



The Free Health Care Initiative: how has it affected health workers in Sierra Leone?

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The ReBUILD Research Programme Consortium is an international research partnership funded by the UK Department for International Development (DfID).

ReBUILD is working for improved access to effective health care for the poor and reduced health cost burdens in post-conflict and post-crisis countries. We are doing this through the production of high quality research on health systems financing and human resources for health, and working to promote use of this evidence in policy and practice.

ReBUILD is implemented by a partnership of research organisations from the UK and from our four core focus countries.

- Liverpool School of Tropical Medicine, UK
- Institute for Global Health & Development, Queen Margaret University, Edinburgh, UK
- Cambodia Development Resource Institute, Cambodia
- College of Medicine and Allied Health Sciences, Sierra Leone
- Makerere University School of Public Health, Uganda
- Biomedical Research and Training Institute, Zimbabwe

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Acronyms

ANC – Antenatal Clinic

BeMONC – Basic Emergency Obstetric Neonatal Care

CHO – Community Health Officer

CHW – Community Health Worker

CNO – Chief Nursing Officer

CHC – Community Health Centre

DMO – District Medical Officer

DHMT – District Health Management Team

DPI – Department of Planning and Information (MoHS)

EDCUs – Emerging Disease Control Units

FHCI – Free Health Care Initiative

HRH – Human Resource for Health

HSC – Health Service Commission

HW – Health Worker

IDI - In-depth Interviews

KII – Key informant interview

M & E – Monitoring and Evaluation

MOHS - Ministry of Health and Sanitation

NGO – Non-governmental organisation

NHSSP – National Health Sector Strategic Plan

PBF – Performance based finance

PCMH – Princess Christian Maternity Hospital

PHU – Peripheral Health Unit

RAA – Remote Area Allowance

ReBUILD - Research for BUILDing Pro-poor Health systems during recovery from political and social conflict (DFID-funded research consortium)

SECHN – State Enrolled Community Health Nurse

SHO – Senior House Officer

SRN – State Registered Nurse

Executive summary

Background

No study to date has focused on how the decisions made, or not made, in the post-conflict period can affect the longer term pattern of attraction, retention, distribution and performance of health workers, and thus ultimately the performance of the sector. The ReBUILD project, funded by DFID 2011-16, aimed to fill that gap by documenting the evolution of incentives for health workers post-conflict and their effects in four countries. In the case of Sierra Leone, the Free Health Care Initiative (FHCI) emerged as a key catalyst in a series of human resources for health (HRH) reforms. Results relating to the FHCI have been pulled together for this report. The rationale for this is two-fold: first, there is an acknowledged gap in the literature on the impact of fee exemption policies on health staff, and conversely, the implications of staffing for fee exemption. Secondly, an evaluation of the FHCI is underway which can benefit from the analysis carried out by ReBUILD.

Study methods

A retrospective and cross-sectional study utilizing both quantitative and qualitative methods was conducted. Fieldwork was done in 2012-13, collecting data back to 2002, when the conflict ended.

Four districts were chosen to be as study sites – one from each of the regions. They were selected purposively to include rural and urban areas, as well as remote and less remote, poor and less poor areas. The study sites were:

1. Western Area (Urban/Rural)
2. Kenema District (Eastern Region)
3. Bonthe District (Southern Region)
4. Koinadugu District (Northern Region)

Data was collected through the following methods: document review (57 documents - fully reviewed, published and grey); key informant interviews (23 with government, donors, NGO staff and consultants); analysis of human resource data held by the MoHS; in-depth interviews with health workers (23 doctors, nurses, midwives and community health officers); and a health worker survey (312 participants, including all main cadres).

Ethical approval was obtained from the Sierra Leone Scientific and Ethics Committee and the Liverpool School of Tropical Medicine prior to the commencement of the study.

Some study limitations are noted – particularly gaps in the secondary data from the MoHS, as well as more limited insights and documents from the pre-FHCI period. However, there were also strengths – notably, the ability to triangulate between views expressed in official

documents with those of key informants (donors, managers etc.) and health staff on the ground. Further, the longer time perspective taken by the study allowed better understanding of the context – the challenges that existed in the health system before the FHCI and those faced now.

Findings

The context pre-FHCI. The post-war context presented familiar features and challenges – particularly, the absence of staff, who had fled, and the proliferation of NGO-supported services, with limited control by the MoHS overall. Gradually, during 2002-9, the MoHS re-established some leadership, and a series of human resource policy documents and plans were produced. These documents presented the challenges, but did not have much traction in terms of funding and implementation of the measures which they identified as being needed. There were substantial gaps in posts filled and poor working conditions for staff, including low pay and difficulties getting on to payroll.

Launch of FHCI. When the FHCI was launched in November 2009, human resources for health was picked out as an area needing immediate reinforcement as part of the policy's implementation. In preparation for the FHCI launch, six technical working groups were put in place, one of which focused specifically on HRH issues. These groups held their meetings up to once a week during preparation phase (November 2009 to April 2010). They were tasked with designing the reforms and changes in the health system necessary to ensure the smooth roll out of the FHCI. They also coordinated different partners, assigned roles and identified available funding. Although there were disagreements within the group over priorities and the process was rushed, all sources agreed that the FHCI was the defining moment that shaped the healthcare system and gave a strategic approach to HRH policies.

The main HRH reforms. The logic behind the HRH reforms was that if health care utilisation was to increase then a number of chronic HR problems needed addressing, including:

- Fast-track recruitment and deployment to fill gaps in staffing
- Payroll cleaning to ensure that 'ghost workers' were taken off the payroll (and those who were working unpaid – the many 'volunteers' - were added)
- Salary uplift to ensure that health workers were adequately paid and motivated to handle increased workload without imposing informal charges on users

These were all introduced early in 2010 to prepare for the launch of the FHCI.

In a second round of HRH reforms (2011-12), a system of monitoring staff absences, linked to a new staff sanction framework, aimed to ensure that the now more generously paid staff were actually at work. The two other main policies introduced during this period were performance based funding to facilities, which could meet the dual needs of providing some

small flexible funding at facility level to replace lost user revenues, as well as providing a direct incentive to staff to provide priority services. Finally, a remote allowance was introduced in January 2012 to encourage staff to take up postings in more rural, hard-to-serve areas.

Effectiveness of implementation. The report presents details on the rationale, design, implementation and funding of these reforms, all of which were important to 'protecting the investment' in FHCI. Broadly speaking, the first wave of reforms and the staff sanction framework were implemented effectively. The fast-track recruitment and deployment filled many gaps in staff, though it was a one-off process. Staff numbers doubled that year, which represents a big increase on previous years' trends, even allowing for the fact that some of these new recruits were already working but simply not on payroll.

The payroll is now believed to be more robust and producing savings, though it should be noted that more people were added than removed. This is because the issue of people working without being on the payroll was quite severe prior to the FHCI). Salary uplift has contributed to better motivation and retention, especially for higher-level staff. The top grades have seen an increase of more than 700% in their salary. Absenteeism has reduced and people have been sanctioned for non-attendance. However, the later reforms were apparently less effective. Monitoring, feedback and payments under the PBF scheme are erratic and it remains poorly understood, though staff welcome it if it can be strengthened. Of those surveyed by ReBUILD at primary health unit level, a third had received no payment over the previous year, while others had received from one to three payments. For the rural allowances, these are even more erratic and opaque, partly linked to funding problems.

Conditions for success. Presidential support for the FHCI was recognised by all as critical to its success. The fact that donors were able to coordinate to support the FHCI was also of the highest importance. This also brought in a large number of short-term technical assistants, who played a role in enabling quick reforms in time for the launch. All of these factors remain important and are risks in relation to sustainability. For the first three years of funding the salary uplift, for example, DFID paid 22% of the costs and the Global Fund paid 20%. The World Bank is the funder of the PBF scheme.

Views of staff. Staff highlight benefits to themselves, in terms of pay and working conditions, as well as to the health system, in terms of increased use by patients and more investment in the services and facilities. They also highlight the strains, e.g. of managing with too few staff, and perceive some negative effects, such as patients visiting repeatedly to seek free drugs and, for themselves, of having less time to pursue other activities e.g. private business. In the survey, salary is the dominant source of official income for all groups, which may be one of the legacies of the FHCI (other sources are relatively low – the next in overall importance are per diems for training etc.). Only 4% reported any revenues

from user fees or any gifts from patients, which suggests that the FHCI is being effectively implemented, though this finding needs cross-checking with patient reports.

Unfinished agenda. Some reforms that are recognised to be important and which were planned for in the NHSSP are still outstanding, perhaps because they require more institutional and deep-rooted reforms. Most sources agree that recruitment and deployment are too centralised and that HR management should be devolved to district level. Within the Ministry, better coordination of HR policies is needed, avoiding 'silos' managed by different directorates. The new HSC is yet to be functional, and the performance management contracts are not fully operational. Measures to encourage and retain staff in rural areas require comprehensive packages, including housing and promotion and training opportunities. Revised training and measures focused on boosting quality of care are all part of the unfinished agenda.

There are still too few of some key cadres, such as midwives, and attrition remains high (13% in 2011, across all cadres). Self-reported working hours average 54 hours per week across the staff surveyed by ReBUILD, who report seeing an average of 117 patients per week, which is relatively high. Questions on remuneration reveal substantial differences between doctors and the rest of the staff, with salaries of doctors more than four times that of registered nurses (a differential which increases when other sources are added). This may require attention, particularly given the low number of registered nurses and midwives and their apparently high attrition rate.

Known unknowns. There are some areas that will be important to investigate as part of the wider FHCI evaluation. We know that some degree of charging for services continues but we need to understand what the charges are for, how they have changed over time, and why. The authors also failed to find information on the technical quality of care provided by health workers – this will be important to study in relation to the likely effectiveness of the FHCI.

Conclusion. The findings highlight how a flagship policy, combined with high profile support and financial and technical resources, can galvanise systemic changes which were previously not possible. In this regard, the story of Sierra Leone differs from many countries introducing fee exemptions. The impact has been broad and largely positive, in galvanising a series of important health system changes (we focus here on HR as a key pillar) over a period of time. The challenge, as evidenced in Uganda, will be sustaining the momentum and the attention to delivering results as the FHCI ceases to be an initiative and becomes just 'business as normal'. The health system in Sierra Leone was fragile and conflict-affected prior to the FHCI and still faces significant challenges, both in HRH and more widely.

Introduction

Health worker attraction, retention, distribution and performance are arguably the most critical factors affecting the performance of a health system. In post-conflict settings, where health systems and health worker livelihoods have been disrupted, the challenges facing the establishment of the right incentive environment are particularly important. The contextual dynamics around them are especially important to understand and incorporate sensitively into policy measures. Human resources development is an important part of rebuilding the health sector post-conflict but has received relatively little attention in the literature and may be overlooked by decision-makers and donors (Pavignani, 2009; O'Hanlon & Budosan, 2011; Shuey et al., 2003).

No study to date has focused on how the decisions made, or not made, in the post-conflict period can affect the longer term pattern of attraction, retention, distribution and performance of health workers, and thus ultimately the performance of the sector. The ReBUILD study aimed to fill that gap by documenting the evolution of incentives for health workers post-conflict and their effects. This is critical to the attainment of the vision of the Ministry of Health and Sanitation (MoHS) as it finds it difficult to attract and/or retain health workers in remote areas.

The original research questions were not focused on the Free Health Care Initiative (FHCI) in Sierra Leone but asked broader questions across four post-conflict countries:

1. How have incentive environments for health workers evolved in the shift away from conflict in each country?
2. What have been the reform objectives and mechanisms?
3. What are their effects (intended and unintended)?
4. What lessons can be learned (on design, implementation, and suitability to context) for future interventions?

However, in the case of Sierra Leone, the FCHI emerged as a key catalyst in a series of human resources for health (HRH) reforms and results relating to the FHCI have been pulled together for this report. The rationale for this is two-fold: first, there is an acknowledged gap in the literature on the impact of fee exemption policies on health staff, and, conversely, the implications of staffing for fee exemption (McPake et al., 2013). Secondly, an evaluation of the FHCI is underway which can benefit from the analysis carried out by ReBUILD.

Methods

Study design

A retrospective and cross-sectional study utilizing both quantitative and qualitative methods was conducted. The timeframe for retrospective data collection was the period since the end of the conflict (2002) to the present day. Fieldwork was done in 2012-13.

Study areas

Sierra Leone has a population of approximately 6 million and is divided into four regions (North, South, East and the Western Area). Each region is subdivided into districts and each district into chiefdoms. In total, there are 14 districts and 149 chiefdoms. Four districts were chosen to be representative of the different regions, urban/rural variations, remoteness/hard to reach areas, and measures of poverty/need. The study sites are:

1. Western Area (Urban/Rural)
2. Kenema District (Eastern Region)
3. Bonthe District (Southern Region)
4. Koinadugu District (Northern Region)

Bonthe and Koinadugu districts have very difficult terrains (riverine for Bonthe and mountainous for Koinadugu) and their population is among the most impoverished in Sierra Leone. Social amenities, electricity and piped water supply are lacking in Bonthe and Koinadugu. Thus, health workers are usually unwilling to work in these districts. Kenema and Western area have large urban and rural populations and referral hospitals.

Research tools

Data was collected through the following methods: document review, key informant interviews (KII), quantitative analysis of existing data, in-depth interviews (IDI) with health workers and a health worker survey. These are described briefly in turn here. Findings are drawn from across these five tools.

1. Career histories of health workers

This research tool used a participatory approach involving drawing of life lines and in-depth interviews with purposively selected health workers. An open topic guide was used, which covered the following topics:

- How and why they became health workers
- Their career path since they became health workers, and what influenced it during and after the conflict

- Their overall perception of their career in terms of motivating and demotivating factors before, during and after the conflict
- Challenges they face in their job and how they cope with them before, during and after the conflict
- Their career aspirations
- Their knowledge and perceptions of incentive policies during and after the conflict
- Recommendation for an effective retaining package for health workers in rural areas

A total of 23 in depth interviews were conducted (Table 1). It was intended that three health workers (1 Doctor, 1 Nurse and 1 Midwife) would be randomly selected from each district hospital of the study sites, and three each from the main referral hospitals in the Western Area. In addition two community health workers (CHOs) from in each study district were to be interviewed – one more urban in location and one more remote. However, final numbers and distribution varied slightly according to availability of staff on the ground. One selection criterion was that they had worked in the health sector since 2000.

Table 1 Career history sample, Sierra Leone health workers

	Number of respondents
By district	
Western Area	11
Koinadugu	5
Kenema	4
Bonthe	3
By gender	
Females	12
Males	11
By cadre	
Community Health Workers/ Community Health Officers	8
Nurses	5
Midwives	7
Medical Officers	3
By facility type	
Primary	7
Secondary	4
Tertiary	12
Total	23

The interviews were recorded by researchers, after gaining informed consent from the participants, and were conducted in a location selected by the respondent that they

deemed as private and comfortable. Fieldwork was undertaken in March 2013 in the provincial study sites and in October 2013 in the Western Area.

The data was analysed from verbatim transcripts using the thematic framework approach with the following stages: transcribing the interviews, familiarisation of the transcripts and the audio recordings, producing a coding framework, coding and identifying key themes from individual transcripts, merging themes, searching for key findings under each theme, comparing and finding associations, and providing explanations for the findings. The coding and analysis was led by a Sierra Leonean researcher, with cross-checking and second reading by a UK-based researcher.

The full findings are reported in (Wurie & Witter 2014).

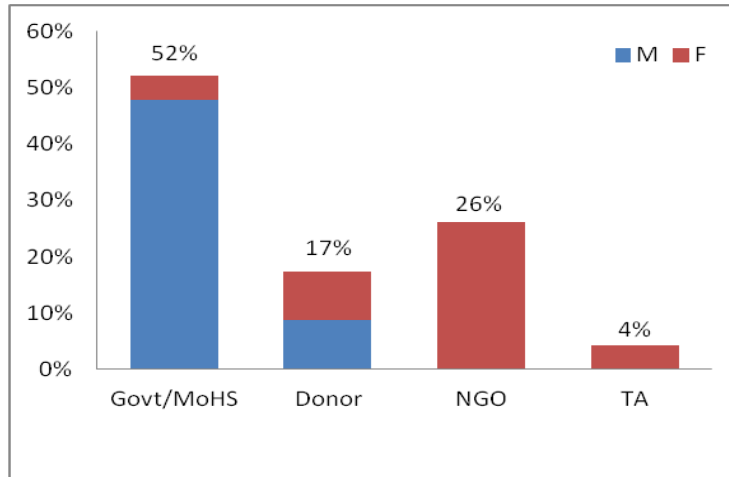
2. Key informant interviews

A preliminary list of relevant key informants was drafted by the ReBUILD team in Sierra Leone. This list included both national and international organisations as well as individuals. Subsequently, a snow-balling technique was used to identify further informants, based on the suggestions of those who had already been interviewed. Respondents who were unavailable for interview were substituted with others belonging to the same type of organisation (e.g. same Directorate in the MoHS, same donor organisation etc.).

23 key informants were interviewed between October 2012 and June 2013. Most of the interviews (19) were carried out in Freetown, whilst 2 were conducted at district level. The remaining interviews (2) were done outside of Sierra Leone or by telephone. 12 of the interviewees work or worked at the MoHS or with other governmental agencies. 6 NGO representatives were interviewed, along with 4 donor representatives and 1 Technical Assistant (TA). The graph below shows the key informants included in the sample.

One researcher carried out the majority of the interviews and 2 additional researchers assisted them for 5 of the interviews.

Figure 1 Summary of characteristics of key informants interviewed (ReBUILD KII, Sierra Leone)



A topic guide was prepared for use across all of the ReBUILD project countries and then it was adapted for use in Sierra Leone. The questions were sequenced in chronological order. Participants were asked about the HRH context in the immediate post-conflict period and the challenges that they faced. They were then asked about the policy responses to these challenges and what effects these had on the health system. Finally, they were asked to share any lessons learned from their experience and whether they had any recommendations for the future.

The interviews were semi-structured and the tool was continuously adapted to further explore emerging themes.

