (e.g. stores, transport, facilities etc), Financial Resources (the Accounting Officer), Human Resources for Health (HRH) and Donor and NGO Coordination. A separate Directorate of Internal Audit reports directly to the Minister of Health and Sanitation.

The country's health service delivery system is pluralistic involving the central government, faith based organizations, local and international NGOs, voluntary organizations, and the private sector all provide health services. There are public, private for profit and traditional medicine practices. The private sector is under-developed compared to some other countries in the sub-region and involves mainly curative care for inpatients and outpatients on a fee for service basis. Private health facilities operate under the authority of individual owners and of board of directors mainly in urban areas. The non- poor tend to use private health facilities more often than the poor. Traditional healers and Traditional Birth Attendants provide a significant amount of health care with TBAs attending to almost 90% of the deliveries at community level.

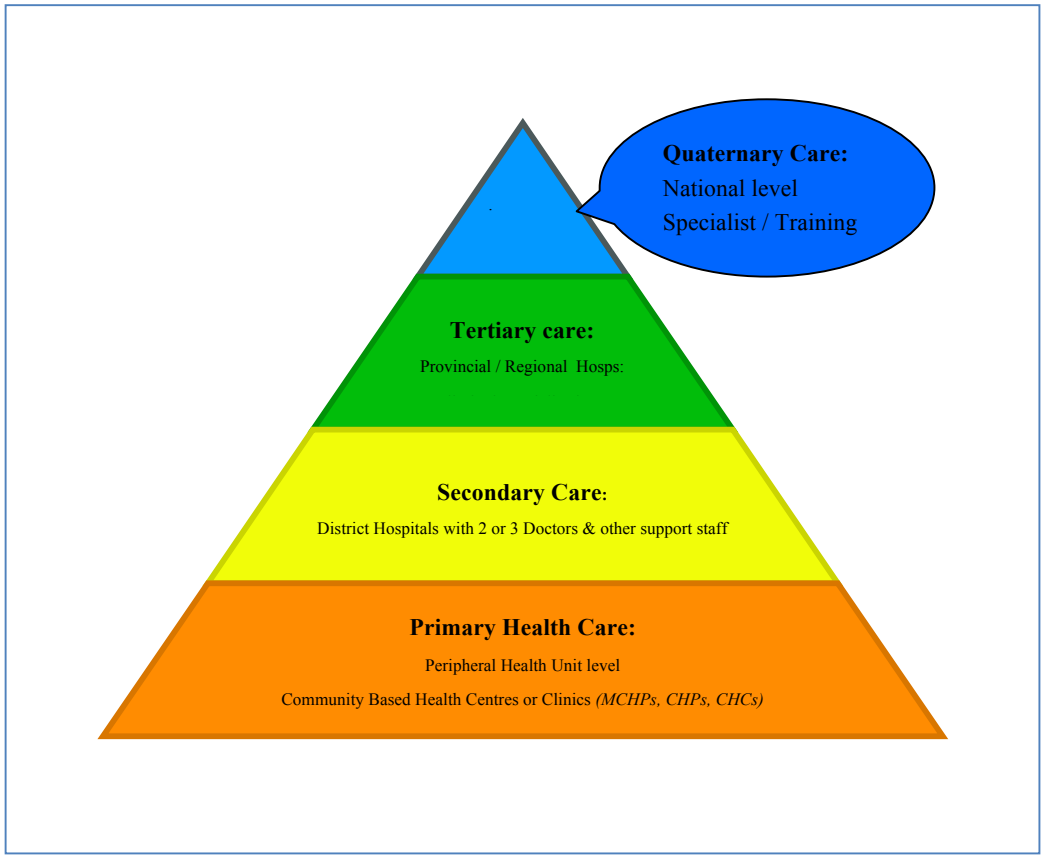
The Government passed the Hospitals Boards ACT of 2004 in the context of the civil service reforms. Both laws seek to devolve responsibility and accountability of some government functions to the local level for effectiveness and efficiency of service delivery.

2.2 Service provision

This subsection describes the provision of personal and non-personal health services at different levels and how different services are delivered (public health services, curative care, long-term care, and rehabilitative services), the infrastructure for the delivery of the services, community participation in health activities.

Health Service provision in Sierra Leone is based on the Primary Health Care concept which was established in the 1980s. The health delivery system comprises four (4) levels as illustrated in Figure 3 below:

Figure 2: The Health Pyramid (Organisation of Health Services in Sierra Leone)



Primary Health Care Level:

As part of public sector reforms started in 2003, the Ministry of Health and Sanitation is now organized into two main levels, the Central and the District levels.

The District level is further divided into the local level components of primary health care. These are networks of peripheral health units (PHUs). In providing the first line health services, the PHUs are further divided into:

- *The Maternal and Child Health Posts (MCHPs):* situated at village level serving populations of less than 5,000. These units are staffed by MCH Aides who are trained to provide services including: antenatal care; supervised deliveries; postnatal care; family planning; growth monitoring and promotion for under-five children; immunization; health education; management of minor ailments, and referral of cases to the next level. The MCH Aides are supported by community health workers such as TBAs, Community Volunteers and others.

- *Community Health Posts (CHPs):* at small town level serving populations between 5,000 and 10,000 and are staffed by State Enrolled Community Health Nurses (SECHNs) and MCH Aides.. They provide the same types of services that are provided at the MCHPs but they also include prevention and control of communicable diseases and rehabilitation. They refer more complicated cases to the CHCs.

- *Community Health Centres (CHCs):* are located at chiefdom level, usually covering a population ranging from 10,000 to 20,000 and staffed by a Community Health Officer (CHO), SECHN, MCH Aides, an Epidemiological Disease Control Assistant and an Environmental Health Assistant. They provide all services provided at the CHP level in addition to environmental sanitation and supervise the CHPs and MCHPs within the Chiefdom.

Secondary Care Level:

The District Hospital is a secondary level referral facility providing back-stopping for the Primary Care level. This level provides the following health services:

- Outpatient services for referred cases from PHUs

- Primary Care services for local population within its immediate environs;
- Inpatient (Admission) health facilities;
- Diagnostic Services;
- Management of accidents and emergencies;
- And provide technical support to PHUs.

The District Health Management Team (DHMT) is responsible for the overall health planning, implementation, coordination, monitoring and evaluation of the district health services under the leadership of the District Medical Officer (DMO). Other DHMT members include:

The Medical Superintendent or Medical Officer/Specialist in-charge of the District Hospital
District Health Sister

District Environmental Health Superintendent

Health Education Officer

Hospital Matron

Health Administrator or Hospital Secretary

WATSAN Coordinator

Community Health Officers' Representative

Finance Officer

District Operation Officer (DOO)

District Social Mobilisation Officer

Births and Deaths Registrar

MCH Aides Training Coordinator

Disease Surveillance Officer

District Pharmacist

Monitoring & Evaluation (M & E) Officer

As defined in the National Operation Handbook *for* Primary Health Care.

Tertiary Care Level:
Regional (Provincial) Hospitals provide some major Specialist Health Services that includes:

- General Surgery;
- Obstetrics and Gynaecology;
- Psychiatry;
- Paediatrics.

However, at the development of this profile, three District Hospitals are doubling as both District and Provincial Hospitals, these are Bo, Kenema and Makeni Hospitals. The Western Region has been left out of this arrangement as there are three major Referral institutions that already play this specialist role in that Region.

Quaternary Care Level:
Quaternary Health Care Services are Specialist Services provided at specialist Hospitals at National level and provide specialist treatment and training.

There a total of 1,268 health facilities in Sierra Leone of which 1,105 (87%) belong to the Government of Sierra Leone; 74 (6%) belong to the Churches, 53 (4%) belong to the Private sector and 36 (3%) belong to NGOs.

Of all these health facilities, 1,225 or 96.6% of the facilities are within the Primary Health Care level.