Interviews were recorded and transcribed for thematic analysis. The researcher became familiarised with the data to identify any emerging themes and then the interviews were analysed using thematic coding. Themes were charted to highlight pattern in the responses to allow interpretation. The other members of the team provided feedback on the initial results of the analysis and on the draft of the report.

An initial list of themes for the thematic analysis was drafted based on the findings of the document review and further themes were added based on the interview data analysis. The key informant interviews were triangulated with information from the document review.

For full results, see (Bertone & Witter 2014).

3. Health worker survey

The objective of the survey was to understand the incentive environment facing key kinds of health workers in Sierra Leone, their characteristics and the factors that motivate and demotivate them.

A structured questionnaire was used to collect data from all main cadres of health workers through face-to-face interviews {Witter, 2014 963 /id}. The study population included Maternal and Child Health Aides (MCH Aide), State Enrolled Community Health Nurses (SECHN), Environmental Health Officers (EHO), Community Health Assistants (CHA), Community Health Officers (CHO), State Registered Nurses (SRN), midwives, pharmacists, laboratory technicians and doctors.

The sample size was based on the total number of workers in each category, with a smaller proportion chosen for larger groups. The rule adopted was as follows: where the group in the district had fewer than 50 people, according to payroll data obtained in 2012, we aimed to sample 50%; where 50-100, 20%; where 100-200 10%; and over 200, we took 5%. This produced a planned total of 374 (see Table 2). This constituted 14% of the estimated overall public workforce in these districts.

These cadres were identified from a range of facility types where they worked, to include rural and remote areas, as well as urban. They came from the public and mission facilities. Sampling in selected facilities was pragmatic, but ensuring that the overall distribution of the sample reflected that on the ground in the district.

Actual numbers diverged somewhat from planned numbers in the different categories, largely due to limited number of staff of each category being found and available in the sites visited. The final sample was 312, instead of the planned 374. However, in relation to the total reported number of staff in the districts, this still constitutes nearly 12%, which is adequate. The main district where it was hard to reach targeted numbers was Western Region.

Table 2: Sampling frame of HWs by district (total number, original planned sample, actual sample)

Cadre	Western Area			Koinadugu			Kenema			Bonthe			TOTAL		
	Total staffing	Original sample	Actual sample	Total staff	Original sample	Actual sample	Total staff	Original sample	Actual sample	Total staff	Original sample	Actual sample	Total staff	Original sample	Actual sample
Medical Officer	24	12	7	3	2	2	4	2	0	4	2	2	35	18	11
Specialist Doctors	12	6		1	1		2	1					15	8	
CHO/CHA	62	12	8	19	10	11	42	21	18	8	4	4	131	47	41
RN	138	14	10	13	7	6	21	11	7	5	3	2	177	33	25
SECHN	757	38	40	96	19	17	325	16	20	43	22	23	1221	95	100
Environmental Health Officers	85	17	6	9	5	2	11	6	4	6	3	2	111	30	14
MCH Aide	350	18	13	77	15	16	161	16	14	63	13	12	651	62	55
EDCU Assistant	11	6	1	7	4	3	76	15	10	6	3	2	100	27	16
Lab technician	58	12	9	2	1	1	91	18	17	2	1	1	153	32	28

Pharmacy Tech.	32	16	15	4	2	2	7	4	1	4	2	2	47	24	20
Other			1			0			0			1			2
TOTAL	1529	150	110	231	64	60	740	109	91	141	52	51	2641	374	312

The questionnaire focused on the current levels of income earned by health workers from different sources; work practices, including the proportion of time spent by the worker in the public and private sectors; and willingness to work in rural or remote settings. In addition, the characteristics and practice of their main employment, including qualifications, years of work, regular workload and training, and earnings from both public and private sectors were included in the survey instrument. Furthermore, qualitative questions on motivating factors were incorporated into the questionnaire.

In order to standardize the fieldwork, two days' training was conducted to prepare the interviewers and supervisors for their tasks. In order to ensure quality of the study, clearly defined standard procedures were observed and the tools were piloted and adapted before use.

The quantitative data was coded, cleaned and analyzed using Stata. Analysis was done by cadre, district, gender and public/mission employment status.

4. Document review

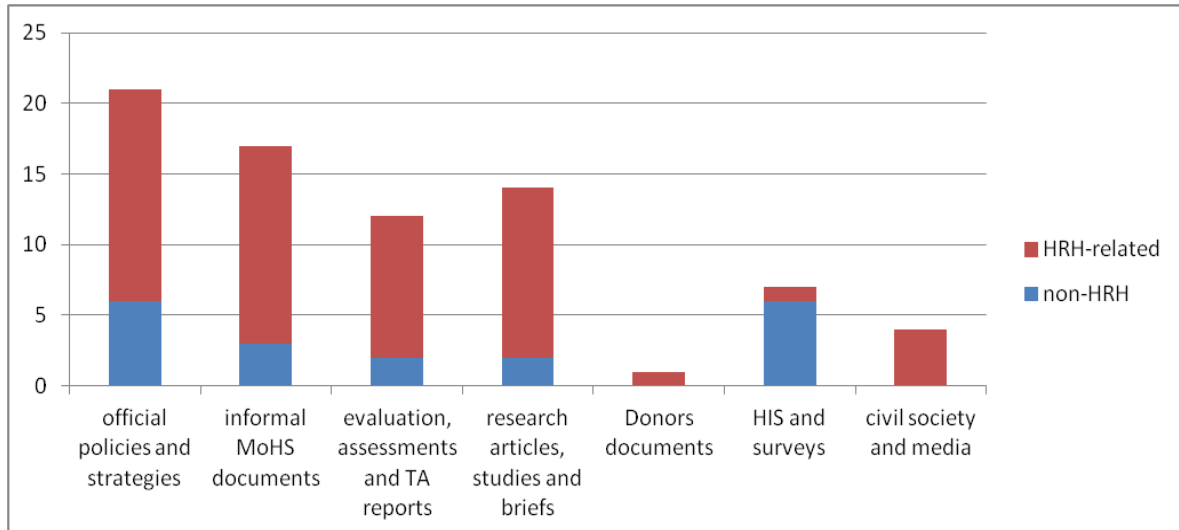
Documents were retrieved in 2012 by the COMAHS/ReBUILD team in Freetown, through contact with the MoHS, international donors and partners, other stakeholders and the international ReBUILD team during field visits and through interviews with informants both in Sierra Leone and in the UK. A rapid internet search was also performed to identify articles in peer-reviewed journals and other relevant grey literature. A snowball technique was then adopted by which documents mentioned in other documents were actively searched from the source. If a theme or policy seemed under-represented, new searches were performed. Any remaining gaps were highlighted.

The initial search led to the identification of 76 documents. After an initial screening, 57 were deemed relevant for HRH issues in Sierra Leone and have been fully reviewed.

The majority of the 76 documents are authored by the MoHS and the Government of Sierra Leone (GoSL). 21 documents (28%) are official policies and strategies (including operational manuals) of the GoSL or of the MoHS, while 17 (22%) are informal documents of the MoHS, including internal communications, monthly updates, reports, extracts of documents, etc. With reference to other sources: 12 (16%) of the documents are evaluations, assessments of context, policies and technical assistance reports, while 14 (18%) are independent studies,

briefs and research articles. Only 1 document is by an international donor, defining its operational plan. The rest are statistical reports (7 – 9%) and civil society and media publications (4 – 5%) (see Figure 2).

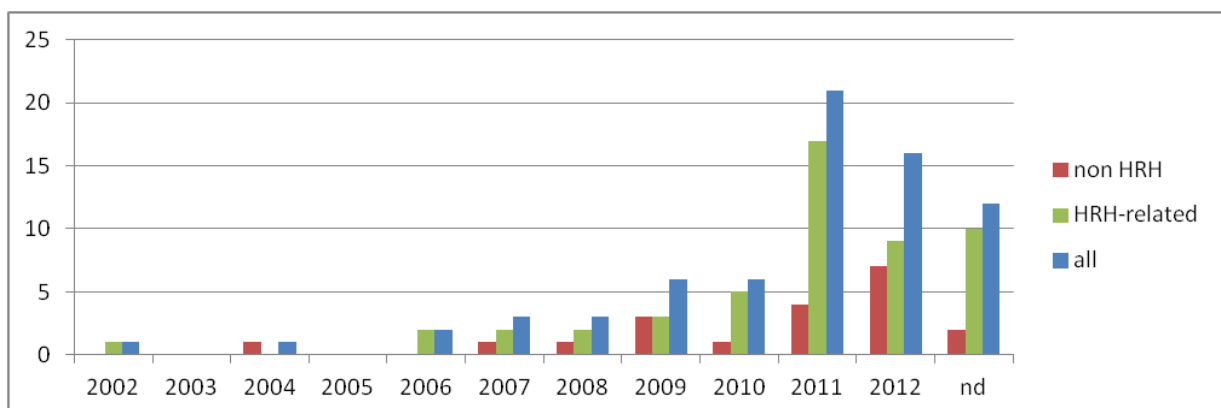
Figure 2 Type of documents retrieved, Sierra Leone HRH ReBUILD study



The oldest document available is dated 2002. There is another one from 2004, while the vast majority are from 2009 onwards, with 54% of the documents dated 2011-2012 and 16% undated (undated (

Figure 3). This may reflect the increased activity and investment levels in the sector post-2010 and/or the difficulty of retrieving earlier reports. Additionally, this may be because before 2009 many different actors were implementing projects in a somewhat uncoordinated manner, focusing on ‘fire-fighting’ and emergencies, without having time and resources for the production of policy documents.

Figure 3 Date of publication (ReBUILD document review)



In order to analyse the documents collected, a series of ‘themes’ were identified and validated by the team. Themes and corresponding subthemes are listed in Table 3. All documents were read and analysed, looking for reference to those themes with regards to each HRH policy¹ discussed and implemented in Sierra Leone after 2002. Comparison of policies pre-, during and post-conflict has been carried out, where documents permitted.

The use of common ‘themes’ and of a template for the drafting of the report was deemed useful in order to structure the analysis and write-up. This also allows comparability both across countries, as the same template will be adopted for the document reviews in other countries where ReBUILD focuses, as well as with other sources of information. In particular, the latter allowed triangulation of the information retrieved through the document review with that collected from key informants’ interviews.

Table 3 Themes and subthemes identified and used for thematic analysis (document review and KII)

Themes	Subthemes
HRH context and challenges	Recruitment challenges
	Distribution challenges
	Retention challenges
	Performance challenges (pay, motivation, management, etc.)
Policy responses	Policy objectives and approaches
	Drivers of change
	Implementation of policies
	Financing of policies
	Impacts

to
Changes
these
challenges
since 2002

The full findings are reported in (Bertone et al., 2014a).

5. Secondary data analysis

A final research component involved analysis of routine staffing data collected by the MoHS (HRH directorate), with the objective of establishing changes in numbers, type, density, distribution, attrition, absenteeism and productivity over time (2002-12). However, this component was restricted by the limited availability of data.

Data were collected showing the:

- i. number of established posts for the different health professionals from 2005 to 2011 at the national level
- ii. number of established posts filled for the different health professionals
- iii. population size

¹ For an explanation of the term ‘policy’ in this report, see section 3.2.1.

- iv. attrition
- v. absenteeism rates (only available 2010-14)

However, gaps in output data (e.g. total number of outpatients, inpatients, facility deliveries, ANC visits) at national level meant that productivity analysis was not possible. A more complete dataset is still being sought for basic trend analysis.

For full results, see {Wurie, 2014 968 /id}.

Research ethics

Ethical approval was obtained from the Sierra Leone Scientific and Ethics Committee and the Liverpool School of Tropical Medicine prior to the commencement of the study. Informed consent was sought from the participants, assuring of confidentiality and anonymity of the information collected, and the research was undertaken in a sensitive manner, with data held securely.

Study limitations

For the in-depth interviews, in some of the study sites, particularly in the provinces, the intended number and cadre of health workers was not met by this project. One major constraint was that high-level cadres, especially doctors, are always very busy so finding the opportunity to interview them was difficult. In Western Area, the full sample for the survey was not obtained, for similar reasons.

For the document review and KII, one of the main limitations for the study was that it was harder to access documents and informants with recall from the period 2002-9. This may have influenced the themes that emerged. Similarly, MoHS informants and documents were more accessible than those of donors and NGOs, which again influences the perspective. It is likely that the reason for the prevalence of policy and strategy documents is that they are official, publicly available and easy to access, while minutes are often buried in a few people's computers and difficult to obtain. Donors' internal documentation is generally not available or is confidential.

Although care was taken to search and include all relevant documents, the document search was not performed in a systematic manner and it is likely that some documents may have been omitted.

Finally, as noted above, the secondary data for HRH was incomplete, which has limited the analysis which we could produce.

Findings

Context of HRH in Sierra Leone pre-FHCI

The few key informants who could recall the period immediately after the conflict (in 2002) described it as challenging for the health system. Most services were completely disrupted and many of the HWs left the country, particularly those in the higher cadres. Other HWs worked for NGOs or held dual positions with NGOs and the MoHS. In this period, a lack of coordination between the different actors of the health system appeared to be an important feature of the policy context. Individual NGOs and donors were acting independently, setting up their own facilities or rehabilitating existing ones, as well as recruiting and remunerating HWs directly.

The reconstruction process started soon after the end of the war and overall, the MoHS was able to maintain leadership during this period. After signing the peace agreement, it was decided that 'combat medics' (i.e., untrained personnel working behind the rebel lines) needed to be reintegrated and retrained as 'vaccinators', which proved a useful solution to cope with the lack of personnel for basic services. Similarly, the utilisation of volunteers for primary healthcare services provided some relief to overstretched HWs. Formalising and improving the existing informal workforce was an essential initial step for health systems strengthening in Sierra Leone.

In the period immediately after the war, there was a breakdown in the structure of health care delivery systems. One health worker stated that 'the whole system catapulted' as a direct consequence of the war. Situations were described where patients were asked to buy gloves, which delayed the treatment process. Many patients were extremely poor after the war and could not afford to pay for hospital visits; doctors were known to treat patients free of cost and nurses bought drugs for patients who could not afford to get treatment otherwise.

'...things are lacking. You can imagine coming to a government hospital like this, you have to write a prescription for a patient to buy a box of gloves. You see time is not of the essence because a patient come you have to give prescription what and what to get, so it's time consuming they have to go get these things come, so you know it frustrates you. These things should be there, a patient come you just go in set yourself immediately so it's frustrating quite unlike before. Before in the wards we have the medicine cupboard, we have different cupboards where we keep things consumables like cotton wool, gloves, antiseptics.....' (Male, Western Area, IDI-18)

'.....people were very poor, poor to the extent that they come they didn't even have money to buy drugs. In those days you have to pay money, they don't have money to pay

consultation fees they don't have money to do lab tests, they don't have money to buy drugs, sometimes you have to give your own money to them. So a lot of people were coming here I mean it was a big challenge, what do you do. You use your money or you let this child die something I mean most of the time in the end you have to use your own money, spend your own money because the moment you see somebody you know this person if you don't help this person he's not going to survive definitely so those were challenges' (Male, Western Area, IDI-19)

Working conditions in health facilities were challenging and some health facilities were supported by NGOs, philanthropic sources and also religious organisations.

'... its improved after the war because we had NGOs coming in...[...].after the war I was at Children's Hospital there were a lot of families who brought food items, clothing and it the hospital ...[...].we had people from overseas who brought things ..[...].we had a from Muslim agencies also, so they doing that after the war there were even before the free health we had a lot of help from outside within and under individuals even from nurses; people were then I think that the war brought the sympathy and so many people brought things that could save lives or help people develop' (Female, Western Area, IDI-14)

'for Children's Hospital they say they had and NGO Cap Anamur they brought a lot of these I think it was pulse oxymeter, oxygen concentrator, so which made work easier; because before if there is a child that needs oxygen we had to take the child from Children's to PCMH theatre if there is oxygen or put that child in an ambulance and go to Connaught Hospital which by then the child must have died on the way, so for us having that after the war they brought a lot of this..[...].So a lot of equipment that were brought to help the hospital and drugs that one made it more reasonable for us and the working conditions better than before' (Female, Western Area, IDI-14)

Health facilities lacked vital human resources as very few health workers who left during the war returned. This caused a change in the working dynamics in some health facilities.

'Like I say this mass migration of our trained nurses, but I believe that even after the war with the developmental strides that has taken place this hospital has improved tremendously. There is a shortage of midwives; you need more midwives per number of patients and we need more of them but even though they are training to me, like the midwifery school is too small now for them. They need a bigger institutions so that they can train more midwives that would stay in midwifery and not having people who are SRN, SCM maybe in a few months' time your midwife that you may have trained in certain areas is taken away and sent elsewhere' (Female, Western Area, IDI-23)

Some also commented on decentralisation, which improved fund flows at a facility level.

'....yes the decentralisation is one of the major events because before now we have to access all the funds from Freetown, but now we have the secondary and primary healthcare have been devolved to council and there is not much of a problem in accessing the funds because they we now access our funds directly from the local council. Although there are problems but it's even much more better because if the monies are available the funds are released by the central government to council they always take health as a priority' (Female, Koinadugu, IDI-9)

Availability and retention challenges

An undated document from the HR Manager of the MoHS on the HR capacity challenges in the health sector (datable around 2006) reports on the availability of public medical personnel over the years 1993-2005 (MoHS, n.d.-a)². Table 4 clearly shows the sharp loss of qualified HWs from the public health sector during the conflict in Sierra Leone and the gap that remained to fill in. The main causes of attrition, during and after the war, were the deaths of HWs and migration for safety and better economic opportunities. Others joined the NGO sector as it was able to offer better working conditions (Sandi, n.d.). Those who stayed in the government service preferred to work in the capital or in the district headquarter towns.

Table 4 Availability of MoHS medical personnel: 1993-2005

Specialization	Number in post				Established vacancy	Gap
	1993	2003	2004	2005		
Medical Officers	203	73	66	67	300	233
Surgeon Specialists	27	7	5	4	30	26
Physician Specialists	23	1	1	3	30	27
Paediatricians	5	3	3	3	20	17
Dentists	19	6	5	6	10	4
Obstetrician/Gynaecologists	22	8	7	6	30	24
Public Health Spec.	58	19	19	19	30	11
Haematologists	-	1	1	1	10	9
Radiologists	-	1	1	1	5	4
Anaesthetists	-	1	1	1	8	7
Psychiatrists	1	1	1	1	5	4
ENT Specialists	1	1	1	1	5	4
State Registered Nurses	623	266	112	152	600	488
Community Health Officers	-	-	132	152	500	348

² It is important to note that other documents report different data on available HWs, thus revealing a general weakness in the completeness and quality of data, already mentioned by Newlands et al., (2011). We have referred to one source of data in the text, preferring the oldest ones. However, in **Annex 2**, we report alternative data on the same issue.

State Certified Midwives	-	-	197	-	300	103
Pharmacy Technicians	-	-	91	228	400	172
SECHN	1014	712	653	753	1500	747

Source: MoHS HRD Survey, July 2004 cit. in (MoHS, n.d.-a)

The document recognises that the challenge to increased availability of HWs lay both in training of new HWs under a coherent national human resource plan, as well as in increased retention of existing qualified staff by increasing job satisfaction and motivational factors, such as increased salaries, car loans and housing schemes, and ensuring the payment of other allowances (risk, extra-duty, remote area, etc.) (MoHS, n.d.-a).

The HRH Manager's annual presentation in 2007 listed in detail the causes for attrition (Sandi, 2007):

- poor conditions of service (low salaries, poor working environments, inadequate basic working equipment)
- no financial or non-financial incentives
- poor career progression and slow promotion
- inadequate training opportunities
- slow absorption processes
- death as a natural cause
- retirement (either voluntary or attainment of actual retiring age)
- migration for better economic opportunities
- poor management style
- poor appraisal system

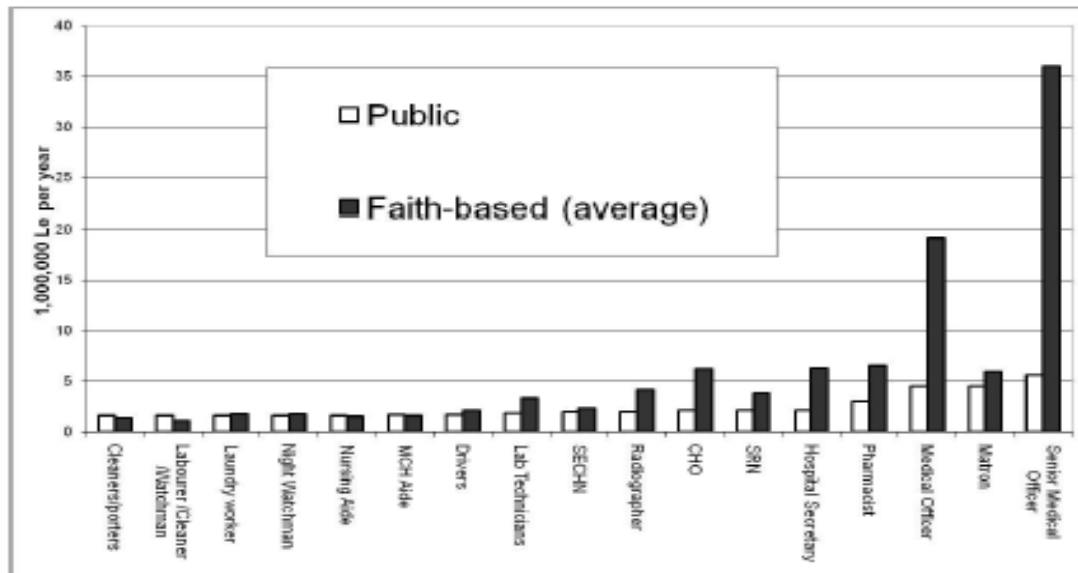
Performance challenges

Factors influencing the motivation and the performance of HWs include the salary, the presence of other financial and non-financial incentives, management, and clear career progression.

Prior to the conflict, HWs' salaries were often paid irregularly and were appallingly low (Ensor et al., 2008). In the immediate post-conflict period, NGOs and other humanitarian organisations did not only provide emergency health services, but also gave financial incentives to certain cadres of HWs working in rural and remote areas. When these organisations left, the government was not able to maintain the same incentive environment (ReBUILD & COMAHS, 2012). Important disparities remained between salaries in the public sector and what can be earned outside of the civil service, particularly for the

most skilled professionals. A comparison between the public and faith-based sector found 4 to 7-fold differences for senior medical officers (Figure 4) (Ensor et al., 2008).

Figure 4: Comparison of remuneration for selective staff categories (faith-based and public sector)



Source: Ensor et al., 2008 - from payroll data of MoHS and selected faith-based hospitals

Additionally, HWs were initially given a non-pensionable temporary appointment. Only after working for one year were they appointed into a permanent pensionable scheme with additional benefits, such as study leave and annual leave. Depending on their rank (usually high cadres of health professionals), HWs were also provided with certain benefits (e.g. housing, transportation, payment for medical bills abroad, telephone top up cards). However, the vast majority of the HWs do not benefit from such incentives (ReBUILD & COMAHS, 2012).

Career progression was available for doctors and nurses, but not for other cadres of health worker, such as CHOs and CHAs (ReBUILD, n.d.).

Information on other important elements regarding the performance of HWs, such as data on over time/hours worked, absenteeism, dual practice, responsiveness to patients, and technical quality of care were not found in the document search.

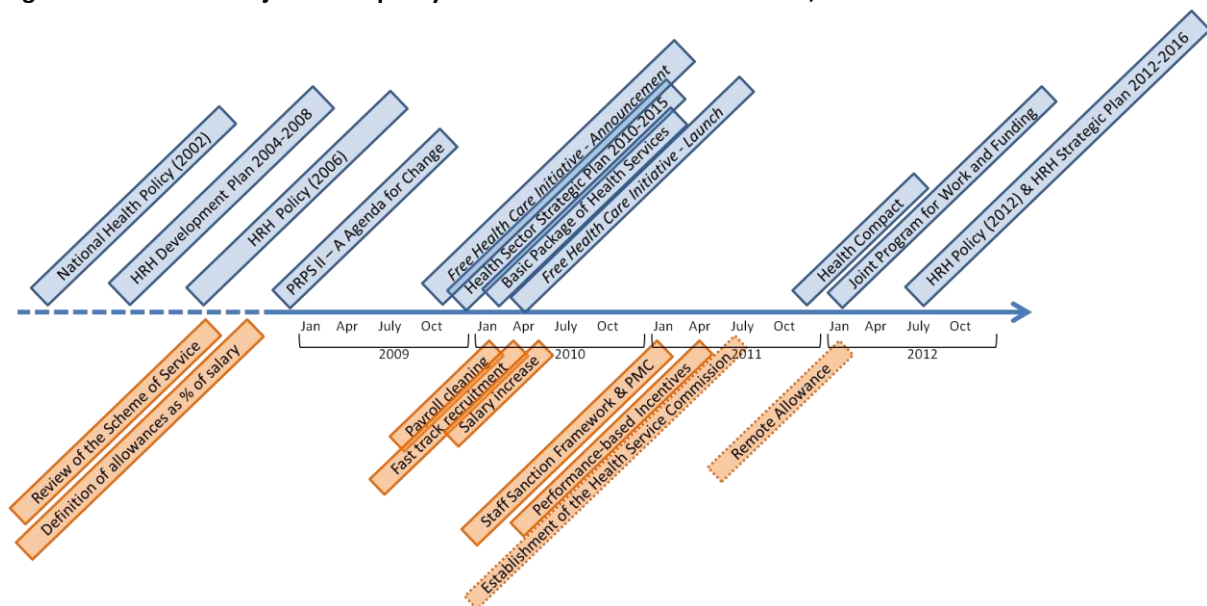
HRH policy objectives and approaches

From 2002-2009 progress in policy-making to restructure the health workforce was slow. Problems were identified by the MoHS but until 2009, little progress was made. This is likely to be attributable to a lack of clear political vision on the future of the health system. The

broader political context also played an important role as the first government elected after the war was weak in terms of leadership and drive for reform. A series of policies were drafted with the involvement of international agencies and external technical assistance. Rather than become effective strategies to be implemented at peripheral level, they stayed 'on paper'. The consequence was a relatively static approach, which left little room for innovation and focused mostly on policy 'fire-fighting'.

Figure 5 highlights some of the main policy and practice changes for HRH in Sierra Leone from 2002 to 2012. Although a number of policy documents were produced before the FHCI period, these remained largely theoretical, and without associated changes on the ground.

Figure 5 Timeline of major health policy and HRH reforms in Sierra Leone, 2002-12



Source:(Bertone et al. 2014b)

The first National Health Policy (NHP) of post-conflict Sierra Leone (MoHS, 2002) mentioned the availability of healthcare professionals among the priorities for the sector. It recognised the insufficient number of HWs, their maldistribution and it also proposed ways of addressing issues such as the financial motivation of HWs, the regulation of private practice/NGO's incentives compared to the public sector, and the training needs for the HRH. However, the NHP did not indicate precise solutions or actions to address these problems but rather suggests that they should be addressed in a subsequent HRH Plan.

Subsequently, the Human Resources for Health Development Plan 2004-2008 was developed in 2004 and revised in 2006 (MoHS, 2006b). This was followed by the development of the Human Resources for Health Policy in Sierra Leone in 2006 (MoHS, 2006a).

Both documents begin with an analysis of the situation and challenges, and suggest a framework to *'organize consistent decisions regarding the supply, utilization and deployment of appropriately trained staff'* (MoHS, 2006b). In summary, they focused on:

- reinforcing HRH planning;
- strengthening the role of decentralised structures (as per the Local Government Act (GoSL, 2004));
- ensuring the training of sufficient HWs;
- experimenting with mechanisms for HW retention, particularly in rural areas³;
- improving the HRH management structure i.e. the introduction of a Human Resources Information System (HRIS), personnel records, reviewed job descriptions, and payroll cleaning;
- ensuring better management of changes and the development of communication strategies.

The HRH Policy 2006 remains a relatively vague normative framework rather than an operational document, as exemplified by the recurrent use of the verb "shall"⁴. Despite allowing a certain flexibility to the activities proposed *'given the current level of uncertainty regarding the exact nature of the reforms and the detailed staffing requirements to support the National Health Policy'*, the HRH Development Plan 2004-2008 describes precise targets for training and retention with reference to each cadre of HW, and a prioritisation of such cadres (MoHS, 2006b).

The new national health policy, entitled the Sierra Leone National Health Sector Strategic Plan 2010-2015 (NHSSP), was approved in 2009 (MoHS, 2009). The document is organised around the six building blocks of the health system (WHO, 2007), which include human resources for health. It identifies the main HRH challenges, gives a policy statement (*'The Ministry of Health & Sanitation will implement the human resource policy and strategic plan that has mapped out the current situation and future staffing needs across the whole health sector and use trend analysis to identify the likely situation over the next 10 years'* - MoHS, 2009: 26), and embeds it in a strategic plan with objectives, articulated in actions and targets.

³ However, the definition of such mechanisms as salaries, allowances and other benefits were left to the Public Service General Orders by the *HRH Policy 2006*.

⁴ For example, regarding financial and non-financial incentives, the HRH Policy 2006 establishes that, *'The Ministry, together with District Councils, shall establish clear staff motivation strategies to ensure continuity of service delivery. In addition to remuneration, loan and allowance packages, the ministry shall package non monetary incentives for its employees such as subsidized housing, furniture, clear reporting lines, relevant and suitable management style and counselling services. It shall also explore other strategies for retention of its employees'* (MoHS, 2006a: 17).

Table 20 provides an overview of its objectives and targets. These remain mostly programmatic, referring to the development of new plans and policies e.g. by recommending the preparation of a new HRH policy and a revised HRH strategic plan or management capacity strengthening. A few ‘targets’ are somewhat more pragmatic, such as ‘fast track the recruitment process and improve retention for HRH’ or ‘define career paths and incentive packages’. However, quantitative targets are not indicated and even these propositions remain vague in terms of operational implementation of actual changes.

FHCI – announcement and preparatory phase

In November 2009, the President Ernest Bai Koroma announced his intention to launch the FHCI for pregnant and lactating women and young children under 5 years of age (GoSL, 2009)⁵. In the document describing the vision for the new initiative, HRH is included as a priority area. More specifically, the document refers to:

- improving conditions of service for health personnel, by introducing performance-based incentives for HWs in 2010, as well as rural incentives and establishing a Health Service Commission.
- providing adequate numbers of qualified HWs; in the short-term by deploying foreign doctors (Cuban and Nigerian) and training of MCH Aides and CHOs; in the long-term by establishing new MCH Aide and Midwifery training schools and a second medical school at Njala University.
- introducing improved and regular training programmes in management, public health and midwifery (GoSL, 2009: 9).

Very little time (approximately 5 months) was given to the MoHS partners to prepare the operational implementation of the new policy and budget. Six technical sub-committees were established based on the six pillars of the NHSSP. These committees held regular monthly meetings to identify challenges and find solutions to address them to ensure the smooth implementation of the policy.

The launch of the FHCI provided an important opportunity for health systems strengthening and to address in a more comprehensive way the issues that previously were partially solved with piecemeal reforms. This was highlighted by partners and NGOs during the key informant interviews.

“Having the free healthcare coming has helped the health system strengthening. I mean, of course, the National Health Sector Strategic Plan was written according to

⁵ There had been an attempt to eliminate user fees in Sierra Leone in 2005, which had failed because the government could not enforce the law and informal fees replaced formal ones (Scharff, 2012).

the six building blocks of WHO [...], but the free healthcare kind of pushed us to work more in that [sense]” (9001, line 816 – NGO).

“It’s a process, yeah. And that’s why some partners, I mean, I am part of them, think that this is an ideal opportunity for health system strengthening [...].”(9001, line 216 – NGO).

“Different components have fallen into place [with the FHCI], but it was bitty. Service delivery came first, and then it was followed by attempts to strengthen the health system, although it should have been done the other way around”. (8002, line 40 – donor).

The FHCI also presented an occasion to improve the coordination between actors and to provide a broad, common objective to all stakeholders. It appears that the announcement of the FHCI and the few months of intense preparation work created a momentum for collective action and renewed partnership between the different stakeholders in the health sector.

Of the six technical working groups put in place before the launch of the FHCI, one focused specifically on HRH issues. These groups were tasked with designing the reforms and changes in the health system necessary to ensure the smooth roll out of the FHCI. They also coordinated different partners, assigned roles and identified available funding. International partners viewed these working groups as ‘task force’ that guaranteed coordination and adequate planning of the reforms. In October 2011, the process was consolidated with the signature of a ‘Compact’ between the Government and partners under the International Health Partnership (IHP+) initiative. To facilitate this, the technical working groups were formalised and other coordinating groups were put in place, namely the Health Sector Coordinating Committee and the Health Sector Steering Group.

However, although the different inter-agency groups increased the coordination among actors in the health sector, some issues remained:

“Of course we had our Working Group meetings and we would talk, but these were the ‘big lines’. If you go to the little activities, we were not so well coordinated”. (9001, line 591– NGO).

In particular, the major donors had different views on the FHCI and how the health system should be reorganized to provide free health services.

“The capacity of the Ministry to coordinate was limited, but we were all, as partners, trying to push for the Ministry to take the lead and to appear to be in the lead” (9001, line 618 – NGO).

Also, within the MoHS there were some overlapping responsibilities. For HRH issues, two different departments were involved in different parts of the reform, the DPI (Department for Planning and Information) and the Directorate for HRH. This fragmentation led to incoherent policies, inconsistent implementation and a lack of information sharing.

“You have many different programmes and directorates doing something on human resources in the Ministry [...]. We had people doing human resources from DPI, when actually it should have been the Directorate [of HRH].” (9001, line 313 – NGO).

The collaboration between Ministry and partners seemed diminished, if not lost, during the implementation phase of the FHCI. The working groups were reported to meet infrequently after the launch of the FHCI and were almost non-functional by the time the interviews were carried out (March 2013).

“And then later on, [the HRH Working Group] kind of went to sleep. There was a break when the new Director came in, and we started working on policy planning, with sometimes more frequent, sometimes less frequent meetings.” (9001, line 628 – NGO).

The link between the FHCI and subsequent human resource policies

Although the FHCI was a high-level political initiative focussed on access to health care for the population, discussion with key informants and health workers and the document review all confirmed that it had major implications for human resources – triggering a series of reforms over 2010-12. The FHCI appears to be the defining moment that shaped the healthcare system and gave a strategic approach to HRH policies.

Key informants often used this event to begin their narratives or framed their narratives around ‘before’ and ‘after’ the FHCI. The quotes from the different actors illustrate their overall consensus on the importance of this event.

“What is a turning point, in the past 10 years, is the free health care. [...]. I believe, for the past 10 years, that free health care was a big turning point, because before gradually everything was coming up. The free health care was big turning point to accelerate the improvement”. (9008, line 63 – donor).

“The introduction of the free health care put the system in place. For nurses, it meant the development of a series of documents, including the core competences, PBF, Sanction Framework, BPHCS, increase in salary, etc. So that things can be taken on from there and there can be aspiration for learning more. [...] The free health care was an eye opener.” (9003, line 108 – MoHS).

“And don’t forget, this free health care was the singular moment. I wonder which other moment we had for a complete sector wide approach at solving a national issue. Everybody was there, all NGOs, donors, everybody came and everybody wanted to achieve this because the President was there, he said ‘this is what I want’.” (9009, line 539 – MoHS).

The logic behind the HRH reforms was that if health care utilisation was to increase then a number of chronic HR problems needed addressing, including:

- Fast-track recruitment and deployment to fill gaps in staffing
- Payroll cleaning to ensure that ‘ghost workers’ were taken off the payroll (and those who were working unpaid – the many ‘volunteers’ were added)
- Salary uplift to ensure that health workers were adequately paid and motivated to handle increased workload without imposing informal charges on users

These were all introduced early in 2010 to prepare for the launch of the FHCI.