Table 2.1. Distribution of Health Facilities in Sierra Leone: GoSL; Mission; Private; NGO:

	FBO				Government (GoSL)								NGO			Private			
Districts	CHC	Clinic	Hospital	FBO Total	CHC	CHP	MCHP	Clinic	Under fives clinic	Hospital	Tertiary Hospital	GoSL Total	Clinic	Hospital	NGO Total	Clinic	Hospital	Private Total	Grand Total
Bo	1	7	2	10	24	16	64	0	2	1		107	4		4	11	1	12	133
Bombali	2	3	2	7	17	21	55	1		1		95	2		2	2	1	3	107
Bonthe		1	1	2	10	14	25	0	2	1		52	2		2	1		1	57
Kailahun		2	1	3	11	41	22	0	2	1		77	1		1				81
Kambia	1	2	1	4	9	12	37	0	1	1		60	1		1				65
Kenema		2	2	4	24	30	61	2	1	1		119	3		3	3		3	129
Koinadugu		1		1	10	8	48	0	1	1		68	2		2				71
Kono		2		2	10	15	49	1	1	1		77	3		3	4		4	86
Moyamba	1	3	1	5	15	21	53	1	2	1		93	2		2				100
Port Loko	1	5	2	8	16	16	73	0	2	2		109				1		1	118
Pujehun					12	14	36	0	1	1		64	1		1				65
Tonkolili		2	2	4	8	10	68	0	2	1		89	2		2				95
Western Area Rural		4		4	11	11	15	2			1	40	1	1	2	2		2	48
Western Area Urban		17	3	20	18	4	14	5	3	7	4	55	10	1	11	26	1	27	113
Grand Total	**6**	**51**	**17**	**74**	**195**	**233**	**620**	**12**	**20**	**17**	**4**	**1105**	**34**	**2**	**36**	**50**	**3**	**53**	**1268**

Source: MoHS: 2011 Health Sector Performance Report - DPI

2.3 Health care financing

Government expenditure on health is of great importance as it supports the public health services in Sierra Leone and is the major source of health care for a large proportion of people (70%) who are living below the poverty line and live in rural areas which are not serviced by the private sector. Government expenditure on health per capita was US$9,05 in 2004; US$11,76 in 2005; and US$12 in 2006 which is , however, not commensurate with the WHO Commission for Macroeconomics and Health (CMH) recommendation that governments spend at least US$34 per person per year on health.

Most of the health sector funds come from household out-of-pocket payment which has been on the rise as a proportion of the Total Health Expenditures (THE) which was 67,13% in 2004; 64,08% in 2005 and from 17,8% to 11% in 2006. On the other hand funding from Government of Sierra Leone grew from 15% of the Total Health Expenditures in 2004, to 19% in 2006. Funding from parastatals and private sector remained fairly significant although figures are not available.

Private health financing agents in Sierra Leone include private insurance, household out-of-pocket payments and households with 2,62% coming from NGOs and 0,36% from private insurance. As outlined in the NHSSP 2010 – 2015, the current level of approved public funding as depicted in table 2.2. is approximately US$2,9 per capita. However, only 30% of the Ministry of Health and Sanitation approved budget is funded by Government.

Table: 2.2. MOHS Budget Versus Actual Government Expenditure.

1.	**Approved Budget Funding per capita US$**	**Population**	**Dollars**	**Leones**	**%**
	US$2,9	5,200,000	15,080,000,00	45, 240,000,000,00	100
2.	**GoSL Actual Funding per capita**	**Population**	**Dollars**	**Leones**	**%**
	US$ 0, 87	5,200,000	4,524,000,00	13,572,000,000,00	30%
3.	**Funding Gap**	**Population**	**Dollars**	**Leones**	
	US$ 2,03	5,200,000	10,556,000,00	31,668,000,000,00	70%

Source: *NHSSP 2010 - 2015*

2.4 Human Resources for Health Costs

The Ministry of Health and Sanitation staff are currently divided into two major categories; the health technical and the civil service staff. The distinction was made in order to identify those who were health workers with specific skills and those who were generally skilled and thus able to be posted to other ministries or departments within the broader civil service. The two categories were created at the onset of the Free Health Care initiative for pregnant and lactating women and children under five, which was launched in April 2010.

The new policy also instigated salary rises for the health technical staff to account for the additional workload expected in facilities, but more importantly, to make up for the difference in income from when they previously were charging user fees from patients. The revised salaries were implemented under an interim salary scale, where allowances were 'rolled up' into the basic pay. Civil service staff (administrative)remained under the same scale and were given an additional allowance under the rationale that they could be moved to a different ministry and the same salary amount could not be maintained.

Net salary for the technical grades is nearly double, due to the launch of Free Health Care which saw introduction and rationalisation of allowances for the technical grades. Salary top ups were also introduced with Free Health Care. These were only effected in April 2010, hence the seemingly high net figures for that month as indicated in table 2.3 below.

The following allowances were added to the basic salary of the health technical grades:

- Medical contributions;
- Transport;
- Rent;
- Danger Allowance (e.g. Mental Hospital Allowance)

From the Gross, there are Statutory and Voluntary deductions that are effected which include:

- Tax;
- NASSIT;
- Other deductions – as per individual selection.

Table: 2.3. : Ministry of Health and Sanitation 2010 Payroll.

Year	Month	Workforce	Basic Salaries in Leones	Net – Pay in Leones	Year	Workforce	Basic Salaries in Leones	Net Pay in Leones
2010	January	7,095	1,089,696,042	1,593,866,956	2011	8,225	5,429,389,350	4,574,940,737
2010	February	7,164	1,099,754,553	1,652,403,298	2011	8,125	5,394,660,892	5,104,626,704
2010	March	5,621	821,408,530	1,277,499,457	2011	7,670	5,117,204,685	4,816,482,300
2010	April	7,077	4,218,842,075	7,003,691,024	2011	7,699	5,151,299,482	4,684,389,496
2010	May	7,772	4,857,457,901	4,978,001,309	2011	8,442	5,179,010,701	4,828,989,229
2010	June	7,870	4,944,269,390	4,286,699,251	2011	7,920	5,340,121,398	5,390,081,196
2010	July	8,214	5,234,199,338	5,170,588,818	2011	8,494	5,441,864,876	5,345,436,854
2010	August	8,229	5,271,599,821	4,861,591,164	2011	8,543	5,471,949,944	5,106,649,099
2010	September	8,353	5,380,606,212	5,108,352,510	2011	8,094	5,502,096,714	4,901,109,949
2010	October	8,360	5,395,518,764	4,716,150,205	2011	8,095	5,533,130,042	4,907,693,518
2010	November	8,340	5,439,483,260	5,451,114,016				
2010	December	8,048	5,340,877,613	5,046,129,761				

Source: *Accountant General's Department MOHS 25, July, 2011.*

2.5 Health information system

An integrated health information system (IHIS) is a prerequisite for sound decision making and planning through the provision of timely, reliable and relevant information. The DPI provides a decentralized information system in Sierra Leone. Routine health data is collected through a network of some 987 peripheral health units (PHUs) and 42 hospitals that are unevenly distributed throughout the country across 13 health districts coordinated by monitoring and evaluation and disease surveillance officers.

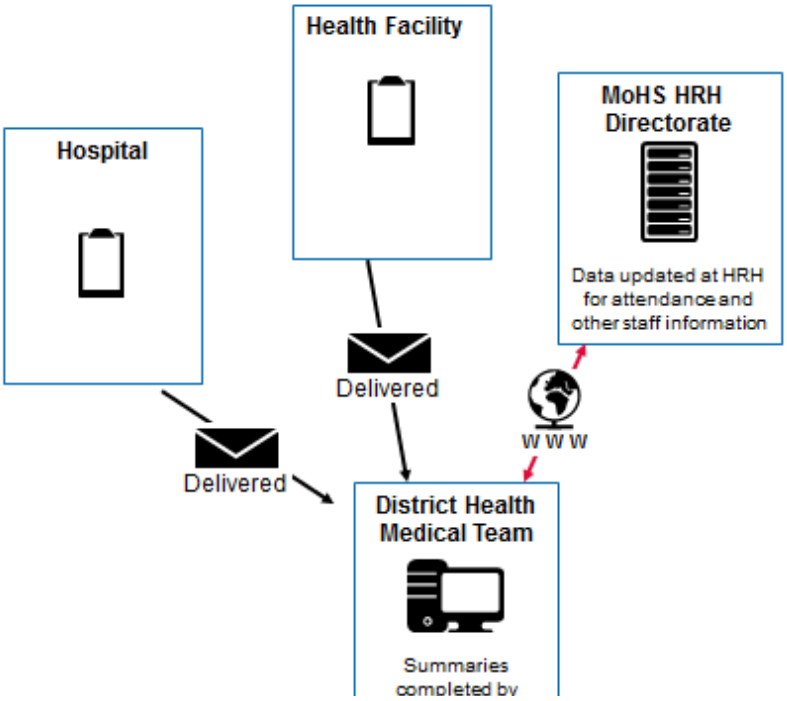


Figure 3. Health Information System flow

The DPI , has statisticians posted at district level as part of the process of strengthening the IHIS of the MOHS. A district based electronic data management system, known as the "District Health Information System " (DHIS) has been developed to integrate and improve the quality and efficiency of data capture, data storage, transfer, analysis and dissemination. This system does not however collect HRH data.