In a second round of HRH reforms, in 2011-12, a system of monitoring staff absences, linked to a new staff sanction framework, aimed to ensure that the now more generously paid staff were actually at work. The two other main policies introduced during this period were performance based funding to facilities, which could meet the dual needs of providing some small flexible funding at facility level to replace lost user fee revenues, as well as providing a direct incentive to staff to provide priority services. Finally, a remote allowance was introduced in January 2012 to encourage staff to take up postings in more rural, hard-to-serve areas.

The MoHS and partners were very aware of potential consequences on HWs and their incentives of the FHCI. As one key informant reported:

“The government was very, very clear on the problem. They understood that [the FHCI] will boost the demand for healthcare services and so then, of course, they would have to increase the number of health workers in the field. On that we didn’t have much to propose and basically the government had to do that quickly, so that was the first issue. The second issue was that this free care initiative would remove all user fees. From what I understand, user fees were already illegal but actually they

were tolerated and they accounted for quite a big portion of the revenues of health workers, as they had very low salaries. So the issue was how do you replace this revenue? One solution was to increase the salaries and the other one was to introduce some PBF mechanism, which had the advantage of also improving the accountability of health workers [...]. There was a third issue related to the geographical distribution of health workers. As you know, most of them are located in Freetown so the idea with the free care initiative was also to set up an incentive package to ensure that some health workers would agree to go into rural areas.” (9017, line 7 – donor).

These policies are described in more detail below. The key finding on HR policy evolution, however, is that the FHCI, through a combination of political momentum, donor buy-in, and technical support, produced a step-change in HR policy-making (Bertone et al., 2014b) – or, more importantly, its implementation – during this period, which significantly altered the life of health workers in Sierra Leone.

Description of key HRH policy changes

An in-depth verification of the payroll was carried out to ensure that only legitimate staff were included in the MoHS payroll. The process was led by Technical Assistants (TA) from Booz & Co. (DfID-funded), assisted by the DHMT and hospital management staff (Heywood, 2010). To ensure the longer term sustainability of this work, the payroll was reengineered to ensure that it remained clean and up-to-date, so that the staff on payroll will continue to have accurate recording of designation, district and duty station (Heywood, 2010).

According to the KII, the verification was linked to the salary increase, which required a precise knowledge of the number and qualification of HWs in the MoHS payroll. Both MoHS officials and development partners perceived this measure as necessary in order to “protect their investment”, so that the payments would not end up in the hands of non-existing or non-qualified workers.

While the salary increase improved the number of HWs available in the long run, in the short term other solutions were necessary. A mobile recruitment programme was introduced at district level where a panel was responsible for interviewing and hiring health workers in the same districts where they would be assigned to work. As one respondent recalls, this process had two advantages; it increased the retention of HWs at district level as they were selected locally and not posted from the MoHS, and it helped to formally recruit all those who had been working in the facilities as ‘volunteers’ and were therefore not included in the MoHS payroll.

“To address recruitment problems, a district mobile recruitment programme was set up in all 13 districts. A mobile interview panel targeting MCH Aides, SRNs, CHAs/CHOs, midwives and cleaners moved around, seeking to recruit directly from the districts. At present, all recruitment is centralised and people are not able to express preferences for where they will be posted. By recruiting locally, they hope to fill gap in those districts and improve retention. And also, to eliminate the ‘volunteers’, the qualified people working without being on the payroll, because that process was so lengthy.” (8001, line 36 – MoHS).

In addition, retired HWs were also recruited on fixed-term contracts to face the sudden increase in service utilisation that was envisaged after the launch of the FHCI. With technical support, HRMO and DHRH worked together focusing in particular on the recruitment of grades 1-5 HWs (i.e., the lower levels of HWs) (Heywood, 2010). These personnel were then deployed to the areas of greatest needs.

Finally, in March 2010, a revised Scheme of Service was introduced (MoHS, n.d.-b). This involved a revision of the job descriptions for MoHS staff (MoHS, n.d.-c) which was categorised in a 14-point scale corresponding to different salary levels and a substantial increase in pay, which now includes all standard allowances. The pay lift applied only to technical and clinical staff and not to administrative and supportive staff, whose salaries may be reviewed under a wider Public Sector Pay Reform.

Linked to this, in March 2010, some of the major ‘vertical programs’ decided to stop extra payments to HWs. In particular, the National HIV/AIDS Secretariat, whose funding provided top-ups for HWs working on HIV, decided to end these payments. The salary uplift therefore also triggered a partial simplification of payments to health workers.

Discussions about the introduction of a Conduct and Sanctions Framework began with the preparation of the FHCI as it was considered one of the pre-launch priority actions (Heywood, 2010). An initial draft of the framework included inputs from the Anti-Corruption Commission, the Medical and Dental Council, the Nursing and Midwifery Board, the Pharmacy Board, as well as the HRH technical sub-group. Despite highlighting the key principles, some major challenges remained and the draft was not ready for implementation by April 2010 (Heywood, 2010). The work continued until mid-2010 when staff absence began being monitored through the Attendance Monitoring System (AMS), and January 2011 when the Staff Sanction Framework was implemented (MoHS, 2011b).

The principal aim of the AMS and the Staff Sanction Framework was to reduce absenteeism among HWs. Different monitoring tools to track the HWs’ attendance were developed. PHU staff were trained by district staff on how to use them and report absence. Additionally, spot checks in the PHUs were carried out by the newly created HRH Support Unit. Staff

absenteeism reports are provided on a regular basis and are reviewed at Health Payroll Steering Committee meetings (Martineau & Tapera, 2012). The framework envisages a sanction of one month's salary for staff who are absent without authorisation for six days or more in a given month. Verbal warnings are required for staff with three days of unauthorised absence. Additional offences lead to a recommendation for immediate dismissal of the HW (MoHS, 2011b).

A donor's perspective onto this reform highlights how the reasons for the implementation of this policy were to protect their investment and minimize fiduciary risk.

"Looking over the period, there is a sequence of reforms all prompted by the free healthcare – which in turn triggered salary changes, and then reforms to protect those investments, such as tightening up on staff absenteeism. There was a need for us to minimise risks [...]". (8002, line 40 – donor).

However, the introduction of the Sanction Framework also created the right incentives for the HWs, ensured their presence in the facilities and restored HW accountability.

Alongside the Sanction Framework, other accountability and performance management systems have been introduced, or are planned: the Performance Management Contracts (PMC) for senior managers (Grade 11-14) and the Individual Performance Appraisal System (IPAS), which will be introduced for staff in Grades 1-10.

As described by Martineau & Tapera (2012), the Performance Management Contracts (PMC) were established in 2011 under a wider public sector reform pilot across seven ministries, including the MoHS. The contracts are cascaded from the President to the Ministers, to the Permanent Secretary and finally to the Directors. They are not employment contracts, but set a series of yearly targets in a Performance Tracking Table (PTT), which include baseline data and progress indicators for each quarter (see Office of the President, 2011). The progress is analysed by the Steering Committee on Performance Contracts with representatives from the Chief of Staff, the Cabinet Secretariat, the HRMO, PSRU and the Strategy and Policy Unit (SPU). There is currently no specific reward or sanction attached to achievement of targets.

To complement the PMC system, the public sector reform pilot envisages the establishment of an Individual Performance Appraisal System (IPAS) for staff below director level (Grades 1-10). The objective of the system is to *"manage and improve performance of the civil service by bringing about a higher level of staff participation in planning, delivery and evaluation of work performance. IPAS [...] integrates work planning, target setting, performance reporting and feedback."* (Martineau & Tapera, 2012). A draft tool was presented in March 2012. However, this system is not currently functional.

During the launch and the initial implementation of the FHCI, there was a consensus among Ministry officials and donors on the need to provide the health facilities with sufficient materials and financial resources to provide health services efficiently and effectively. Besides efforts to improve and guarantee drug supply, health facilities began receiving additional funding under the “cash-to-facility” scheme. In order to receive this money, facilities had to open bank accounts, which made the introduction of the Performance Based Financing (PBF) initiative possible in early 2011 (Martineau & Tapera, 2012). PBF was not entirely new to Sierra Leone as small-scale pilot schemes had been set up by NGOs, such as the International Refugee Council (IRC) in Kenema and the Medical Research Council (MRC). The consensus among donors on the need to better fund facilities, as well as the agreement on PBF as one of the best option to provide such funds, led to the introduction of the “Simple Performance-Based Financing Scheme for Primary Healthcare”. The concept paper was presented to the MoHS by the World Bank on February 2010, while the final operational manual was approved in March 2011, shortly before the operational implementation of the scheme on April 1st (Canavan & Coolen, 2010).

As stated in the Operational Manual (GoSL, 2011c), the general objective of the PBF scheme is: *“to change the behaviour of health providers at facility level for them to deliver more quality services under the free health care policy”*. The specific objectives of the system are to:

- Provide cash at facility level to cover the local costs of delivering services and removing the need for ‘informal’ fees.
- Provide financial incentives to facilities in order to increase productivity and quality of care.
- Increase the equity of distribution of resources with funds from PBF allowing facilities to hire contractual workers and finance outreach activities.

In particular, the second objective refers directly to the motivation of HWs. Under the PBF scheme facilities receive a quarterly bonus for their achievements based on a list of output indicators (all core components of the Basic Package of Essential Health Services, plus additional ones relating to management or process indicators e.g. recording staff absence, presence of a functioning Health Management Committee, and avoidance of drug stock outs) that are verified by the District Health Management Teams and the MoHS at central level. This financial bonus is split so that 40% must be reinvested in the facility to improve service delivery and 60% can be used to reward all staff, using a points system (Table 11). The scheme encourages teamwork, rather than individual performance. In some cases, it also contributed to reduced absenteeism as all personnel could agree to reduce the bonus for staff who were frequently absent (Martineau & Tapera, 2012).

Table 11: incentive sharing points

Staff Cadre	Points
CHO	10
Midwife	10
EHO	10
SECHN	9
CHA	9
MCH Aide	8
EDCU Assistant	7
Nursing Aide	5
Laboratory Assistant	3
Non-Technical staff on payroll	2
In-charge bonus	2

Source: (GoSL, 2011b: 39)

When asked about the rationale behind the introduction of PBF, interviewees provided different explanations. Some link the introduction of the PBF scheme to HRH issues, complementing HWs' salaries and providing a lasting incentive to improve performance.

"The thing about salary is that it is a contract. A salary rise will only motivate you for the one month. The next month you don't get motivated any more, it becomes regular, it's a contract. [...] So you know you need something more for motivation, you need something extra for motivation that I get because I work and it gets taken away from me because I don't work, that is what motivation, that is to me, that is what I think is motivation [...]. So this was why I supported the two-tier approach that is, number one, raise the salary of everybody, and then number two, give a performance based [bonus] that you get because you work or you don't get because you don't work." (9009, line 654 -- MoHS).

According to some, PBF allows focus to be given to the quality of the HWs performance, while the salary increase was geared towards increasing the quantity of the HWs.

"The second strategy we used during the designing was, [...] we have now increased salaries for our health workers. What that means, we are looking at the quantity of service people and delivery, but in terms of quality, can we look at the quality aspect of it? We increase the number of personnel, we increase their salaries. They are happy and they will be ready to provide services, ok. Fine. So let's look at the quality aspect of this. So when we look at the quality aspect of it during the design we talked about the performance-based financing as another strategy to complement implementation of the free healthcare so that's the way the PBF came on board, you see". (9010, line 91 -- MoHS)

The same respondent later provided a slightly different view of PBF, less related to the HRH aspect and more to the financing at facility level.

“What we did was, before we launched the free healthcare, we brought in the idea of upgrading the facilities. We agree that, ‘ok let’s start giving them what we call cash to facility, ok’, and [...] we develop guidelines on how to use that cash to facility basically to upgrade their facilities [...]. Basic things, like toiletries, curtains, you name them. [...] And then we used those cash for facility as a window of opportunity for PBF to enter”. (9010, line 712 -- MoHS)

Providing increased remuneration for HWs employed in remote areas to reduce attrition has been on the agenda of the MoHS for a long time (MoHS, n.d.-d). With the FHCI and the changes in the salary levels and structure it brought, rural incentivisation was discussed again and was included among the priority actions prior to the launch of the FHCI (Heywood, 2010). However, such an allowance was not established during the pre-launch period for a number of reasons:

- The introduction of new salary scales could have changed the motivation for rural posting.
- In some cases, underperforming HWs could prefer remote posting where supervision is weaker.
- Observations from districts showed that non-availability of accommodation is the major disincentive to rural posting and non-salary based incentives could be more effective.
- A draft Civil Service Rules and Regulations that included a proposal for rural incentivisation was under review at the time (Heywood, 2010).

Many of the respondents recall that a remote allowance for the HWs in rural locations was initially discussed during the preparation for the FHCI. However, although many recognise that this was an essential issue to tackle, the remote allowance was not introduced until 2012. Different reasons emerge from the interviews to explain this delay. It is certainly attributable to the urgency in which the launch of the FHCI was being prepared. Also, there were no extra funds available to cover the remote allowance. Moreover, without the payroll clean and the rationalisation of the HWs database, it was impossible to know which HWs were entitled to a remote allowance.

“For the remote allowance, the design was done even before the free healthcare started, but the problem was, who is going to fund this? [...] I think, we made three or four different designs even before free healthcare started, but then the question was who is going to pay for this and which design is going to be picked? And what work? Because the thing is if you are going to pay remote allowance, you need to know that

that person is really remote. But we didn't have that information. Then the Global Fund came in and Global Fund money was used to help the salary increase, but then I believe in the end they also helped with remote allowance". (9001, line 560 – NGO).

No official policy documents were retrieved on the functioning mechanisms and the funding of the Remote Allowance. However, based on secondary documents (Charlie Goldsmith Associates, n.d.; Stevenson et al., 2012), it seems that a remote allowance has been paid to HWs working in rural areas since January 2012 with funding from the Global Fund via the National AIDS Secretariat (NAS). Allowances are calculated as shown in Table 5, depending on the remoteness of the facility.

Table 5 Calculations for the Remote Allowance

Addition to basic salary	Remoteness level
10%	Western Area Rural and within 10km from regional or district headquarters (HQ)
15%	>10km from regional or district HQ
25%	>10km from regional or district HQ and no car access during the rains
40%	>10km from regional or district HQ and no motorcycle access during the rains

Source:(Stevenson et al., 2012)

As envisaged by the NHSSP, the new Human Resource for Health Policy (MoHS, 2012a) and Human Resource for Health Strategic Plan 2012-2016 (MoHS, 2012b) were developed in 2012. These documents are heavily influenced by the changes that took place since 2009, both in HRH strategies and approaches, and across the health sector in general.

Additionally the MoHS and its development partners signed the Health Compact (GoSL, 2011a) in December 2011. This document describes a framework for the coordinated efforts of Government and donors towards the implementation of the NHSSP through a sector-wide approach and establishment of a Health Sector Coordinating Committee, a Health Sector Steering Group and a series of Technical Working Groups. In January 2012, the Joint Program of Work and Funding 2012-2014 (JPWF) (MoHS, 2012c), was developed. This was a medium term expenditure framework (MTEF) that evaluates the financial resources necessary to implement the NHSSP.

The HRH Policy 2012 and the HRH Strategic Plan 2012-2016, aimed to respond to the implementation challenges and priorities expressed in the NHSSP, the 'Compact' and the JPWF. The overall objective was to *'prioritize the retention and reverse the high attrition rates of qualified and experienced health workers and ensure continuous availability of health workers in sufficient quantity and quality [...]*' (MoHS, 2012a: 1). The 2012 policy acknowledges the creation of the HRH Department in 2011 and changes in the policy formulation process via the Health Sector Steering Committee and the HRH Technical

Working Group, established by the Health Compact. The document gives policy direction in the six key HRH policy areas for action (i.e., governance, production, management, information and research, partnership, and mobilisation of resources), and introduces concepts in the management of HWs, such as “performance assessment methods”. In addition, a costed *HRH Strategic Plan* has been produced, the implementation of which will be led by the HRH Directorate.

The HRH Strategic Plan 2012-2016 is based on the same key policy areas⁶ that are further developed to give a clear road map, including quantitative targets, a time frame and financial needs. However, the majority of those targets refer to the “planning”, “development”, and “preparation” of strategies and reforms (terms actually used in the matrices of the plan), rather than to the actual implementation of such interventions.

Issues and challenges in the decision-making process

The decision-making process that led to the selection, design and implementation of these reforms was far less smooth than it would appear from the end results presented above. In this section, we present the main issues that emerged during the interviews with the key informants.

Sense of urgency in decision-making

Many respondents who participated in the design of the reforms felt that their preparation and launch was rushed. The time allotted for this process was limited and decisions had to be made quickly. There was not enough time to thoroughly analyse problems and discuss potential solutions. At times, this caused frustration among some of the actors.

“I mean, he [the President] announced that we were going to get free healthcare and then we had less than half a year to prepare. So you can understand that when we were looking at human resources in the light of free healthcare, we, I mean -- we had to make choices.” (9001, line 164 – NGO).

“After the free healthcare then everything appeared to come together, although I don’t think the free healthcare was properly prepared. It was good, but it was rushed” (9004, line 136 – MoHS).

“[...] everybody was in a hurry, I mean, including the President, because the President said that it [the FHCI] would have to be ready in April [...]” (9017, line 88 – donor).

⁶ In fact, the *HRH Strategic Plan 2012-2015* is organized in 5 policy areas, i.e. Leadership and Governance, Training, Management, Information and Research, and Partnership (Advocacy and Resource Mobilisation, which was included in the *HRH Policy 2012*, is missing).

Role of Technical Assistance

As the FHCI had such a high profile, both nationally and internationally, many actors participated in the preparation work. Many of the development partners involved sent Technical Assistants for specific tasks.

“A lot of technical assistance came in from various donors to help with specific things [...] Depending on what kind of topic, they would decide and find a person. And of course, I mean, it was sometimes a little bit wild, because things had to happen so fast. [...] At times, there were so many, there were so many TAs. You know, that means, when I was in meetings I sometimes would say, ‘I am so and so and I’ve been already so many years in country’, because otherwise people would think again I was a three-week TA.” (9001, line 270 – NGO).