There are no standardized definitions and procedures of collecting HRH data. Whilst Health Information data is currently being captured in electronic form at district level and entered into an Integrated Data Warehouse (IDW), HRH data is still collected manually from PHUs and hospitals as indicated in the figure below.

HRH data flows from the local level, represented by the District Hospital to include all the Peripheral Health Units and facilities, through the District Health Management Team to the HRH Directorate. This data is then sent to the Human Resources Management Office, outside the MoHS, after perusal by the MoHS Permanent Secretary. This data is also made available to the Public Service Commission, the employer of all government staff.

There is a monthly attendance monitoring system that uses the most current HRH data and updates some HRH data for place of work, staff movements, attendance and leave taken. It allows districts to confirm staff presence at which workstation and their correct job designation details.

Other requests may be on an ad-hoc basis but the 'flow' is through the similar system as the attendance data when it is for general HRH.

3 Health Workers Situation

The vacancy rates that are currently prevailing at the Ministry of Health and Sanitation are very high. Some of the positions registering very high vacancy rates include the Radiographer category that is at 100% vacant together with the positions in Medical Electronics. This compromises service as the diagnostic services are crippled and the Medical Electronics are also in poor state with potentially dangerous implications. If medical electronics engineers and technicians are not in post it may mean two of critical issues, 1) no repairs and servicing of equipment and 2) no or poor calibration of equipment with potentially catastrophic implications.

Community Health worker category has reflected lower vacancy rates than other categories. The categories listed below will need to be unbundled to get the more specific vacancy rates within the professional category listed.

Table 3.1. MoHS Health Professionals Establishment and Strength.

Staff Category	Authorised	No. In-post	Vacancy Rate
Specialists (includes Specialists in management position)	75	41	44%
Registrars (All)	70	5	93%
Medical Officers (All)	116	79	32%
House Officer	66	40	39%
Radiographer	16	0	100%
Physiotherapist	13	1	92%
Orthopaedics	52	18	66%
Rehabilitation	285	15	95%
Medical Electronic Engineer	26	0	100%
Medical Equipment Technician/Electrician	96	17	82%
Nutrition & Catering	318	54	83%
M&E	248	14	93%
Environmental Health Aide	540	171	68%
Maternal & Child Health Aide	2640	1892	28%
Nursing Aide/Assistant	1008	1098	+8%
Darkroom Attendant	56	n/a	n/a
Laboratory Aide/Attendant	221	78	65%
Pharmacy	412	197	52%
Medical Laboratory Science	685	183	73%
Refractionist	52	5	90%
Community Health	839	566	33%
Epidemiology	29	1	97%
Health Education	284	5	98%
Environmental (Sanitary) Health	1029	200	81%
Nurses	4536	1746	62%
Midwives	400	76	81%
Senior Ward Sister / Midwifery Officer	100	6	94%

Source: Personnel Unit MOHS : October, 2011.

The high vacancies seen in the technical grades are not limited to those alone, but the open Administrative area is also negatively affected. Some of the high vacancy rates are seen with the category of Hospital Managers (100%), the Births and Deaths Registrar (82%) and the Environmental Health Aides (at 68%).

Of note that is that the HRH unit is fully staffed according to these statistics and yet when examining the numbers against the workforce, evidence is that there is a shortfall in numbers. A total workforce of slightly over 8,000 being managed by a staff with a complement of not more than 5. A significant portion of the HRH staff are found within the clerical grade which also has a vacancy rate of 48%. From these statistics, it becomes evident that the HRH unit is inadequately configured with the wrong numbers and no dedicated skills.

Table 3.2 Administration and Finance Establishment & Strength

Substantive Post	Authorized	No. Of Staff	Vacancy Rate
Permanent Secretary	1	1	0
Deputy/Snr Asst/Asst Secretary	5	4	20%
Internal Audit	4	4	0%
Hospital Manager	8	0	100%
Principal/Senior/ Hospital Secretary	47	10	79%
Procurement Manager	1	1	0%
Principal Donor NGO Liaison Officer	1	1	0%
Stores	38	19	50%
Director of Human Resource	1	1	0%
HRH Staff	4	4	0%
Secretarial Staff	11	10	9%
Births and Deaths Registrar	44	8	82%
Clerical Staff	425	220	48%
Principal Health Economist	1	1	0%
Driver/Mechanics	300	177	41%
Security Staff	265	297	+12%
Cleaner	1320	64	95%
Labourer	265	200	25%
Laundryman/Laundress	50	21	58%
Messenger/Porter	1390	288	79%
Porter	1320	245	81%
Steward/Stewardess	250	78	69%
Cloakroom Attendant	100	22	78%
Cook	250	100	60%
Catering Aides	48	37	23%

Source: Personnel Unit MOHS October, 2011.

3.1 Health workers stock

In this category, more of the vacancies are seen in the Provincial Hospitals which perhaps are still not yet fully functional. Currently, the District hospitals are doubling up as Provincial Hospitals. As noted elsewhere above, the biggest vacancies are seen with the specialist categories regardless of the type of hospital. Specialists such as the ENT Specialist (995%) who is virtually not available at any f the institutions. The availability of midwives is better in all institutions with an average vacancy rate of 55%.

There is no information on the availability of Nutritionists and Cataract surgeons.

Table 3.3. : Vacancy rate analysis for MOHS Hospitals.

Cadre	Pro Hos	Dist Hosp	Chn Hosp	Lakka Hosp	Connaught Hospital	PCM Hospital	Average Vacancy rate
Medical Officer	81%	65%	17%	50%	48%	44%	50%
Physician	83%	100%	n/a	n/a	100%	n/a	94%
Surgeon	89%	94%	**n/a**	**n/a**	44%	**n/a**	76%
ENT Surgeon	100%	100%	100%	n/a	98%	**n/a**	99.5%
Paediatrician	100%	100%	50%	100%	98%	65%	86%
Cataract Surgeon							
Obs/Gyn	98%	98%	**n/a**	**n/a**	**n/a**	67%	88%
Pathology	100%	100%	100%	100%	67%	100%	95%
Laboratory	40%	100%	100%	100%	33%	100%	79%
Radiographer	100%	-	100%	100%	71%	100%	94%
Pharmacy Technician	50%	68%	100%	100%	20%	33%	62%
Staff Midwives	33%	35%	75%	95%	60%	30%	55%
SRN	85%	91%	n/a	100%	n/a	46.7%	80%
SECHN	41%	15%	20%	80%	20%	93%	45%
Ophthalmologist	100%	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**	100%
Ophthalmic Technician	100%	100%	**n/a**	**n/a**	**n/a**	**n/a**	100%
Ophthalmic Nurse	100%	97%	**n/a**	**n/a**	**n/a**	**n/a**	98.5
Dental Surgeon	33%	100%	98%	100%	100%	100%	86%

Dental Technician	100%	100%	**n/a**	**n/a**	**n/a**	**n/a**	100%
Nurse Anaesthetist	80%	89%	100%	n/a	50%	75%	79%
CHO	0	73%	**n/a**	**n/a**	**n/a**	**n/a**	73%
Nutritionist	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**

Source: Report on HRH and AID Effectiveness in SL. July, 2008.

3.2 Distribution of health workers by category and trends

Comparing there years spaced apart, it is clear that during the year 1991, there were more health-workers available than the years 2003 and 2009 especially in the specialist grades. The SR Nurses seem to have a maintained a constant level of availability although the gap for 2009 is still at a high of 701 vacancies. The relatively newer grade of the MCH Aide has also performed better with a gap of 13.

One of the reasons for this kind of presence is that most of these cadres are locally recruited and therefore are more likely to stay than those that are recruited from outside the village or district.

Table 3.4. Distribution trends for Medical Personnel for the last 3 years:

MEDICAL CADRE	1991	2003	2009	Gap
Medical Officers	207	71	75	459
Pediatricians	16	4	1	53
Dentists	15	6	5	47
Obstetricians and Gynecologists	23	6	5	49
Public Health Specialists	33	18	24	6
Surgeons	13	7	5	49
Specialist Physician	17	6	3	7
Psychiatrists	0	1	0	7
Pharmacists	23	13	17	13
Midwives	132	111	95	205
S.R. Nurses	625	266	685	701
MCH Aides	0	530	825	13

Source: MOHS HRH Department: June, 2011.

3.3 Gender distribution of Health Workers by Location.

As shown in the tables below, the health sector is staffed more by women than by men. Headquarters which has more of the senior specialists and senior managers has more males than females compared to the districts. Most of the districts have a general female presence of more than 60% including even the Western Area. As a result, the national picture is also skewed to more women in the service than men. The Western Area has the overall highest number of Health-workers with 2,672 staff.

Table 3.5. Gender of Health Workers by Location.

Location	Numbers	% Female	% Male
Headquarters	670	43.2	56.8
Port Loko	549	50.0	50.0
Kailahun	230	52.7	47.3
Bonthe	152	60.7	39.3
Bo	813	60.8	39.2
Kambia	255	62.9	37.1
Tonkolili	331	63.3	36.7
Pujehun	197	63.5	36.5
Kenema	688	63.6	36.4
Koinadugu	268	64.8	36.4
Western Area	2,672	64.8	35.2
Kono	308	64.8	35.2
Bombali	488	64.8	35.2
Moyamba	265	67.6	32.4
Unknown	127	52.2	48.0
Study Leave	504	n/a	n/a
National	8,517	59.6	40.4

Source: Personnel Unit Analyzed by DPI October, 2011

3.4 Gender distribution by health occupation/cadre

Table 3.4 below shows that in the medical specialist positions, there are more men (78%) than females (22%). However going to the nursing professionals and midwifery professionals, there are more women in position than men. In the case of midwifery, 100% of all the positions are filled by women. Over the years, even in the absence of any law that stopped men from joining the profession, midwifery was considered as a preserve of the females. Only in the last year has one school of midwifery accepted three male students into training.

The category of health management and skilled administration has a near balance with females making up 40% of the staff list.

Table 3.6. Gender distribution by selected health-worker category

Occupational categories/cadres	Total	Female	% Female
General medical practitioners	109	24	22%
Specialist medical practitioners	92	1	1.0%
Nursing professionals	1700	1300	76.4%
Nursing associate professionals	1043	750	72%
Midwifery professionals	79	79	100%
Midwifery associate professionals	1965	1965	100%
Paramedical practitioners	299	44	14%
Dentists	4	0	0%
Dental assistants and therapists	50	27	50%
Pharmacists	50	13	26%
Pharmaceutical technicians and assistants	148	13	9%
Environmental and occupational health & hygiene workers	297	5	1.6%
Physiotherapists and physiotherapy assistants	20	5	25%
Optometrists and opticians	9	7	77.7%
Medical imaging and therapeutic equipment operators	45	3	6.6%
Medical and pathology laboratory technicians	55	6	13.3%
Medical and dental prosthetic technicians	4	1	25%
Community health workers	173		
Health management workers/Skilled administrative staff.	377	154	40.8%
Other health support staff	1407	290	20.6%
TOTAL			

Source and Year: HRH support unit report 2011

3.5 Age Group Distribution of Health Workers

In this category, the Sierra Leone workforce has 10 employees who are under the age of 18 raising questions about the employment laws of the country. The majority of the workers in the sector are in the 28-37 year age-group (21.9%) and in the 38-47 year age group (22.3%)

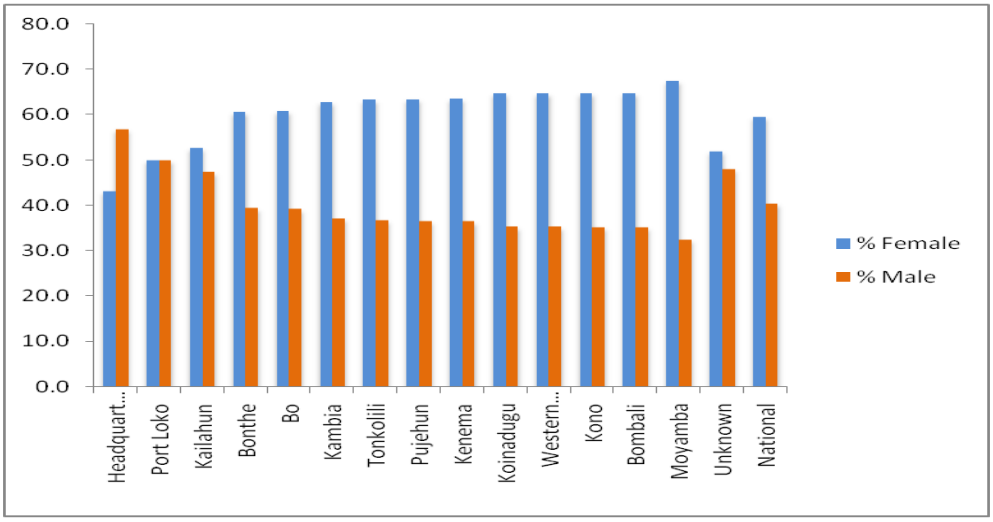
Table 3.7. Age Group Distribution of Health Staff

Age Group	Number of Health Workers	% Distribution of Staff
<18 yrs	10	0.1
18 – 27 yrs	251	3.2
28 – 37 yrs	1850	21.9
38 – 47 yrs	1816	22.3
48 – 57 yrs	1143	13.6
58 yrs +	261	3.1
Age not verified	2747	35.8
Grand Total	8357	100%

Source: Personnel Unit Analyzed by DPI October, 2011

Note should be made that there is a very significant part of the workforce whose ages are not known. This group is easily the largest at 3,415 or 35.8% and could therefore pose problems in HRH planning. The figure 4 below presents a graphical illustration that in the majority of the districts, the female health-workers outnumber their male counterparts. This would also mirror the fact that the nursing grade which is predominantly female is also the single largest group of employees.

Figure 4: Staff Distribution by Sex



Source: DPI MOHS October, 2011.

As table 3.8 below shows, the distribution of staff by age seems to follow a similar pattern across the districts with the majority workers in the 28 to 47 year age ranges although the 48 to 57 year age group also has some significant number. The Western area has the highest number of workers under the age of 18 years (4) and also the highest number of workers aged 58 years and above. Bonthe district has the lowest number of health workers overall.

Table 3.8. Age Group Distribution of Staff by District.

District/Station	<18 yrs	18- 27 yrs	28-37 yrs	38-47 yrs	48-57 yrs	58 yrs	Total
Headquarters	0	14	130	149	168	32	827
Bo	2	31	182	200	116	17	910
Bombali	0	17	123	144	87	27	514
Bonthe	0	3	46	40	17	0	150
Kailahun	1	3	45	78	28	3	260
Kambia	0	6	56	66	28	7	265
Kenema	1	15	178	185	85	17	731
Koinadugu	0	8	55	61	33	6	262
Kono	0	5	57	119	57	14	328
Moyamba	1	8	87	84	28	7	296
Port Loko	0	19	83	74	78	9	519
Pujehun	0	6	43	59	11	2	189
Tonkolili	1	9	75	78	43	14	359
Western Area	4	107	690	479	392	106	2747
Grand Total	**10**	**251**	**1850**	**1816**	**1171**	**268**	**8357**

Source: HRH Directorate MoHS, 2011

3.6 Availability of Medical Doctors

Of the 157 medical doctors employed in the Ministry of Health and Sanitation, 17% are stationed at the Head Office as Directors and managers. These doctors are no longer in direct medical practice but are now more focused on management and administration. It is however also important to note that the majority of doctors are in direct medical practice with 45% working as Medical Officers in the field. If the numbers that are Medical Superintendents and the District Medical Officers are included in the field doctor list the proportion of doctors in practice goes significantly higher than 50%.

Whilst this may be so, it is important to read this table together with the tables on the actual vacancies as those give the level of need that the country faces.

Table 3.9. Medical Doctors Stock

CATEGORY OF DOCTOR.....	NUMBER OF DOCTORS
Head Office Medical Directors	13 (8%)
Head Office Medical Programme Managers	15 (9%)
Medical Superintendents of Hospitals	23 (15%)
District Medical Officers (DMOs)	13 (8%)
Medical Officers	70 (45%)
V.S.O. Doctors	9 (6%)
Doctors on Contract	4 (3%)
Doctors on Study Leave	10 (6%)
Total	**157 (100%)**

Source: *MOHS HRH - August, 2011.*

3.7 Urban/rural distribution of selected health-workers

This is one area that magnifies the need for reconsideration of the staffing policy of the Ministry of Health and sanitation. The large majority, 100% in most categories, of Medical Specialists are employed in the urban areas living the rural areas with staff with basic qualifications. This however mirrors the organization of the health services in that the specialist cadres are supposed to be found at the regional and central levels. The Primary Health Care level is not designated to have any medical specialists.