The arrival of a large number of external consultants focusing on different issues, for different lengths of time, often in an uncoordinated manner, did not ensure coherence in the decision-making process. It also led to duplication of work and a loss of institutional memory. An example of this is the payroll cleaning system. While some of documents (Heywood, 2010; Krisifoe, 2011) state that ‘ghost workers’ were identified and removed from the payroll, other actors recall that a national cleaning of the civil servants’ payroll had already been carried out a few years earlier. The second, health-specific cleaning was to remove the HWs who had to be subsequently re-entered into the payroll. This process appears to have caused much confusion and delays, at the time when action had to be taken swiftly.

“The reason why these people looked like ghost workers is because nobody in the Ministry of Health was keeping coherent records about where workers were posted, so because we had no records we didn’t know where people were supposed to be. So then if they weren’t where we thought they were, they would get recorded as ghost workers, whereas that was probably because the Chief Medical Officer had sent them somewhere else, or the Nursing Officer had sent them somewhere else.” (line 1050). “They stopped being paid overnight, and then it took months and months and months to reconstruct the health payroll. And this was happening at exactly the same time as the free healthcare implementation.” (line 926). “Why weren’t there any ghost workers? It was [because] a civil service-wide cleaning of the payroll [had been done] about 2 years earlier!” (9018, line 1095 – TA).

“We [MoHS] did a survey to establish the requirements for all cadres at each level, leading to a staff list in 2004” (8003, line 16 – MoHS).

Conflicting donors' agendas

It emerged that there was some disagreement between donors on the design of the HRH policies to accompany the FHCI. In particular, these disagreements focused on merits of a salary increase compared to the introduction of a performance-based financing (PBF) scheme.

"These meetings [of the HRH Working Group] were completely dominated by [two donors] having their ideological fight effectively. I mean, it wasn't just those two individuals but these meetings achieved very little, because, when these two big donors are busy having a fight, week after week after week not much else gets discussed" (9018, line766 – TA).

Although it was recognized that PBF would improve the accountability of HWs, it was also agreed that setting up a PBF scheme would have higher transaction costs and take longer than implementing a salary increase. This was perceived as a major disadvantage in the rush to launch the FHCI. As one respondent recalls decisions were ultimately made on the basis of feasibility.

"PBF would provide an increase of revenues, but at the same time it would create an incentive to ensure people are present and they are providing some adequate quality [of services]. I remember that DfID was quite opposed to that [PBF], with two reasons; I think the official reason was that basically setting up the PBF mechanism would delay the implementation of free care, which is true. That was a good reason. It takes some time to do that. But I think the unofficial reason was also that they just didn't believe in PBF. I heard some very strange points [...], DfID was saying that we should increase the salary [as this would] basically create amongst health workers a moral duty to serve the patient [...]. So ultimately I think that, well, given that PBF was taking more time and that everybody was in a hurry, [the salary increase was adopted]." (9017, line 78 – donor).

However, some of the respondents highlighted that the discussions between donors on this issue often ignored the perspective of the MoHS.

"I think that the Ministry of Health was more in favour of PBF, because I would say their concern was really on the accountability of health workers." (9017, line 66 – donor).

"Interestingly people tell you it is the government to decide. That's what they say, government has to decide. So I did an options appraisal [...]. I did a comprehensive thing when I went to present. As I presented [...], I remember a furious lady who got

up and said 'no, no, no, no, we will not accept that. It's not the one', and I said, 'well, you said government is to decide' (laughs). Well, she got up in the meeting and said 'no, no'." (9009, line 932 – MoHS).

The MoHS appeared to be caught in the crossfire between donors and the pressure of the funding possibilities that came with one or the other's support. This could also be due to contrasting perspectives internally within the MoHS.

Adding to these discussions, in March 2010, just a few weeks before the FHCI launch, HWS organised a nationwide strike. The main issue being negotiated between HWs and the MoHS was salary, given the envisaged increase in the workload from the FHCI. At this point in time, the salary increase became inevitable. A wider public service pay reform was also considered by the government, but financial constraints meant that it was impossible to implement. The salary increase was therefore limited to technical health workers, even though there were still questions around how it was going to be funded. A salary increase for HWs was approved and the PBF proposal remained an idea that could be developed later on.

These challenges described in the decision-making process led to a fragmentation of policies and strategies. Moreover, the actors involved tended to focus on the immediate design of the policies and there was less attention given to their implementation.

Introducing a PBF scheme had been discussed during the preparation of the FHCI. However, this option was sidelined in favour of a general increase in salary for the technical staff of the MoHS. This did not mean the complete abandonment of the idea and from the interviews, it seems that both the MoHS and development partners were still interested in the plan. The DPI and the World Bank continued to discuss PBF and the scheme was implemented one year after the FHCI.

The analysis of the interviews showed no single issue as the main driver for the introduction of PBF. Many of the respondents noted that the introduction of PBF was led by the World Bank, who is also the main funder of the scheme. Other development partners were less engaged with this policy reform (if not openly opposed), although their position may have changed in more recent years.

"It was not agreed by everyone. We wanted to introduce PBF, we spoke with the district councils, we spoke with the PHU staff, we talk with them, we do the manual, we ask them are you agree and then we implement it; you don't need all of the partners to agree to PBF". (9009: line 900 – MoHS).

"Within and outside the Ministry. In fact some partners, like DfID, they never believed that a performance-based financing would be feasible in Sierra Leone. [...] But when

we started they said, 'ah! Something is happening you know, you go to health centres you meet them they are clean in terms of hygiene, you check their records, they are ok you know. Check a lot of things, they are fine. [...] So some partners are coming on board now, they are coming on board because they have seen some of the gains that we are doing. [Interviewer: like, who for example?]. Like DfID. [...] They are now convinced that it's doable, you see and some of the partners also they are coming on board. Coming on board in a sense where you accept the idea. This is doable, this can work, this can provide what we want. Like, WHO is convinced that it is doable". (9009: 446 – MoHS).

It is clear that some people within the MoHS were in favour of the PBF scheme. It is interesting to note the division of roles between DPI and the Directorate for HRH (D-HRH). While the D-HRH is responsible for the salary increase, payroll clean, and Sanction Framework, via the newly created Payroll Office, the DPI was more directly involved in the design and planning of the PBF scheme and of the Remote Area Allowance.

This division of roles was due to the mechanisms of donor's funding as well as operational and pragmatic constraints (the DPI is responsible for HIS data and was therefore chosen to verify the PBF data. It also employed the only health economist of the MoHS).

Interviewer: "Why do you think there is this division? Why do you think HRH is looking at the salary increase and DPI is looking at performance-based financing?"

Respondent: "Er, HRH is looking at the salaries because it's, well... it was thought that it's a human resource thing. They look at attendance registers and other things and they look at the cleaning of the payroll. It has been an HRH thing all along. But with the PBF and DPI it's simply because of the data verification. Well.. number one, because the data sits there, then number two, the [donor's] RCH funding doesn't target HRH Directorate. So HRH can only benefit if they decide to merge with DPI on the PBF".

Implementation of policies

The documentation analysed shows that important responsibilities for the preparation and implementation of HRH reforms before the FHCI were given to technical assistants from organisations such as Booz & Co. (later Charlie Goldsmith Associates), Concern Worldwide, the Ministerial Leadership Initiative (MLI), the Office of Tony Blair through the Africa Governance Initiative (AGI), in partnership with the MoHS staff (Heywood, 2010). The high level of ad hoc TAs employed highlights the urgency of the reforms, as well as the close involvement of international donors.

Despite the external assistance, the implementation of the HRH reforms was not free of challenges and bottlenecks. Issues during the payroll verification concerned the lack of communication between finance and HRH functions in the MoHS, as well as the little coordination and the overlaps in responsibilities between national and decentralised institutions (Heywood, 2010). Cadres of HWs that were considered key for the implementation of the FHCI were mostly recruited, while others (such as vaccinators, nursing aides, security staff and drivers) were not included in the process, despite playing an important role for service delivery. Consequently, some districts had to identify budgets for the recruitment and motivation of these cadres (Heywood, 2010). Additionally, decisions on the deployment of retired staff have been frequently open to challenges and may not reflect the real needs in terms of geographical allocation (Heywood, 2010).

Finally, a key issue arose when HWs went on strike six weeks before the launch of the FHCI (March 18th to 28th). Strikes for salary increase are not new in Sierra Leone⁷, but in this case it occurred at a delicate moment in the preparation of the FHCI and was mainly motivated by the lack of communication to the HWs on the new initiative and in particular with reference to the upcoming salary increase (Krisifoe, 2011).

Beside the initial negotiation to make sure that the Staff Sanction Framework could be organically implemented within the existing legal structure, the approval of the framework did not find extreme opposition, not even from HWs. In fact, according to some analyses, the Acting President of the Sierra Leone Nurses Association appeared to be quite supportive (Martineau & Tapera, 2012).

Analysts agree that once approved, managing the AMS appears challenging and quite time-consuming both at facility level and the MoHS headquarters. Monitoring by both the DHMTs and the HRH Support Unit can only realistically be done infrequently and spot-checks in remote facilities are rarely taking place (Martineau & Tapera, 2012; Stevenson et al., 2012). However, some suggest that frontline managers appreciate the results (Martineau & Tapera, 2012). The system needs regular review to ensure that staff do not find ways to get around the controls. In the future, with the ongoing decentralisation reforms, the responsibility for attendance monitoring should be moved to district level and/or facility level. Involvement of a civil society organisation, the Health for All Coalition (HFAC), in monitoring attendance of HWs has been envisaged since mid-2011 (MoHS, 2011c). Despite the signature of a Memorandum of Understanding between the HFAC and the Anti-Corruption Commission (ACC & HFAC, 2012), it is not clear whether this is being presently implemented.

⁷ A strike in 2008 forced the Government of Sierra Leone to raise all employee salaries by 10%, as documented in the Ministry of Finance's 'Salary Grade Table: Effective 1st January 2007 & Effective 1st January 2008' (Kelly & Barrieb, 2010).

The implementation of the high-level Performance Management Contracts has been more complex and often delayed. For example, the 2011 contract for Directors at MoHS was signed only in September 2013. This delay was caused by the fact that Directors were cautious about committing to targets without being sure that necessary resources were available. Delays then cascaded from the Minister downwards. Similar issues were experienced in 2012 (Martineau & Tapera, 2012).

Many of the key informants, especially those who collaborate with the Directorate of HRH, had little insight into the design and working mechanisms of PBF. A lack of involvement from MoHS departments in this process resulted in further fragmentation in the design and implementation of the HRH policies and the incentives package for HWs. In addition, health workers felt that they should have been involved in the design and implementation process.

‘well some of the policies because they are not involving the end users, I think sometimes there are problems because if the end users are involved in the policy making process, the end users they will give input, they will give problems what and what to do’ (Female, Koinadugu, IDI-9)

The implementation of the PBF scheme began in April 2011, and it was run mainly by the DPI with support from the District Health Management Teams (DHMTs). The scheme was implemented immediately at national-level, covering all the Primary Health Units (PHUs) in the country, and later in the main maternity and children’s hospital in Freetown. Many of the respondents recognised that the PBF scheme faced some challenges, especially at the beginning.

The main problems were:

- ensuring the understanding and acceptance of a new concept (i.e., performance-based) for providing funds to the facilities and the staff. Acceptance was particularly difficult where stakeholders that did not have much to gain from the scheme, or if they thought their power would diminish as a result of the scheme. For example, the DHMTs and their heads, the District Medical Officers (DMOs) were initially opposed to PBF.
- ensuring the smooth running of the scheme and the set-up of all the necessary procedures, including bank accounts and the flow of funds;
- ensuring the correct reporting and record keeping of the services provided from the PHU staff.

“So then gradually people accepted it and it was a new concept, it was a new game altogether. People find it difficult, but when we went into the district, we did a lot of training there, they see the importance of the PBF [...]” (9010, line 201 – MoHS).

“One of the biggest bottlenecks is ... some DMOs, the District Medical Officers, find it difficult to accept, the concept. The idea behind that was that the facilities can manage money on their own. [...] I mean in the country, we are now in the decentralization system. So let’s start pushing the responsibility to people. So, medical officers should have less to do in terms of management. You give [money to] the PHUs, the facilities.” (9010, line 701 – MoHS).

“The other [challenge] is dealing with bank-to-bank transfer, because [the PHUs] have the account in different banks [...]. So whenever the Ministry of Finance send authorisation to the Commercial Bank to effect payment, now when you have 1200 facilities across the country, the period of transfer took a lot of time. So that was another big challenge. The Ministry of Finance is working on that to see how best we can speed up things. There are still some delays, but the delay in terms of timing has reduced drastically. [...] And the other challenge is the reporting, timing reporting, timely reporting was another big challenge. Even though we still have it as a challenge, but not that much compared to when we started initially. [...] Data entry into the records was another challenge and some were finding it very difficult.” (9010, line 795 – MoHS).

These challenges caused extremely long delays in the payment of PBF bonuses to the facilities. The MoHS at central level thought issues were being properly addressed (*“There are still some delays, but the delay in terms of timing has reduced drastically”*), actors closer to the field reported that problems still remain. They also complained about the lack of communication and transparency between the central level and the districts surrounding the bottlenecks in the implementation process.

“They [the PHUs] have not received the last two quarters [of PBF payments]. [...] But they need money. A lot of them have agreed to give their PBF [to staff not on payroll], but with the PBF not coming, [...] then it's like, ‘oh well, it's not working’.” (9014, line 561 – NGO).

“If the PBF wasn’t going to come and that was communicated to people, donors and obviously the district health management team, that’s one thing. But it's like people are just kind of waiting, they don’t know what’s going on, like the DMO in [name of district] is like, ‘I don’t know what’s going on’, and all of his staff are asking him ‘where is our PBF?’” (9015, line 189 – NGO).

Such delays in payment are perceived as an important problem. If HWs do not see the direct linkage between performance and payment, their performance may be disrupted. It could also jeopardise the future of the PBF scheme as a whole.

These findings were confirmed by an external verification of PBF in 2014, which estimated delays at 4-5 quarters (payments for the fourth quarter of 2012 were processed by the MOFED---LGFD in the first quarter of 2014) (Cordaid, 2014). Their suggestions for improved implementation included:

- Increased and improved involvement of councils in contracting, verification and strengthening of DHMTs
- Better orientation of DHMTs to improve the quality of verification
- Improved financial management guidelines in the operational manual
- All PHUs to be given the necessary tools for financial management and financial reporting
- Strict adherence to payment schedules
- Smart methods of sampling to reduce the time pressure on DHMTs and Councils in carrying out internal verification
- Improved registration and record keeping in PHUs
- Better HMIS record keeping and storage of information

These suggestions indicate a range of implementation issues for PBF, which, until sorted, will influence their effectiveness as a motivation tool for staff.

For the Remote Area Allowance, issues arose in the second quarter of 2012 as cash flow shortages meant the NAS was not able to disburse the allowance on time. The allowance was paid towards the end of the year and a new system to ensure its timely pay was put in place with support from TA. However, there is no documentary evidence on the effectiveness of the implementation of this measure.

The remote allowance is granted to the HWs based on a 'remoteness' score calculation based on the distance of their facility of posting from the district headquarter town. The HWs then receive an amount in their bank account, separate from their salary⁸. The allowance is funded by the Global Fund, however many agree that it is not well implemented and that it rarely reaches the HWs that are eligible for it. There appears to be a lack of continuity in Global Fund funding and also perhaps difficulties in disbursement mechanisms (especially when staff move across areas with different remoteness grades). However none of the informants were familiar with the mechanisms for eligibility and funding of this allowance.

⁸ However, it is not clear whether this amount is fixed or calculated as a proportion of the HW's salary. None of the respondents were able to provide further details on this and no document on the working mechanisms of the remote allowance was retrieved.

The lack of awareness about the design and implementation, and sometimes even the existence of the allowance, is a surprising element emerging from the interviews. Many of the respondents, including some working exclusively on HRH issues, had to be explicitly asked about this policy and would not recall it when listing the HRH policies in place. Others, such as representatives of NGOs working in the districts, were not at all aware of the existence of this allowance.

“I’m actually not familiar with the [remote area allowance]”. (9014, line 534 – NGO).

“It’s also really interesting that [name of person] who is our national health co-ordinator [...] does not know about it. And what’s interesting is that I heard many, many health workers, PHU staff, and DMOs talk about performance-based financing. I’ve never heard anyone mention this remote area allowance”. (9015, line 556 – NGO).

There is once again a strict division of tasks within the MoHS, in particular between the DPI and the Directorate for HRH, with regards to designing and implementing the remote allowance. Because the DPI cannot pay the allowance without information from the D-HRH, the D-HRH provides a staff list to the DPI who then does the calculations without providing any feedback to the D-HRH/Payroll Unit on which payments have been processed. It is not clear whether the funds are disbursed directly by the National AIDS Secretariat (the principal recipient for the GF HSS grant), the MoHS, or the Ministry of Finance.

The remote allowance appears to be another instance of fragmentation in the design and implementation of the HRH policies. It created a ‘vertical organization’ of the policies within the MoHS, as if they were different programs although they all had the overarching goal of improving conditions for HWs.

Financing and sustainability of policies

While most of the HRH-related reforms introduced in preparation for the FHCI (payroll cleaning, Sanctions Framework, etc.) required donor-supported technical assistance, the major funding requirements were for the salary increase.

Most of the key informants recognise the role that DfID played to fund the costs of the salary increase. DfID advocated for the FHCI, providing the majority of technical assistance and funding. In particular, they supported the increase in HW salaries and the purchase of essential drugs. DfID also came with clear ideas as to what accompanying policies should be implemented and requested measures that would “protect their investment”.

However, the interviews suggest that the Global Fund also played a critical role. Although they were not regularly present in the discussions in Freetown, were not providing technical

assistance and were less involved in policy design, the Global Fund provided much funding for the salary increase through its health system strengthening (HSS) grant. It also appears that this happened in an almost serendipitous way.

“[During the strike], the Minister of Finance thought, ‘ok if they [DfID] are paying, we will go for it’ [for the salary increase], he was under so much pressure by then. But they [DfID] didn’t! They paid a part of the incremental cost, and in the end it was this Global Fund Health System Strengthening project that actually saved the day and funded [the salary increase], because there was no fiscal space. [...] This [the availability of the GF HSS grant] is what made it [the salary increase] implementable. It wouldn’t have been otherwise [...]. So it then came in through the salaries rather than as top-ups.” (9018, line 478 -- TA).

“It [the GF HSS grant] was there and it’s definitely not related with free healthcare, it’s not related.” (9018, line 423 -- TA).

“The Global Fund money was just about right to cover the gap. It was..., it was kind of miraculous in a way. It was... not miraculous, but [...] as far as I can tell, it was entirely coincidental! It was this application they [DPI] had made to Global Fund. They didn’t expect to get it and it happened to be that it basically covered the gap. And, and that’s what saved DfID’s back.” (9018, line 569 -- TA).

A recent evaluation of DfID support to Healthcare Workers’ Salaries in Sierra Leone (Stevenson et al., 2012) indicates the following breakdown of the respective contributions to the salary payments, made by the GoSL, DfID and GF (table 8)⁹. On average, over the first 3 years, DfID contributed 22% of the costs, the GF approximately 20% and the GoSL the remaining 58%. Overall, DfID committed 10.3 million GBP over a 5 year period to the salary increase. The funding was front-loaded as the Government progressively increased its share of the marginal costs (Stevenson et al., 2012).

⁹ Other documents, such as the MoU between GoSL, DfID and GF (GoSL, 2011b) suggest slightly different amounts.

Table 6 Breakdown of financial support to salary increase

	2010	2011	2012	3 year total
Total Health Salaries (1)	63,397	76,376	74,783 (2)	214,556
DfID contribution (Le.)	16,071	15,500	15,140	46,711
GF contribution (Le.)	3,342	18,311	21,461	43,114
GOSL contribution (3)	43,984	42,565	38,182	124,731

Notes: (1) Figures are actual expenditure for 2010 and 2011, budgeted amount for 2012. (2) It seems likely that the budget estimate will be substantially exceeded in 2012, as first quarter actual expenditure came in at Le 19,887B. (3) This is not reported, but calculated as a residual in the table

Source: (Stevenson et al., 2012: 20)

Beyond defining the repartition of the financial support to the salary increase, the memorandum of understanding (MoU) between the GoSL (represented by the Ministry of Finance and Economic Development (MoFED)), the Global Fund (through its round 9 principal recipient, the National AIDS Secretariat (NAS)) and DfID also established conditions for the external support (GoSL, 2011b). Among these conditions was the creation of the Health Payroll Steering Committee, which is chaired by the Director of Human Resources of the MoHS, and whose members include representatives from Directorate of Financial Resources (MoHS), HRMO, Accountant General's Office, and the relevant funding agencies (DfID and NAS for the Global Fund). The Health Payroll Steering Committee is responsible for monitoring the payment of salaries and coordinating its management. It also established and monitored the benchmarks and indicators whose fulfilment is linked to the disbursement of the donors' funding (GoSL, 2011b).

DfID also funds most of the technical assistance working with the MoHS, and in particular for the payroll management and attendance monitoring system described below (DfID Sierra Leone, 2011; Stevenson et al., 2012). For these tasks, the HRH Support Unit was created within the HRH Department of the MoHS.

While development partners are largely financing the new salary structure, the GoSL plans to generate or identify other funding sources. However, it is not clear how the GoSL would be able to sustain the increase in expenditure and some analysts question the sustainability of the reforms (Obermann, 2011; Thompson, 2010). Others believe that the salary increase is sustainable by the GoSL in line with what was agreed in the MoU (Stevenson et al., 2012). In contrast, they highlight how the element that may raise sustainability issues is the capacity of the HRH Support Unit to continue to manage the payroll and the attendance monitoring system once technical assistance ceases (Stevenson et al., 2012).

It is also important to point out that there are economic gains that come with attendance monitoring. The government claims to have saved approximately 240 million Leones (USD

54,000) on their salary bill in 2011 since attendance monitoring and sanctions have been implemented (Charlie Goldsmith Associates, 2012; Martineau & Tapera, 2012).

The establishment of the PMC and the IPAS should not entail costs.

It is known that the PBF scheme is funded by the World Bank under the Reproductive and Child Health Project (RCPH) II, until October 2013¹⁰. However, little information is available on the amount of funding and the financial commitments of the GoSL for the future sustainability of the project.

Impact of policies

Health workers' perception of impact of FHCI on health system

Positive effects

Implementation of the FHCI had the most impact on the health care delivery system in the post conflict situation, according to in-depth interviews with health workers. One of the intended effects of the FHCI was to increase service utilisation amongst the vulnerable groups. This increase in the utilisation of the health facilities was experienced across Sierra Leone. Even before the FHCI, health facilities in some hard to reach areas were overburdened. Since the FHCI, health workers can provide services to more patients who otherwise would not be able to afford healthcare. The number of institutional deliveries has increased as traditional birth attendants (TBA) and service users have been sensitised on the importance of hospital deliveries.

'At that time, in 2002 there are four chiefdoms in the riverine area with a population of about 12000 and we only had only four health facilities, which was a heavy burden on the facilities then' (Male, Bonthe, IDI-2)

'For the health facilities, people are now making use of the facilities even the maternal beds compared to before' (Female, Bonthe, IDI-1)

The staff also recognise the investment that it has brought into the health system. Health partners have also helped improve the sustainability of the FHCI by providing equipment/logistics (e.g. motor bikes for health facilities in hard to reach areas) to reach patients quickly and to also help develop the infrastructure of health facilities.

'Now they rehabilitated some centres, constructed new ones. Presently like here a partner is constructed the BEmOC centres, they have also complete two of that; they

¹⁰ The total amount available for the funding of the RCPH II project is 20,000,000 USD, according to: <http://www.worldbank.org/projects/P110535/reproductive-child-health-project-phase-2?lang=en>

provided ambulance for the primary health care for transportation of emergency of obstetrics cases; they also constructed the school, The Maternal Child Aid training School, they sometime support them in form of providing there materials they work with. A partner also paid the final year student fees the last time so we are getting there little by little' (Female, Koinadugu, IDI-8)

Donor agencies like UNICEF are involved upgrading some health facilities to BEmONC centres. This involves training staff in specialised skills relating to child and maternal health, which in turn improves the quality of service rendered.

..... it is free healthcare that came about with implementing Human Resource because they have strategic number of people who should be at the health facilities now at any level and ensure they are there like BEmONC...[...].they give us more like here we have three midwives now because this is our target to have a standard obstetric and newborn care services and then they extend it to the others..[...].the staff that is needed and the new born care also because those are stages that normally we will lose our babies and even the mothers.....[...]. more staff at the health facility and the training of these people to tackle these cases that have been killing p mothers and children..[...].and the development of the health facility..[...].as soon as we became a BEmONC centre UNICEF came to let us have 24 hours, they gave us a water tank, 24 hours running water..[...].and they also provided us 24 hours electricity because in the absence of NPA (energy provider in Sierra Leone) at night we can put on our solar...[...].24 hour throughout the night the solar are on so it makes the environment very conducive for work' (Female ,Western Area, IDI-20)

'in the nineties let me say for instance the matron of the whole hospital, she has to rent a house and to share it with another person; but now since the introduction of the free healthcare they are now quarters although there are not enough for all the staff but at least for the senior staff there is housing facilities and even in the drugs there are drugs for those in the free healthcare' (Female, Koinadugu, IDI-9)

The FHCI was reported to have increased institutional deliveries. TBA deliveries were reported to have reduced as the government has introduced a fine for TBAs conducting deliveries outside of the health facilities. TBAs are also encouraged to refer women to health facilities and in some places, they receive incentives from the health facilities for doing so. In addition, TBAs are invited to participate in workshops centred on child and maternal health and work with community health workers to ensure that women have safe institutional deliveries. Women's visits to health facilities have increased since the implementation of the FHCI, e.g. for antenatal care (ANC) and immunisation.

'...people are making use of health facilities even the institutional deliveries' (Female, Bonthé, IDI-1)

'before now we, people don't really make use of the facilities; actually the pregnant women they only come when they have problems when they have complications, but now we can see them just walk in, into the hospital because of there is no cost attached to the services, they will come to have their babies and also the under-fives they will make use of the facility for the immunisation and even the ANC Ante Natal Care, they will come to the hospital because there is no cost attached and also there are drugs' (Female, Koinadugu, IDI-9)

'because now when we have this free health we have laws, that no women should deliver at home or no TBA. But at first when there was no free health these TBAs they did the deliveries at home. So now it's a different, because now if you deliver any pregnant woman at home you are going to be fined. So as soon as any pregnant get to the TBA she will say,' No, let's go the hospital' (Female, Koinadugu, IDI-10)

'.....another success could be instead of going to traditional birth attendants.....[...]...because they were having a lot of complications with TBAs traditional birth attendants but now we are happy because they TBAs even themselves come with them now[...]...the role of the community also is a success because even the TBAs were holding on to the patients but because Ministry of Health is now calling them to workshops, involving them in other activities like community health workers; now they are policing the people in the community ensuring that they live a healthier life so their role also have changed ..[...].....which will have a great impact; instead of trying to give native medicine at home now it is having a great impact wasting the patients time having great impact now because people come to us nowno complications' (Female, Western Area, IDI-20)

'... I was at Ola During when it started and the influx of patients I saw, it was overwhelming, I was so happy that people who were afraid in the former days to come to the hospital because maybe they were not having money they think they will be charged and so on are coming in hundreds. ...[...]....so if there was no free health all these children who are so ill looking, these children who are so sick these parents who look so poor would die somewhere someday not getting any care....[...]...The antenatal clinic sometimes you would go there you would have 4/5 patients for the day now you have up to a 150 patients in one day coming there and they prefer coming here because they get drugs if they are admitted, they are admitted, no admission fee, no bed fee and you have 3 meals a days' (Female, Western Area, IDI-14)

However, one health worker reported that some rural areas of Sierra Leone are still ignorant about the FHCI, and that women do not utilise the health system for deliveries.

'....in those remote areas they are still ignorant. They don't know about this free health care and they don't know about hospital delivery' (Female, Koinadugu, IDI-10)

Health facilities were described as being more user-friendly or more accessible due to the FHCI, with health workers changing their attitude towards service users.

'Well one of the changes is now the hospital is a bit user friendly..[...]...In those days before the war people were paying for service, but now with the free health care and a lot of trainings going on, it seems as if nurses are changing their attitude. You see...And then the accessibility is the hospital....the patient and they are utilizing the hospitals as compared to before' (Female, Kenema, IDI-9)

Record keeping has improved in the post FHCI period, as required for the PBF assessments of health facilities. In understaffed health facilities, dealing with increased patient numbers and fulfilling record keeping requirements is an additional burden or constraint.

Negative effects

With regards to negative effects, the perceived increased workload was the most cited. Limited human resources means health workers are over stretched, especially in the provinces, work very long hours, and have to be available 24 hours a day. This sometimes leads to complications with care, as some health facilities cannot cope effectively with the number of patients coming through.

'Because we are working 24hours and we are not, it's not like a hospital where you have routine doctors, we are the only higher cadre personnel that work 24hours so the work is strenuous, before this time people are not coming because of finance but now once they remove the users fees people are coming 24hours' (Male, Koinadugu, IDI-11)

Currently one of the tertiary hospitals is struggling to cope with the gap in mid-level doctors, as many have left to specialise as the health sector is lacking specialist clinicians. Only two senior doctors are currently in post and they are unable to supervise all the newly qualified junior house officers attached to this hospital. This situation translates into junior house officers dealing with the increased traffic of patients, mostly from the FHCI qualifying group, unsupervised. This issue should be addressed quickly to minimise the risk of increasing child and maternal mortality rates. Another health worker commented that the FHCI should have been planned better to ensure that there was enough personnel who can work unsupervised and deal with the expected increased traffic of patients coming through the health facilities.

'...well after the war, there are have been some moves but the primary issue is still there unattended or they are being gradually attended and now they see the truth of it all. Today as we speak we have over 14 medical examiner (ME) doctors, distributed in East Africa and West Africa doing post graduate training what it is not something that you send in today and bring out tomorrow. It's a process that takes 3 years, 4 years, 5 years and this is a lesson that we must remember, that if we don't prepare, to prosper, to develop the health system we prepare to fail' (Male, Western Area, IDI-17)

'....so all of these people now we are putting at the forefront they take care of wards, they take care of children without even our supervision. These are house officers, we cannot supervise them because there is only two of us so when they come maybe they are with us one or two week and then they go out and then they go and take care of cases. So permanent doctors, there are only two of us. We have one or two other doctors from the NGOs who come for help I mean but these are people they are not middle level workers they are people like us, consultants or so you cannot tell him to go and sit in the outpatients for a long time..[...]....but the problem the increase in the number of the attendance people seeking services but there is no increase in the number of doctors. I used to tell people you cannot manufacture doctors, it's not like drugs; we are making free healthcare we go and buy drugs from Germany or China we cannot go and buy doctors from Germany and bring them in but although it's good they have introduced this free healthcare it would have been better if they had planned before a long time ago to make sure we have enough personnel..[...]....but now the thing is we don't we don't even have the consultants who will help us train; I mean there are not enough so that's why the ministry told us they have been sending some of our doctors to the sub-region some have gone to Kenya some are in Nigeria and some are in Ghana' (Male, Western Area, IDI-19)

Some facilities reported that organised systems were in place for drugs and medical supplies. On the other hand, some health workers also expressed concerns about the sustainability of the FHCI in general and also about the effectiveness of the current drug supply system.

'Well the free health care is moving on, but my only fear is the sustainability of it, because things you have started and you are not able to sustain it, it will be a catastrophe in the end. Then again there are certain drugs which are supposed to be in Free health care but sometimes they come in very small quantity and that cannot even take a week, they finish, and then patients, most times they grumble a lot' (Male, Bonthe, IDI-3)

Despite sensitisation exercises carried out on the radio, TV and via text messages, a number of health workers reported that service users, especially those in the rural areas, have a

different perception or misunderstanding about the free health care drugs, as the drugs are being misused. Instances were reported in which service users will acquire drugs from different health facilities, for the same ailment and within the same timeframe. These drugs are then sold by the service users, a practice that has a negative impact on the health facilities, as sometimes the drug supply is low or not available. Stock levels should be maintained and used for those who actually need the drugs. In addition, when sold on, these drugs can have detrimental side effects on those consuming them.

'Again the other problem is the sensitization of this free health centre has not gone down too far, particularly in the rural areas...[....]....a patient can come to this clinic, with a sick child or herself, pregnant woman or suckling mother, come here, get drugs, the next day goes to the other place, she will not tell you the correct history, that she has got some drugs, collect drugs; sometimes they go with these drugs and sell it to people' (Male, Bonthe, IDI-3)

'Even when they are not sick they will come for it except when we are educated, so that was the challenges we have, at first people were coming to collect medicine and there was proof, community people, people living in the community gathering the medicine thinking medicine is something you can just take it's our right...[....]....I thought the education was not enough before the implementation, the sensitization was not enough, people you have to tell them about the side effects of drugs, they should be well educated and what dose of drug, what is the effect it will take and that this thing is going to continue it's not just coming to go, it should be sustained' (Female Western Area, IDI-20)

In one particular health facility, availability of space was a major concern, as it limited the number of activities that the health facility could deliver effectively. In the opinion of one KI, the lack of privacy in the health facility deters young girls and other women from participating in family planning services offered at the health facility. Some health workers also reported that the lack of vital equipment to strengthen the health system is lacking.

'....we are having this problem like if we have enough space now for adolescent health, where we say there is a room special for them where we try to educate them on what to do and what not to do in their adolescence, that one can minimize maybe even the early pregnancy, teenage pregnancy, STIs, sexually transmitted, HIV infections all these things because if they see from films or they hear from us but they cannot come into here it is not friendly you know..[....]...you see them coming sometimes maybe the reason even why they don't come for family planning because they don't want people to tag them other patients there is no privacy' (Female, Western Area, IDI-20)

'even before the free health going towards free health after the war , we found out that this building is too small because the influx of patients that were coming, especially when

I was at the Children's Hospital we started admitting 2 patients per bed even before the free health came and that was a concern. We had beds but there were nowhere to put the beds because of space...[...].now that we have the free health it is almost 300% small with these people just coming in' (Female, Western Area, IDI-14)

'patients come and some health staff cannot perform some, key functions, lifesaving functions, so definitely they have to refer and even if you refer, we only have like one ambulance here or two that have to visit all those 68 PHUs. So let's say for example, it happens that two or three PHUs call at the same time to go and collect patients by the time they go, another call, where do you get the vehicle to go. We don't have enough drivers, I mean those on payroll' (Female, Koinadugu, IDI-8)

Unintended effects

A major perceived unintended effect of the FHCI is the increase in teenage pregnancies, partly due to peer pressure and due to the notion that having a baby is free, as reported by the health workers.

'And then when you look at the challenges again faced now with the free health care let's say teenage pregnancies, you find out that the hospitals have to do a lot of caesarean sections because the bulk of the deliveries of pregnancies are coming from under age children 13, 14 years of age, that's a child mother' (Male, Kenema, IDI-6)

'and what I also observe is the teenage pregnancy which is at a worst situation now that is happening...[...].and they see their friends maybe peer group influence somebody have gone through and have the baby without spending money' (Female, Western Area, IDI-20)

'It's a step in the right direction...[...].I think the whole idea was to get women to come into hospital to have a clean safe delivery. But our young ladies are abusing it...[...].because all you see is as young as 12, 13, 14 yeah, 15, they are the ones having babies now. And one of them say "Oh I will have my baby the President will take care of it" (Female, Western Area, IDI-23)

On the same note, another health worker recommended that health facilities need to improve the utilisation of family planning to avoid the increasing rates of unwanted pregnancies amongst young girls.