Community Health Officers are distributed with a large number (84%) found in the urban areas and less (16%) in the rural areas. As anticipated, MCH Aides are also a preserve for the rural areas with 68% deployed there. It is again a reflection of the arrangement of health service provision which places more emphasis on strengthen MCH services in the rural areas where the need has been identified as greatest. It is however irregular that the SECHNs are found more in the urban areas with nearly 86% found in the urban areas. This picture is not supportive of the Primary Health Care approach with most staff of the MoHS found in the urban areas.

It is also important to note that these figures need to be updated as they are from quantifications done nearly three years ago. The HRH unit would need to revise their staff distribution lists as they are at moment not up to date. Some staff movements are expected to have happened over this gap period and for strategic planning purposes, this information would need to be revised.

Table 3.10. Urban/Rural distribution of selected worker categories in alphabetical order

Cadre	Total	Urban	Urban %	Rural	Rural %
Anaesthetist	1	1	100%	0	0%
Biochemist	5	5	100%	0	0%
Cardiologist	1	1	100%	0	0%
CHO	132	111	84.0%	21	16.0%
Chiropodist	1	1	100%	0	0%
Dentist	5	5	100%	0	0%
Dental Nurse	2	2	100%	0	0%
Dental Technician	6	6	100%	0	0%
Dermatologist	1	1	100%	0	0%
EDCU Assistant	247	126	51.0%	121	49.0%
Entomological Assistant	2	2	100%	0	0%
Environmental Health Officer	113	93	82.3%	20	17.7%
Epidemiological Assistant	2	2	100%	0	0%
Gynaecologist/Obstetrician	7	7	100%	0	0%
Haematologist	1	1	100%	0	0%
House Officer	6	6	100%	0	0%
Health Education Officer	4	4	100%	0	0%
Laboratory Assistant	17	17	100%	0	0%
Laboratory Technician	48	46	95.8%	2	4.2%
Limb Fitter	1	1	100%	0	0%
MCH Aide	1023	328	32.0%	695	68.0%
Medical Officer	59	59	100%	0	0%
Medical Officer (Public Health)	7	7	100%	0	0%
Nurse Anaesthetist	11	11	100%	0	0%
Nutritionist	4	4	100%	0	0%
Ophthalmologist	1	1	100%	0	0%
Ophthalmic Nurse	14	14	100%	0	0%
Ophthalmic Technician	2	2	100%	0	0%
Orthopaedic Technician	5	5	100%	0	0%
Paediatrician	3	3	100%	0	0%
Pathologist	2	2	100%	0	0%
Pharmacist	13	13	100%	0	0%
Pharmacy Technician	91	82	90.1%	9	8.9%
Physician	1	1	100%	0	0%
Physiotherapist	1	1	100%	0	0%

Psychiatric Nurse	1	1	100%	0	0%
Psychiatrist	1	1	100%	0	0%
Public Health Sister	47	47	100%	0	0%
Public Health Specialist	19	19	100%	0	0%
Radiographer	2	2	100%	0	0%
Radiologist	1	1	100%	0	0%
Refractionist	2	2	100%	0	0%
Sanitary Engineer	1	1	100%	0	0%
SCM	197	186	94.4%	11	5.6%
SECHN	653	560	85.7%	93	14.3%
SRN	112	107	85.5%	5	4.5%
Surgeon	5	5	100%	0	0%
Surgeon ENT	1	1	100%	0	0%
X-Ray Technician	2	2	100%	0	0%

Source: Report on Human Resources for Health and Aid Effectiveness in Sierra Leone July, 2008.

3.8 HRH in Faith-based Health Institutions of Sierra Leone

The Faith-based health institutions of Sierra Leone are an integral part of the health service delivery system in Sierra Leone. With thirty (30) clinics and eleven (11), they make a significant contribution to the sector. There however is no evidence of an agreement between the Ministry of Health and Sanitation and CHASL on how the two would relate. The CHASL also have schools of nursing in the districts and these also make a contribution to the availability of Human Resources for Health.

From the figures in table 3.11 below provided by CHASL through the MoHS HRH unit, the staffing situation is quite poor at the faith based facilities. There are a total of 180 staff in all faith-based hospitals of whom 76 are seconded by GoSL. The numbers that are required at these facilities are set at 247 hence highlighting a gap of 67. Looking at simple numbers, this would mean that on average, a faith-based facility has 4 staff. This is unimaginable as some of these facilities are training schools. What these figures signify though is that there needs for an intensive survey of the HRH situation at faith-based facilities and also work on matching the HRH needs of each facility with the service that they provide.

The information available indicates a big gap in the staffing norms at faith-based facilities and also brings into question the role of the district level in terms of supervision of service provision against national standards. It therefore is cause for concern to the authorities how these mission facilities are operating with such low levels of staff. Please note that the table below relates only to the technical grades, with no information provided on the Administrative and Support services

Table: 3.11. Summary HRH data for Faith-based Health facilities in Sierra Leone.

Designations	Total	Number Seconded by GoSL	Number Employed by Mission	Number Needed	Gap
Medical Doctors					
Gyn/Obstetrics	0			1	1
Physician	5	1	4	8	3
Spec. Surgeon	7	1	6	12	5
Dentist	0	0	0	4	4
Medical Officers					
CHOs	13	6	7	20	7
CHAs	5	2	3	15	10
Nurses:					
Matron	6	2	4	7	1
SRN	13	5	8	15	2
Anaesthetist	8	4	4	11	3
SRN/SCM	2		2	6	4
SECHN	59	21	38	74	15
MCH Aide	34	23	11	24	0
Other					
Pharmacist	2	0	2	7	5
Phar. Tech.	4	3	1	6	2
Radiographer	0	0	0	2	2
Lab. Tech.	15	6	9	14	0
Physiotherapist	0			3	3
Vaccinator	7	2	5	18	11
Totals	**180**	**76**	**104**	**247**	**67**

Source: Christian Health Association of Sierra Leone (CHASL) October,2011.

4. HRH Production

4.1 Pre-service education

The Government of Sierra Leone owns most of the training schools through the Ministries of Education, Science and Technology and Health and Sanitation. The Government of Sierra Leones owns 7 of the 12 pre-service training schools with the largest school being the University of Sierra Leone's College of Medicine and Allied Health Sciences (COMAHS) which covers up to nine disciplines. The Njala University College in the Southern Region focuses on four disciplines of training. The two Universities belong to the Ministry of Education, Science and Technology and from evidence on the ground there is no discussion of training targets for all the disciplines with the MoHS.

Institutions belonging to the CHASL own four of the training institutions focusing mainly on the State Enrolled Community Health Nurse (certificate level). The private for profit sector has one training school that produces the State Enrolled Community Health Nurse.

The highest concentration of schools is in the Western Area, which has 5, and each of the other three regions have at least two schools. Midwifery is trained at institutions in the Northern Region and the Western Area.

Table 4.1 Number, type and ownership of Training Institutions in Sierra Leone.

Type of training institution	Type of ownership			Total
	Public	Private not for profit, FBOs	Private for Profit	
Western Area Region				
1. Medicine 2. Pharmacy 3. Laboratory Studies 4. Community Health 5. BSc Nursing 6. Nursing Education 7. Registered Nursing 8. State Enrolled Community 9. Health Nursing Certificate	College of Medicine and Allied Health Sciences (COMAHS), University of Sierra Leone Freetown			1
State Enrolled Community Health Nursing (SECHN) certificate	Defence School of Nursing Freetown	Redeemers School of Nursing Freetown	Blue Shield School of Nursing Freetown	3
State Certified Midwifery	National School of Midwifery			1
Southern Region				
1. Community Health (Dipl/Cert) 2. Environmental Health BSc/Dipl 3. State Registered Nursing (SRN) Dipl 4. State Enrolled Community Health Nursing (SECHN) Cert	Njala University College, Bo Campus			1
State Enrolled Community Health Nursing (SECHN) Certificate		Mattru School of Nursing Mattru Jong		1
Eastern Region				
State Enrolled Community Health Nursing (SECHN) Certificate	Eastern Polytechnic School of Nursing Kenema	Nixon School of Nursing Segbema		2
Northern Region				

State Enrolled Community Health Nursing (SECHN) Certificate	Northern Polytechnic School of Nursing Makeni	St. John of God Nursing School, Mabesseneh Lunsar		2
State Certified Midwifery	School of Midwifery			1
Maternal and Child Health Aide Training	Conducted in all Districts			
Total	7	4	1	12

Source: MOHS, HRH Support Unit, June, 2011.

Without central coordination of the training, each training institution sets its own training targets on the basis of its own internal capacity and therefore there is no unified effort to meet the workforce training needs of the country.

There is no MOHS Training Plan in place and as a result, each training institution decides trainee intake based on their internal capacity to train. There is thus no link between production and national health-worker requirements.

The MOHS has no direct control over the production of the Health Training Institutions. Each Training Institution decides on the number of Trainees to enroll. However, the Nurses Board has made efforts to standardize the examinations that are set for nursing students and the marking and moderation of these is done by the Board. The curricula of the various professional groups vary from institution to institution according to institutional interests and not the MOHS needs. Training Institutions train the numbers they are capable of handling using their own tutors with minimum or no guidance from the Ministry of Health and Sanitation.

There is no mechanism for assessing Physical and Professional operations of Health Training Institutions.

Comparing the intakes and the graduates in table 4.4 below, there is a significant number that is lost during training and this needs to be examined to ascertain why these numbers drop out. During the four year period between 2007 and 2010, the total number students in training were 185 yet the graduates were 101. Since this period is shorter than the time required to train a doctor, it is not possible to actually see the dropout rate against each intake. It however can be noted that the numbers that graduate are generally lower than those that commenced training. The HRH Unit seems to be agreed that there is a general 30% loss rate on training. Some of the reasons to these losses include students who fail to maintain the required standards of the course and some cases female students get withdrawn from training by their husbands so that they can look after their families. It has also been noted that some of the students withdraw from training if other seemingly more lucrative opportunities emerge.

Table 4.2 Number of entrants and graduates by year.

Cadre	Number of entrants				Total input	Number of graduates				Total output
	Year 2007	Year 2008	Year 2009	Year 2010		Year 2007	Year 2008	Year 2009	Year 2010	
Doctors	25	30	60	70	185	20	26	25	30	101
Nurses	90	120	140	160	510	75	110	135	150	470
Midwives	45	48	42	61	196	43	45	41	55	184
Dentists	0	0	0	6	6	0	0	0	6	6
Pharmacists	45	35	32	40	152	22	17	11	16	66
Laboratory workers	20	19	17	9	65	20	16	10	9	55
Environment & public Health workers	20	25	40	50	135	18	22	35	48	123
MCH Aides	520		689		1209	480		650		1130
Total	**765**	**277**	**1020**	**396**	**2458**	**678**	**236**	**907**	**314**	**2135**

Source: MoHS HRH Support 2011

Accreditation Mechanisms.

Accreditation is mandatory for health training institutions, independent practice licensure and registration to practice. Accreditation is conducted by the existing Health Professions Councils, Boards and Associations which institute mandatory Licensure/Registration for their membership as provided for in the relevant Act of Parliament. Accreditation is on an annual basis as a requirement for renewal of licence to practice.

4.2 In-service and continuing education

As indicated above, health training is not currently planned and coordinated by the Ministry of Health and Sanitation. Public and private training institutions train health personnel according to their interest, judgement and capability using their own tutors. At both pre and post-basic training, the training institution determines its curriculum, programmes and levels of intake without consultation of the Ministry of Health and Sanitation. Training institutions review their curricula as and when they feel like and in most cases on the availability of resources.

In spite of the fragmented situation described above, training institutions have generally experienced the following challenges:

- Shortage of properly qualified tutors;
- Shortage of reading material;
- Shortage of demonstration materials, gadgets and models;
- Inadequate of physical infrastructure for both training and residential accommodation;
- Lack of quality safe drinking water;
- Unreliable electric power supply;
- Generally poor sanitation;
- Inadequate Transportation system

4.3 Health workforce requirements

The projections for staff requirements below are based on an incremental approach related to the NHSSP pronouncements. A more robust projection model would need to be used to make more accurate projections. These projections will however depend on the quality of information that is available. At the moment HRH information and HIS is fairly fragmented and would need a concerted effort to prepare for use in staff projections. The numbers highlighted as needed also need to be based on the population needs and the burden of disease.

Even when these projections are made, for the gaps t be filled there would need be an intense discussion between the MoHS, the HSC and the HRMO, the PSC and the Ministry of Finance. These are the key decision makers in as far as financing and staffing of government services are concerned. The current staff shortages have on a number of occasions been linked to inadequate budgets from Central Government.

Table 4.3. Projections for health workforce requirements for the coming years

Cadre	Year 2012	Year 2013	Year 2014	Year 2015	Year 2016	Needed…
Public Health staff	6	6	6	6	6	30
Surgeons	6	5	5	5	5	26
Physicians	6	5	5	5	5	26
Clinical Pharmacologists	5	5	5	5	4	24
Pharmacists	12	10	10	10	10	52
Pharmacy Technicians	60	60	60	60	60	300
Nephrologists	2	2	2	2	-	8
ENT Specialists	2	2	2	2	-	8
Neuro-surgeons	2	2	2	2	-	8
Gastro-enterologists	2	2	2	2	-	8
Neurologists	2	2	2	2	-	8
Paediatricians	6	6	6	6	6	30
Ophthalmologists	5	5	5	5	2	22
Haematologists	2	1	1	1	1	6
Obstetrician/Gynaecologists	6	5	5	5	5	26
Dentists	6	6	6	6	6	30
Anaesthesiologists	3	3	2	2	2	12
Radiologists	6	6	6	6	6	30
Psychiatrists	3	3	2	2	2	12
Dermatologists	2	1	1	1	1	6
Medical Officers	25	25	25	25	15	115
Registered Nurses	120	120	120	120	120	600
Midwives	60	60	60	60	60	600
Nurse Anaesthetists	7	7	7	7	7	6
Paediatric Nurses	15	15	14	14	14	72
Peri-operative Nurses	10	10	8	8	8	44
Ophthalmic Nurses	6	6	6	6	6	30
Cataract Surgeons	3	3	2	2	2	12
Refractionists	6	6	6	6	6	30
ICU Nurses	4	4	4	4	4	20
SECHNs	300	300	300	300	300	1,500
Environmental Health Officers G4	75	74	74	74	74	369
Environmental Health Officers G5	99	99	99	98	98	493
Environmental Health Officers G6	54	54	54	54	54	270
Community Health Officers	60	60	60	60	60	300
Community Health Assistants	60	60	60	60	60	300
Vector Controllers	15	15	15	15	15	75
Laboratory Technicians	30	30	30	30	30	150
MCH Aides	300	300	300	300	300	1,500

Source: DHMTs and HRH Support Unit, June, 2011, MOHS.

5. HRH Utilization

5.1 Recruitment

Health Workers are recruited by:

- Initial work applications for a job are made to the Ministry of Health and Sanitation.
- The Human Resource Management Office (HRMO) informs the MOHS when vacancies are available;
- The Scheme of Service is used in assessing applications and recommendations are made to the HRMO;
- The HRMO forwards the application documents to the Public Service Commission with their recommendations;
- Interviews are conducted by the PSC and results sent back to HRMO;
- The HRMO informs the HRH department of the MOHS with a letter of appointment to the applicant;
- HRH (MOHS) opens a file for the employee and deploys the new employee.

In Sierra Leone, on completion of basic training, qualifying graduates of the training institutions are not guaranteed employment as they have to compete for whatever posts are vacant. This has thus led to a growing number of unemployed training schools graduates and some are now finding their way out of the country as they are not guaranteed employment in the country. This however is not consistent with the high vacancy rates that were seen earlier even in the entry grades. The challenge that the MoHS faces is that they need the approval or authority of the two bodies outside their control, i.e the HRMO and the PSC. Even then, the availability of funds is a major factor in filling the vacancies as the MoHS has a “paper budget” that does not necessarily tally with their HRH needs

5.2 Deployment and distribution mechanisms

Deployment is done centrally from the national level to the District Health Management Teams and District Hospitals. The Director HRH writes a deployment letter addressed to the new recruit copied to the Head of the health facility, department or unit indicating the date of duty assumption. Induction is managed at the local level by the directorate or department concerned. All technical grades have a clearly defined career structure whilst the open Administrative area is defined in the context of the rest of the civil service.