'...unwanted pregnancy now but it's on the increase now, it's on the increase, and that will create a lot of dropouts from school...[...]. maybe we need to put strategies in place for the uptake of family planning and introduce it in the schools' (Female, Western Area, IDI-20)

Payroll cleaning

Data on the results of the payroll clean vary across documents. Some state that 850 phantom HWs were removed (around 12% of the total), while 1000 new HWs were added (Heywood, 2010; Krisifoe, 2011). However, others point out that 1,626 HWs were initially removed but then most of them were reinstated because they returned to work, were on study leave or provided other satisfactory explanations. Only 297 HWs have been definitively removed from payroll (Stevenson et al., 2012).

The new recruits included mainly those HWs who were previously working 'voluntarily' in the health facilities, remunerated on the basis of the internal facility revenues, but without receiving any compensation from the MoHS. These HWs were redeployed to the districts where needs were greater, as shown in the table below.

Table 7 Redeployment of HWs to the Districts

	Original	Recruits	April Total	% Increase
Bo	703	134	837	19%
Bombali	400	58	458	15%
Bonthe	59	69	128	117%
Headquarters	325	0	325	0%
Kailahun	173	45	218	26%
Kambia	218	13	231	6%
Kenema	489	196	685	40%
Koinadugu	235	10	245	4%
Kono	270	37	307	14%
Moyamba	157	103	260	66%
Port Loko	409	54	463	13%
Pujehun	97	65	162	67%
Tonkolili	291	26	317	9%
Western	2238	45	2283	2%

Source: (Heywood, 2010)

The recent evaluation of DfID support to HWs salaries found that there had been "tremendous improvement" in the quality of the MoHS payroll data management and that there were no irregularities in the payroll in 2012. Overall, the new management arrangements had eliminated all of the ghost workers from the payroll and increased its reliability and completeness. This led to monetary savings of around \$408,200 USD in the period between March 2010 and May 2012 (Stevenson et al., 2012).

Salary uplift

While no information is available on the updated terms and conditions under the revised Scheme of Service, some analyses have been done on the salary increases (Newlands et al.,

2011). This shows that the increase was highly skewed towards the higher grades. For example, Grade 14 HWs received a 705% increase, while for grade 3 it was of 314% (Newlands et al., 2011). The table below show the salary increment for some cadres of HWs. It is more or less consistent with the findings of a more recent ReBUILD survey (Table 16).

Table 8 Salaries (including allowances) for 3 cadres of HWs (Leones per month)

Cadre	Old scales			New
	Bottom	Midpoint	Top	
State enrolled community health nurse	165,626	195,860	226,094	624,000
State registered nurse and staff/community midwife	205,173	245,717.5	286,262	840,000
Medical officer	525,334	667,845	810,356	4,620,000

Source: Booz & Co., 2010 cit. in (Newlands et al., 2011)

The evaluation of the DfID HWs salary support notes that it has not been possible to identify the process undertaken to determine the level of the salary increase. There is no documentation or evidence available to provide such justification (Stevenson et al., 2012). Moreover, some point out that the disproportionately higher increase in the salaries of doctors is not justified by the relative scarcity of this cadre or by their greater workload due to the FHCI. At the same time, other cadres of HWs, such as volunteer vaccinators, were not included in the recruitment and salary increase (Newlands et al., 2011). Some analysts argue that this could have contributed to the fall in immunisation levels observed after the introduction of the FHCI, though other factors may be responsible (Newlands et al., 2011). Concerns about charging informal fees to patients for services and drugs that should be given for free still exist. A public survey revealed that 238 out of 1,168 respondents (approximately 20%) had been asked to pay for officially free services, with some regional disparities, as this was reported more in the Western Area (52% of the respondents) compared to 0% in Kailahun (HFAC & Save the Children, 2011). A civil society organisation, the Health for All Coalition, was later entrusted by the Anti-corruption Commission of Sierra Leone with the function of guaranteeing an independent oversight on the implementation of the NHSSP and the FHCI (ACC & HFAC, 2012).

According to some KI, the impact on attraction was clear and positive:

“In the preparation towards the free healthcare, salaries were increased massively for health workers and for technical people in the sector and that really attracted a lot of medical practitioners to come on board, namely the doctors and nurses [...]. Those that went into the NGO sector came straight [back] to the public domain. It was a very good strategy that the government used”. (9010, line 26 – MoHS).

For health workers, the salary uplift was the most significant personal impact of the FHCI. This had a positive impact on health workers in general and was said to have improved the dedication of the medical personnel to service.

'There was a huge jump, it went up to about Le700, 000(seven hundred thousand Leones)..[..]...Well I felt good though it was not quite enough, but it was better as compared to what we were having before this time' (Male, Kenema, IDI-4)

'Well we can mention Free Health Care though it is as recent as 2010 and that one is actually eventful as you have rightly said, because it brought a lot of changes in the work, movement of personnel and dedication of personnel to service' (Female, Koinadugu, IDI-8)

There were different perceptions about the salary increase, with an underlying theme of it being a positive step that was long overdue but not commensurate with the role health workers play. There were some disparities among the different cadres of staff, with nurses thinking that doctors had benefitted more from it.

'... that's not it does not reflect much on the nurses..[..]...it's the doctors, but the nurses it does not reflect much it's the doctors have benefitted from that' (Female, Western Area, IDI-18)

Moreover, the FHCI directly impacted on the workload of the health workers: the increased workload meant the health workers had very limited opportunity to be involved in other activities to increase their monthly income. Accordingly health workers are advocating for extra allowances to augment their monthly income.

'.... the workload is increased, because now the categories who have been named are the most vulnerable and even before the free health care those are the people you see mostly in the clinic; the sick children, pregnant women, suckling mothers, these are vulnerable people. Even at normal times when there was no free health care these are the people that you see mostly. So when the free health care comes, well that one compounded everything. So they are coming, they are coming...[...].if a clinic there is only two people there and with the emergence of this free health care, we are now seeing a lot of people, they are over-burdened with work..' (Male, Bonthe, IDI-3)

'Like I said earlier even with the last salary increment what they are paying us is not enough to take care of our families, care for your children, provide feeding for them; like what I am receiving is just barely enough to take care of my family so thinking about having accommodation, medical bills, transportation, paying fees for my children' (Male, Kenema, IDI-5)

'But now they say nurse salary is increase but you do everything in that salary, you have responsibility, so I think that is not helping much because those day they leave to do extra

things so they will be able to provide for themselves, they don't care but for now they restrict them so much, they work so much 24hr, yet they don't have much; it's a problem.....[...].... Well they don't have the time because the work load cannot allow you and you since are working 24hr and you know if any case is mismanaged in your centre you are responsible, definitely you don't have to leave your work, you have to work' **(Female, Koinadugu, IDI-8)**

The FHCI also brought some additional challenges to health workers other than the increased workload. Recipients of the FHCI were not properly sensitised and expected everything to be provided for free.

' but only for anything that is free is a bit challenging, challenging in the sense that most of the patients that do come in they expect everything to be free; free medication, care of their newborn even giving them Pampers should be free but in that area not all of those things are provided by the government' **(Female, Western Area, IDI-15)**

'... we had problems already ...and now we have enormous amount of patients coming, lack of adequate supplies, drugs are short, materials are not there and then these patients come and the old challenges I have already mentioned are still in place and then the burden more burden has been added to us. I feel in fact this is a burden that is going to crack our back and that is why some of us are worried, that if we were not properly motivated then certainly we are going to leave the Ministry of Health because with the advent of the free healthcare more burdens has been given to us. More responsibilities with less motivation, I am not talking our salaries but at least incentive' **(Male, Koinadugu, IDI-12)**

In one case, a health worker reported having to close down his private practice to deal with the increased traffic of patients at the health facilities.

'so when you have free healthcare and people start coming to those I closed the place and I rented it to somebody else and I came to the hospital and by then also er I was almost the head of this hospital, there is too much work' **(Male, Western Area, IDI-19)**

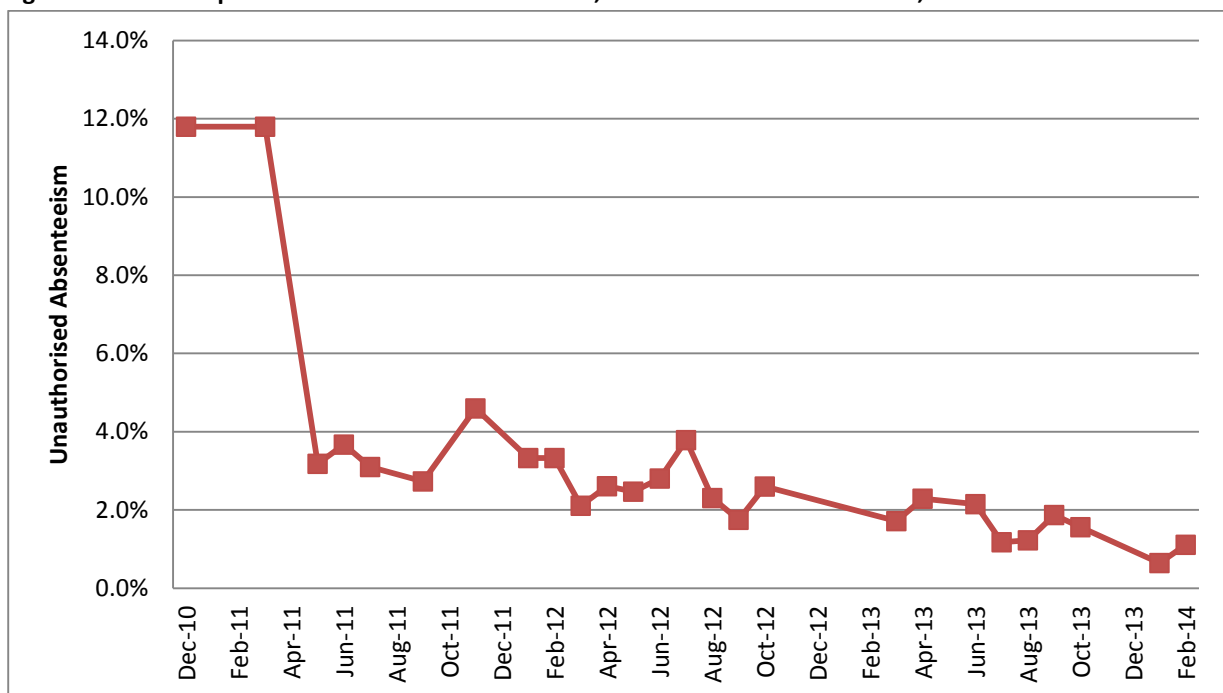
Staff sanction framework

The Staff Sanction Framework appeared to be working in reducing unauthorised absence. The reported absence levels went down to 5.5% during 2011, according to the Health Payroll Steering Committee, although spot checks suggest it may be actually higher (Martineau & Tapera, 2012). Interviews in the field found that most HWs reported improvements in attendance and it appeared that the message about the risk of sanctions for unauthorised absence being high is well understood by staff (Martineau and Tapera,

2012). During 2011, approximately 600 staff were sanctioned due to unauthorised absences or unknown workstations (Martineau & Tapera, 2012), while 134 were recommended to HRMO for dismissal (Charlie Goldsmith Associates, 2012), though it is not clear whether any (or how many) were actually dismissed.

Analysis of payroll monitoring data showed a significant drop from baseline of 12% in December 2010, when the Staff Sanction Framework was implemented, down to 1.1% in February 2014 (Figure 6) (Wurie and Witter, 2014). However, two caveats remain for the analysis: the absence of baseline data prior to the FHCI or the framework’s introduction, and the need to continue with spot-checks to ensure that the reported data is robust.

Figure 6 Rates of reported unauthorised absenteeism, Sierra Leone health workers, 2011-14

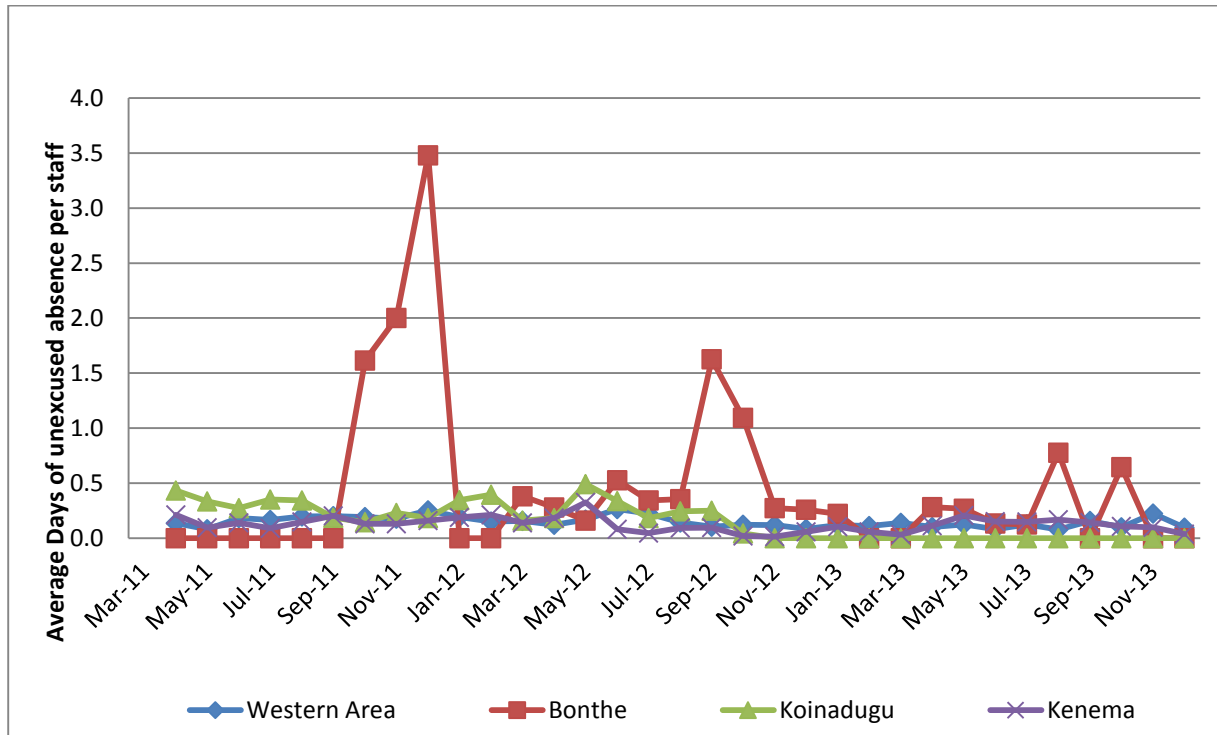


Source: payroll monitoring data, analysed in Wurie and Witter, 2014. Note: unauthorised absenteeism calculated as 'staff with one or more days of unauthorised absence /number of staff on payroll'.

Available data also included the average number of days of unauthorised absence in the work place, per staff and by district.

Figure 7 shows numbers for the four ReBUILD study districts. Western Area, Kojnadugu and Kenema reported relatively low levels of unauthorised days off work. However Bonthe reported a higher average number of days of unauthorised absence from the work place at specific time points. These appear to fall in the rainy season and may be linked to difficulties of travelling to work.

Figure 7 Average days of unauthorised absence by health workers, 2011-13, selected districts



Source: Wurie and Witter, 2014

Performance management contracts

Some analysts highlight how the performance management system is still lacking some important parts; job descriptions should be more widely available; induction and orientation processes should be introduced; and communication mechanisms between management and staff should be improved (Martineau & Tapera, 2012).

Performance based financing

The PBF scheme was initially implemented in a “simple” form at PHU level, using only existing institutions and administrative arrangements. The fact that the scheme initially excluded all hospitals caused some resentment among staff (Martineau & Tapera, 2012). However, it has now been extended to the 2 hospitals providing maternal and child services, Princess Christian Maternity Hospital (PCMH) and Ola Daring Children’s Hospital (ODCH), and it is envisaged that it will be rolled out to all hospitals. Under the PBF scheme facilities receive a quarterly bonus for their achievements based on a list of output indicators and “quality” items. This financial bonus is split so that 40% must be reinvested in the facility to improve service delivery and 60% is used to reward all staff, using a points system. In a report that considered the first two disbursements to PHUs (April to June and July to September 2011), it found that facilities received bonuses ranging from 200,000 to 2 million Leones. Their calculations in one health facility showed that out of the total earned in one

quarter (2,629,000,00 Le), a midwife received 142,720 Le, CHA 113,657 Le, and MCHA 99,450 Le (Martineau & Tapera, 2012).

No evaluation of the PBF scheme has yet been carried out. However, an external verification mission in 2014 (for the year 2012) found that 85% of the DHMTs interviewed mentioned staff motivation as the most important improvement as result of PBF (Cordaid, 2014). According to this report, most health facilities based bonus payments on staff presence during duty time, which leads to more discipline and adherence to time schedules. (This may therefore be reinforcing or duplicating the sanction framework, which is also based on presence.) The two hospitals in the PBF programme were said to be refining the incentive scheme to introduce a simple performance assessment based on the attitudes and practices of services. Thus would represent an interesting attempt to cascade the indicators from facility to individual level. The verification team also found that the PBF programme is indeed seen as complementary to the FHCI in replacing (and indeed surpassing) user fee revenues. A second external verification exercise for the year 2013 is scheduled to take place at the end of 2014.

The PBF scheme was implemented in Sierra Leone on the 1st of April 2011, with payments being made to the health facilities on a quarterly basis. Therefore 7 payments should have been made up by December 2012 when the ReBUILD health worker incentive survey data was collected. There were 216 responses to the question on the number of PBF payments received (including 91 HWs who responded 0). 94 responses were missing, which may reflect the fact that not all health workers were eligible for PBF (at the time, it applied to PHUs and was also being introduced at Ola Doring and PCMH hospitals). As we know that all PHUs in the country are supposed to receive PBF payments and all workers in those PHUs should be entitled to a percentage of the bonus, the following analysis only includes the 138 working in PHUs and eligible to received PBF payments from the MoHS scheme. Of the 7 payments that should have been made, a maximum of 4 payments was reported as received in some PHUs (Table 9), which in most cases was paid late as reported by the health workers. A quarter had received no PBF payments, while a third had received three, with no significant difference by type of PHU but significant differences by cadre (Figure 8) and district (Figure 9). The pattern across districts is either linked to variable performance or problems of disbursement in certain districts.