The open Administrative area is in such a position because their grades are similar to grades in the rest of the civil service and therefore the structures cannot be different from other ministries. The civil service staff of the Administrative sector are therefore regularly being rotated from one government ministry to another’ hence institutional memory is easily lost.

Below is an example of some of the career paths that may be followed by Nurses in Figure 5 and Doctors in Figure 6.

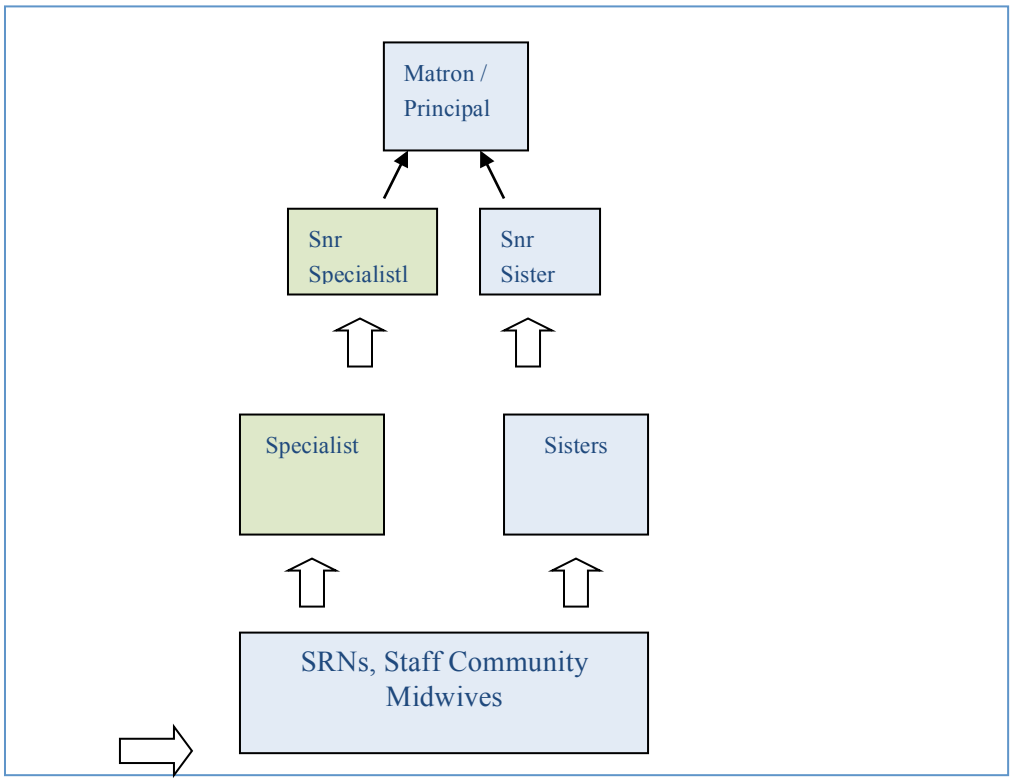


Fig 5: Career Progression for Nurses

The figure above shows the progression an SRN and/or Community midwife can take in career advancement. They can either pursue their career as specialists or in the general nursing category. The two paths however converge at the level of Matron / Principal.

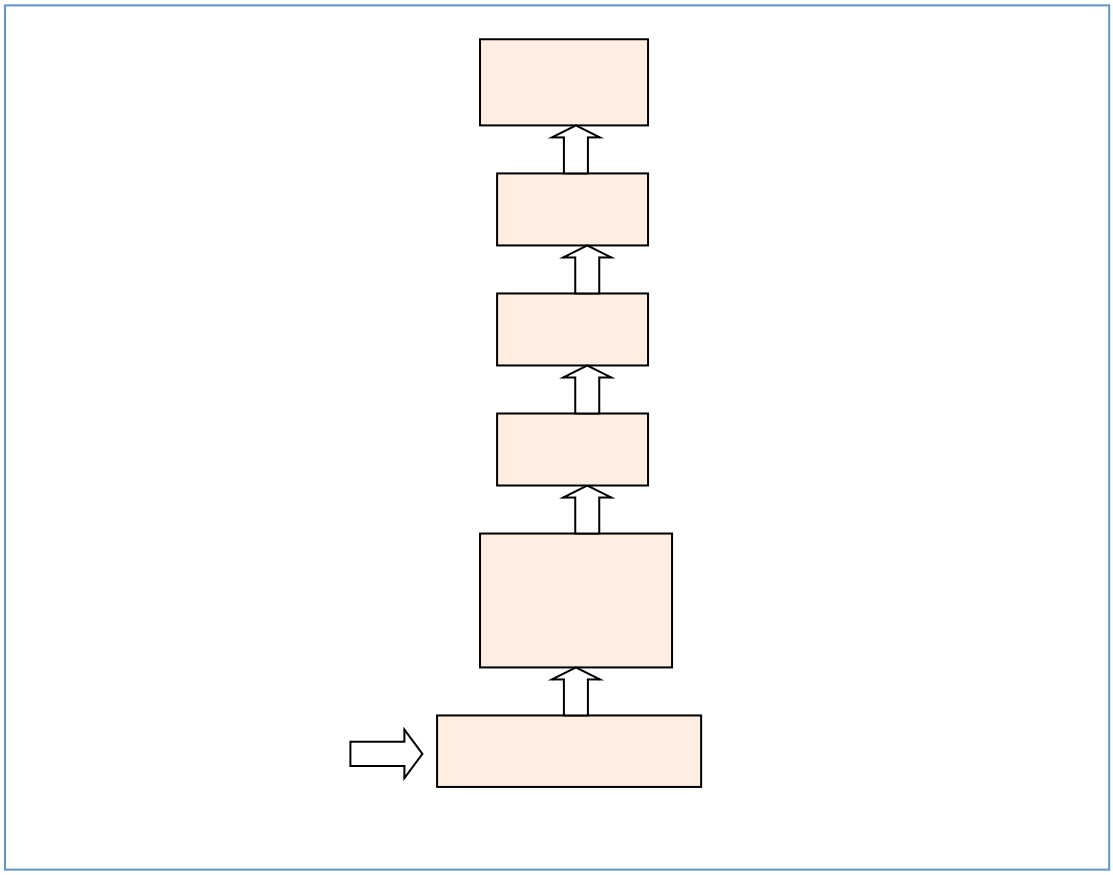


Figure 6: The abridged Career progression of Medical Doctors

From House Officer to the post of Senior Consultant would require up to 13 years of experience including training as a Specialist.

5.3 The work environment

Payment Mechanisms (Remuneration and Benefits):
With the launch of the Free Health Care policy in April 2010, several reforms were made to the MOHS pay structure. These included:

- A new (interim) salary scale and grading structure which was implemented for all health professionals, effective 01 March, 2010. Rent, Medical and Transport allowances were absorbed into basic pay and they are not reflected as separate items of the salary.
- Designation names were rationalised with removal of redundancies while grades were harmonized for each designation.
- Benefits for health workers, such as Rent, Medical and Transport allowances, Leave days and Pension are applicable after attaining a defined period of service.
- The above changes apply mainly to the Professional grades that fall under the Chief Medical Officer. The Administrative grades remain equated to the open civil service structure.

Policy makers would best consider that free health care is only for specific target groups, hence its implementation should not be related to Conditions of Service as it creates division among workers.

Incentives and Motivation Systems:
There are no other motivation and incentive packages in the MOHS other than regular increases in salaries and allowances and defined career paths for promotion and recognition.

5.4 Employment of health workers in the private sector

Information on the employment conditions in both the private and FBO sectors is not readily available.

6. Governance for HRH

6.1 HRH policies and plans

The Sierra Leone NHSSP 2010 – 2015 plan is in place with the key HRH Policy Statement embedded in the Strategic Plan. There is a close link of the NHSSP and the macroeconomic policies as illustrated by the economic indicators provided in this document. The HRH Strategic Plan for this period is not yet in place but plans are to be implemented soon. It is anticipated however, that the resultant HRH policy and strategic plan will be supportive of the strategic direction of the Ministry of Health and Sanitation. The HRH strategy will also have to make deliberate efforts t bring into line the efforts of all the other players in the health sector.

6.2 Policy development, planning and managing for HRH

The HRH Directorate in MOHS SL had no structure since the end of the war and therefore no capacity to implement the HRH function effectively. However, there is some restructuring that is taking place to strengthen the HRH Directorate. It is important to note that at the moment most HRH policies come from the HRMO inn collaboration with the Public Service Commission, with the HRH department of the MoHS being an implementation unit.

The HRH unit at the MoHS is more of a Personnel Administration unit as they implement the instructions that come from HRMO and PSC. The unit has very limited input into the Ministry's strategic planning process. The unit has significant limitations in both the technical capacity to manage effectively a professional HRH unit and the size of the unit. The majority of the staff are general clerks who are into records management with very few exposed to HRH management systems. The HRH unit is currently not replicated at District and local level as the function of personnel administration is left to the general clerks that do other tasks over and above human resources.

There is a process of decentralisation in place, which however is not understood by all and it has been difficult for the staff in the administrative function to buy into it as they do not understand its provisions. As indicated above, the MoHS implements policies developed at HRMO and PSC level. As an example, it is still not clear who has the authority to terminate employment for staff between the MoHS and the District Council.

MOHS determines pay for the health workforce under its umbrella and the District Councils determine salary paid by the local authority.

In May, 2011, the Government of Sierra Leone gazetted the forming of the Sierra Leone Health Service Commission, whose functions include, but are not limited to:

> *"appoint the professional staff of Government healthcare facilities and the Ministry (of Health and Sanitation) and determine the remuneration and other conditions of service of the staff."*
>
> ***And also to***
> *"set standards for the training of healthcare providers and ensure compliance with the standards; .."*

These provisions put the responsibility for the training, appointment and management of HRH in the public sector directly in the mandate of the Health Services Commission. This Commission is, however, not yet operational and is expected to start full operations at the beginning of 2012.

6.3 Professional Regulation

The main regulatory bodies of HRH registration process are based on an Act of Parliament for the following professional groups:

- Sierra Leone Medical and Dental Council;
- Sierra Leone Nurses and Midwifery Board;
- Sierra Leone Pharmacy Board

Health Professionals are registered at the entry point into service immediately after qualifying and on annual basis for accreditation and Licensing. The Professional regulatory bodies are also used for quality assurance and regulation of the practice of health professionals.

6.4 HRH information

The HRH national planning process is an ongoing function of the HRH Directorate and all line health managers. Monitoring and evaluation of national HRH strategic objectives contained in the NHSSP 2010 – 2015 is also on going as part of the HRH function. There is a computer-based Health Information systems that starts at the local service provision units and transmits information to the national level. The Human Resources Information system is however mot linked to the HIS and is also not computerised. Records are still paper based and this has led to a lot of information being lost in the system.

Elsewhere in this report, there is evidence shown that there are some staff members who are on the payroll yet their ages are not known and in some cases their actual work stations are not well known. This has an obvious negative effect to the quality of HR information base. Efforts are reportedly in place to computerise the HRIS.

6.5 HRH research

There are no HRH specific research programmes at the moment but HRH research questions could be raised on the following priorities:

- Migration patterns
- HRH shortages and imbalances (Rural versus Urban);
- The current state of supply and demand for HRH in the public sector
- Identifying capacity gaps in both technical and managerial areas and developing intervention mechanisms
- Utilisation patterns for Health Training schools graduates supported by the Government of Sierra Leone
- Identifying and implementing an effective performance management system for both institutions and individuals.
- Reviewing the HRH requirements in implementing the NHSSP.

6.6 Stakeholders in HRH

The existing interaction mechanism is through the Health Sector Steering Committee and the HRH Sub-committee. These are changing as presented in the COMPACT agreement to seven (7) Health Sector Working Groups which include:

- The Leadership and Governance Working Group (LGWG);
- The Integrated Service Delivery Working Group (ISDWG);
- The Human Resources for Health Development and Management Working Group (HRHWG);
- The Health Infrastructure Development and Maintenance Working Group (HIDWG);
- The Health Financing and Financial Management Working Group (FFMWG);
- The Procurement and Supply Chain Management Working Group (PSMWG);
- The Information, Monitoring & Evaluation, and Supervision Working Group (M& EWG).

Table: 6.1. National and International Stakeholders in HRH in Sierra Leone.

Stakeholder	Stakeholder Role
Ministry of Education, Science and Technology	Responsible for the establishment and management of most health training institutions and curricula in the country.
Ministry of Finance and Economic Development	The Government Budget Planning, Control and Allocation
Research Institutions	Investigations/Surveys
Ministry of Internal Affairs and Local Government	Administration and Management of Local Government Councils
United Nations	Technical Assistance
UNICEF	Technical Assistance
UNFPA	Technical Assistance
Department for International Development, (DFID) UK	Technical Assistance and funding
Global Alliance for Vaccine and Immunization (GAVI)	Technical Assistance
College of Medicine and Allied Health Sciences	Training and Specialization
Economic Community of West African States (ECOWAS)	Technical Assistance and funding
Faith Based Organizations (FBOs)	Service delivery support
World Health Organization (WHO)	Technical Assistance
West Africa Health Organization (WAHO)	Technical Assistance
Christian Health Association of Sierra Leone	Service provision
Sierra Leone Medical and Dental Council	Registration/Certification and Accreditation/Licensing of Medical Doctors and Dentists
Sierra Leone Nurses and Midwifery Board	Registration and Accreditation of Nurses and Midwives
Sierra Leone Pharmacy Board	Registration/Certification and Accreditation/Licensing of Pharmacists
Civil Society Organizations	Monitoring, Advocacy and Communication and Evaluation

Source: Human Resources for Health and AID Effectiveness Report July 2008.

7 Issues for Policy and HRH Strategic Consideration

In an to improve the HRH situation in Sierra Leone, roles and responsibilities for the various stakeholders in the Management of HRH will need to be clarified and agreed especially the district councils, where the lowest service delivery unit is situated.

1. **Develop the HRH Training and Development Policy**
2. **Develop national deployment formulae (minimum staffing levels for each level and institution type with the appropriate skills mix)**
3. **Develop Staff Performance Management system (including attendance, expectations, orientation)**
4. **Strengthen the integration of HIS and HRIS**
5. **Strengthen HRH departmental capacity (numbers and skills). HRH department strengthened with technical (consultants) assistance and equipment**
6. **Rolling out the function of the HRH to the regions and districts**
7. **Decentralising recruitment**
8. **Review Conditions of Service for peripheral staff to make the remote areas more attractive taking into consideration the following:**
    - **Remoteness and risk**
    - **Political and Cultural challenges**
9. **Develop staff retention policy which may include bonding agreements**
10. **MoHS (HRH), Director of Post Graduate training, Training institutions (of MOHS and MEST and others) to agree on mechanism for working together under one national policy and leadership**
11. **Approach more partners to support the restructuring and strengthening of the HRH function**
12. **Get the HSC into operation and possibly include all workers under the MoHS**
13. **Government to make efforts to localise some of the specialist (post basic) Training**
14. **Review and strengthen the roles of Councils and Boards. Where some professional groups do-not have, initiate the creation of such boards**

Annex 1: Definitions of health workforce data

Health Workforce: Aggregated Data

In the aggregated data, the health workforce is grouped into the following 10 categories:

Physicians
Includes generalists and specialists.

Nurses
Includes professional nurses, auxiliary nurses, enrolled nurses and other nurses, such as dental nurses and primary care nurses.

Midwives
Includes professional midwives, auxiliary midwives and enrolled midwives. Traditional birth attendants, who are counted as community health workers, appear elsewhere.

Dentists
Includes dentists, dental assistants and dental technicians

Pharmacists
Includes pharmacists, pharmaceutical assistants and pharmaceutical technicians

Laboratory workers
Includes laboratory scientists, laboratory assistants, laboratory technicians and radiographers.

Environment & public health workers
Includes environmental and public health officers, sanitarians, hygienists, environmental and public health technicians, district health officers, malaria technicians, meat inspectors, public health supervisors and similar professions.

Community health workers
Includes traditional medicine practitioners, faith healers, assistant/community health education workers, community health officers, family health workers, lady health visitors, health extension package workers, community midwives, institution-based personal care workers and traditional birth attendants.

Other health workers
Includes a large number of occupations such as dieticians and nutritionists, medical assistants, occupational therapists, operators of medical and dentistry equipment, optometrists and opticians, physiotherapists, podiatrists, prosthetic/orthotic engineers, psychologists, respiratory therapists, speech pathologists, medical trainees and interns.

Health management and support workers
Includes general managers, statisticians, lawyers, accountants, medical secretaries, gardeners, computer technicians, ambulance staff, cleaning staff, building and engineering staff, skilled administrative staff and general support staff.