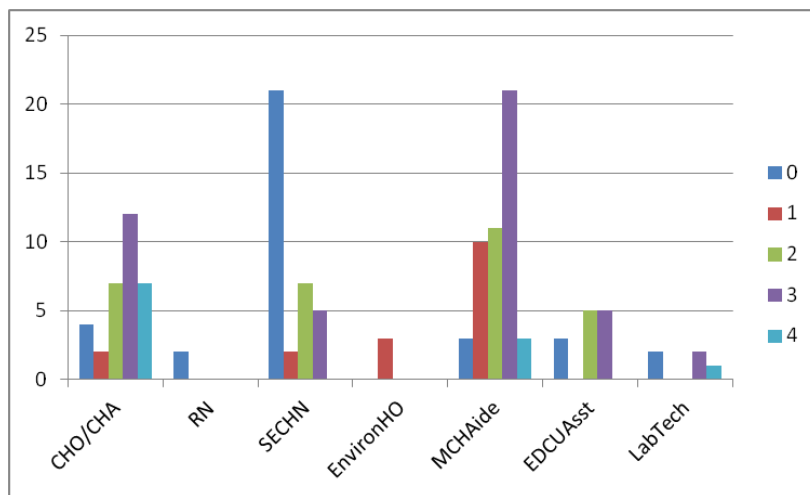
Table 9 Number of PBF payments received, by place of work (n=138) [column %]

Num of PBF payments received	TYPE OF PHU			
	CHC	CHP	MCHP	Total
0	23	4	8	35
	31.08	20.00	18.18	25.36
1	9	1	7	17

	12.16	5.00	15.91	12.32
2	15	4	11	30
	20.27	20.00	25.00	21.74
3	19	10	16	45
	25.68	50.00	36.36	32.61
4	8	1	2	11
	10.81	5.00	4.55	7.97
Total	74	20	44	138
	100.00	100.00	100.00	100.00

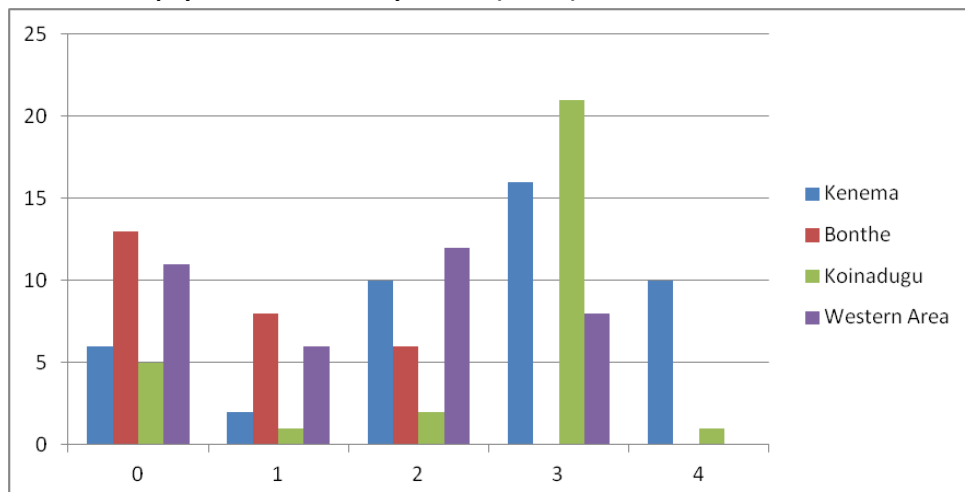
Pearson chi2(8) = 8.4775 Pr = 0.388

Figure 8 Number of PBF payments received, by profession (n=138)



Pearson chi2(24) = 81.8811 Pr = 0.000

Figure 9 Number of PBF payments received, by district (n=138)



Pearson chi2(12) = 66.4953 Pr = 0.000

The original question on PBF payments asked for the “amounts received in last 12 months”. To gain a quarterly average, we have summed all PBF payment amounts ever received and divided by four. For HWs that received less than 4 payments (0-3 payments), the missing

payments are considered as 0 Le. received and included in the average. When a payment was received but no information on amount provided, the observation was dropped. Outliers (individuals reporting more than 2,500,000 Leones) were also removed.

The results by cadres are shown in Table 10. Some cadres received nothing, which largely reflects the fact that they (doctors and registered nurses, for example) do not work at primary level.

Table 10 Average quarterly PBF payment (mean max min sd), by profession (n=110)

	Mean	Min	Max	Std. Err.	[95% Conf Interval]		n
Doctor							
CHO/CHA	219,693	-	544,250	51,864	107,648	331,738	14
RN	-	-	-				2
SECHN	75,333	-	738,250	28,557	17,233	133,434	34
EHO	75,000	50,000	87,500	12,500	21,217	128,783	3
MCHAide	192,386	-	782,500	28,366	135,181	249,591	44
EDCU Assist	92,972	-	238,750	30,805	21,935	164,010	9
LabTech	19,563	-	50,000	12,136	- 19,059	58,184	4
Pharmacist/PhTech							
							110

F=2.36; Prob>F = 0.0279

There are significant differences in the PBF amounts earned by district with HWs in Koinadougou receiving more than in other districts (Table 11).

Table 11: Average quarterly PBF payment, by district (n=110)

	Mean	Std. Err.	[95% Conf Interval]		N
Kenema	189,833	31,638	125,126	254,539	30
Bonthe	33,030	8,379	15,736	50,324	25
Koinadougou	260,326	50,564	154,851	365,802	21
Western Area	95,719	26,052	42,716	148,722	34
					110

F=9.36; Prob>F = 0.0000

There are no significant differences in the PBF amounts earned by type of PHU (F=1.76; Prob>F = 0.1773).

PBF has provided job satisfaction for the health workers as the amount they receive is based upon both individual and teamwork effort to achieve the PBF grading criteria and creates a conducive working environment for health workers, as the health facilities are maintained. It has also raised the awareness amongst health workers that they have to give improved quality of service over quantity of service users treated, as reported by one health worker. PBF was described as valuable and encouraging, having a positive impact on health workers

and the health system. It was also described as not forthcoming and appreciated but not enough when compared with the cost of living. Thus it was recommended that the government should do more to ensure that payments are made on time to keep the health workers dealing with the increased workload motivated.

'That was also a good motivation that would encourage people to work hard as the harder you work, the more money you will get. But again this is not forthcoming. People working hard for the whole of 2012 and have not received a single cent. It seems as if they are saying the DHMTs are receiving the monies but this is not being given to the health workers' (Male, Bonthé, IDI-2)

'The only way it helps you is to keep focus, because if you are having some additional money and then you are reducing the problems that are worrying you, you can have time to concentrate on the job. I think that's the main way it helps' (Male, Kenema, IDI-4)

'The PBF came in as sort of motivation to add more effort because it has some criteria that you have to meet before you get it, so it gave me the urge to put more effort to what I was doing than before...[.]...The PBF has helped a lot...[.]...It has created awareness among the health staff that they have the responsibility to improve the quality of the service they provide for the patient, because PBF all about...is not just about quantity of service provided it also looks at the quality of service you provide..[.]....so with that staff have become so conscious and are becoming aware of the fact that they have to improve the quality of service they are providing' (Male, Kenema, IDI-5)

'Before this time people used to pay, you know the pregnant women, the children under 5s and lactating mothers they are the clinic attendants. When they come before this time they used to pay Le10,000 per child, you see about 50 or 100 children or pregnant women it's good money; but now it is free, but government is saying they are going to compensate, it is not a pay per se but a compensation at least to serve as a motivating factor, but this PBF it is good anyway and it should continue but the only appeal is that it should be in time, it should be in time, no matter how little it is it should be in time, we will appreciate it' (Male, Koinadugu, IDI-11)

'Yes, some have doubled their efforts a bit, and some others only when they know the PBF is on the way that is the time you see them doing their work, doing what they are supposed to do, but we do encourage them to do what they are supposed to do, somewhat to go strictly by his or her job description, because I always tell them if you don't do this, you only will spoil the whole PBF, because if you are supposed to clean this area, when they come on supervision cleanliness is part of it, if you are supposed to have 7 just because the compound is dirty, the environment is dirty they subtract 3 then you

get 4, and you spoil everybody's effort, so it's like a teamwork, we have to work as a team if we want our PBF to swell up.' **(Male, Western Area, IDI-21)**

One health worker was not in receipt of PBF but reported that she was still committed to her job. In the provinces, PBF (first phase) is only paid to PHUs. Therefore, health workers stationed at referral hospitals not receiving PBF are demotivated as they deal with child and maternal referral cases from the PHUs.

I've not received my PBF but I am still working it has changed because I know as long as I am working I will receive my PBF' **(Female, Western Area, IDI-16)**

'Another issue for the hospitals becausewhen patients have been referred from the primary health care...[....]...we are the only referral hospital in district, so if we don't have this performance based it is so demotivating; ..[....]...nurses are always grumbling that the PHU are receiving this performance based and they are doing almost the same thing and we are, in fact, we are doing more than them because when they are tired they refer to us in the hospitals...[..]....so if they can advocate for us especially for the hospitals to have this performance based it will even motivate the nurses that are working surely for the free healthcare because sometimes when you call them for operation they will always say we are not receiving performance based allowances' **(Female, Koinadugu, IDI-9)**

PBF was described as valuable and encouraging, having a positive impact on both health workers and the health system. For instance, the 60% can be used to give TBAs incentives to motivate them and to help increase institutional deliveries. They can also pay porters and cleaners to help maintain cleanliness in the health facilities. It plays an important role in implementing government policy and reducing TBA births. Institutionalised deliveries have increased with a simultaneous decrease in TBA deliveries as service users and TBAs are more sensitised about institutional deliveries.

'The hospitals are cleaner; I don't know if you have gone to other hospitals, I mean I can boast my hospital is the cleanest hospital in the entire let me say country.....[....]...we decide as a hospital how the money is going to be used we have been putting most of that money 1. in hiring of volunteers, we have volunteers we are paying because we don't have enough staff, there is no staff here those porters, cleaners people in the kitchen you find they are not enough. We hire them and we pay them also on a quarterly basis, we pay them as and when we get PBF.' **(Male, Western Area, IDI-19)**

'....we motivate the traditional birth attendants to come and work with us. I take pride in working because those are the grass root people, if we are giving them something on quarterly basis it's like they are on salary, meaning they really appreciate it and it gives the chance for them to really take the government policy into practice [.....]to stop the

practice of home delivery [...] before this time people were not sensitized about their health, they didn't take advantage of the clinic that is been provided for them; we have tried to change that mentality...[...].... and also people believe that delivery should be done by the native people in the bushes, we've changes the dimension that delivery should be at the hospital, it has to be skilled, so as for the life of the mother and that of the foetus, the baby' (Male, Koinadugu, IDI-11)

It also serves as an effective means of enforcing discipline in the workplace, with regards to punctuality and dress code, free of political interference.

'So we introduced by-laws as to when we can punish or discipline you by taking some money from your PBF...[...]... by-laws say if you are supposed to be here at 8 o'clock and you don't come until after 9 o'clock we draw a red line there it means you have lost 10,000 Leone for that day; if you are supposed to be on night duty it's 20,000.....if it's on weekend you've lost 50,000 Leones...[...]....this is the way we punish people here because actually we don't have the power. If we say "You go home and don't come to work for one week" and this person whether it's a nurse or whatever will go home very happy because still at the end of the month he/she is going to the bank and collect a month's salary' (Male, Western Area, IDI-19)

It has also had a reported positive impact on record keeping in health facilities (a measured target in the PBF assessment).

'...like record keeping...[...]....at time when there was no PBF except you go and seat there you see somebody performing and not even recording it. So now they know the more they record the people and sometimes like family planning they go and give it at home but now they come with the patient here and they make sure they enter the data' (Female, Western Area, IDI-20)

As mentioned earlier, 40% of the PBF amount is used to improve the health facilities, making it attractive, in terms of drugs availability and repairs, and accessible to the increased traffic of service users.

'Yes greatly, because we have leaking roofs, we have repaired that, we have resurfaced the paint that was once used on that, buy some drugs, some syrups for under 5s and some basic drugs used by pregnant women, and they are coming, you know in Waterloo we have, there are other 7 PHUs surrounded at our own facility and like we are their main referral areas...[...]....so we receive quite a good number of them, they are coming, some do appreciate although others, when they are coming' (Male, Western Area, IDI-21)

Whilst PBF potentially adds to the overall income of the health facility, other policies were reported to have had an opposite health system effect. An example of this is the cost recovery system. One health worker reported that policies put in place from central government, presumably with regards to cost recovery drugs, need to be revised. In his opinion, cost recovery drugs are more expensive than pharmacy drugs and health facilities are expected to pay 100% back compared to 60% in the past. The remaining 40% was used to run the health facilities, including the payment of security staff who are not on the government payroll system. With the current policy implemented in 2012 whereby health facilities are expected to pay 100% back, no allowance is made for the security staff that play a vital role in safeguarding the health facilities and minimising theft of drugs.

'.....again we are operating on two categories of dispensary drugs: cost recovery and the other one free health care. But if you look at the cost of cost recovery drugs, most of them are far higher than even those in the pharmacies. So I mean, and what they are saying that we should pay 100% out of it. Formerly we use to pay 60%. The 40% we use for the clinic and that is what we even use to pay the porter, the security and so forth. And these people they are not on salaries, and we need their services because of drug theft....'
(Male, Bonthe, IDI-3)

Remote allowance

There is no documentary evidence on the effects of the Remote Area Allowance (RAA).

In the survey, only a few respondents (16% - 51) mentioned that they received a Remote Area Allowance at all. Of these, 22% (10) stated that they received it regularly, 71% (32) did not receive it regularly and 7% (3) did not know. There was no significant difference across the cadres. Due to difficulties of classifying areas, we cannot disaggregate by rural and urban health workers.

Health workers perceived the RAA to be a good initiative that could change the way they work, negating the need for a second income and enabling them to focus on the job. It could also serve as a means of motivating health workers to stay in post. However, a number of concerns were raised by health workers about the RAA, mainly about the irregularity of the payments. Some health workers reported not receiving any payment for a long period of time; one health worker was discouraged that his RAA has never been paid despite the fact that he is working in a rural area.

'That was one policy I was really happy about because when you look at the way it was rated, the more remote area you work in the more money you get, which will encourage

somebody to stay. But these monies are not forthcoming and this has started discouraging staff posted in remote areas' **(Male, Bonthe, IDI-2)**

'Well it's...the only way its help you is to keep focus, because if you are having some additional money and then you are reducing the problems that are worrying you, you can have time to concentrate on the job. I think that's the main way its helps' **(Male, Kenema, IDI-4)**

'Well some of them told me that they have been receiving some amount..[...]..... I feel discourage..[...]....Because I'm also up the provinces you see, whether its urban or rural as long as you are in a region you are up the provinces you should be included' **(Female, Kenema, IDI-9)**

Health workers in rural postings feel neglected by the government and call for this incentive policy to be revised, possibly with input from its beneficiaries. One reported that as there is often no electricity and water supply in these rural postings, regular receipt of RAA will help make meeting other expenses to improve their living conditions, such as buying a stand-by generator, affordable without digging into their salary.

'well some of the policies because they are not involving the end users, I think sometimes there are problems because if the end users are involved in the policy making process, the end users they will give input, they will give problems what and what to do so you see some of these policies if they involved end users those of us in the grassroots sometimes it will create an impact' **(Female, Koinadugu, IDI-9)**

' It worked once, for the entire 2011 and 2012 we only receive once...[...].....people need to do certain things, it's like people are neglecting their duty...[...].....People up there, because one thing about Government policy or things happening in the Ministry, people need to do something before something happens. If you have to do your work, somebody up there needs to do something but to another level, people are just neglecting it because perhaps it's not in their own favour, but once it is in national favour they need to do that so as to things to work up fine' **(Male, Koinadugu, IDI-11)**

'...because when I receive that one it will motivate me for now there is no electricity there is no water supply, so maybe if I receive that remote area allowance I will try to get a standby generator you know to improve my livelihood you see' **(Female, Koinadugu, IDI-9)**

Another reported that payments are not consistent and the payment system needs to be restructured, as junior staffs are in receipt of RAA with a higher monetary value compared

to senior staff within the same health facility. Health workers feel that they should be involved in the calculation system to have some insight and input into how RAA is disbursed.

Another issue raised by the health workers was that those working in cities, e.g. Kenema, are not considered to be working in rural areas. An example was given of a health worker from Freetown posted to Kenema and classified as not eligible to receive RAA; however this individual has family home to support in Freetown in addition to supporting himself at his posted location. He is on the same salary as other health workers, who only have one home to support.

*'Well they have a policy called rural posting, if they post you to the rural areas then they will give you some allowances, but what I understand under this rural posting is relative towards cities or non-cities. So if you are in Kenema, Kenema city is not considered a rural posting if you are posted from Freetown to Kenema but then the workers don't want to understand that; say I was in Freetown, I was born and breed there, I went to school there I studied there and now you are sending me to Kenema where I don t have any relatives and you do consider that a rural posting; that what the argument is saying. They said Kenema is a city, Makeni is a city, Bo is a city Freetown is a city. So if you are working in any of these area that's not a rural postings...[...].....Well I don't know am not sure because we are not benefiting from it. Now they consider rural if you posted from say to areas like Kailahun, Pujehun, Moyamba, that is what they will say is rural because they don't have a centralized electricity supply..[...].....Now they need to revisit these things. Why? Let's say somebody is coming from Freetown who has never been to the provinces and you send that person from Freetown to Kenema. If he is married maybe he is not coming with his wife....[.]...he has to keep two homes...[...].....the children are going to school in Freetown and he is here, he has to support them that they should be considered also. So I don't believe simply because you are living here you have a centralized power supply and water supply that does not make it a rural relative to Freetown' **(Male, Kenema, IDI-6)***

In this regard RAA should serve as both compensation and motivation, therefore it is recommended that the policy needs to be revisited and regularised to have its intended effect on health workers.

Changes in numbers, attrition and density

Data analysis on HRH data provided by the MoHS payroll department gives some insights into trends in staffing numbers over the past ten years (though see above for a discussion of the data limitations – this data should be interpreted lightly as it is not clear how complete it is).

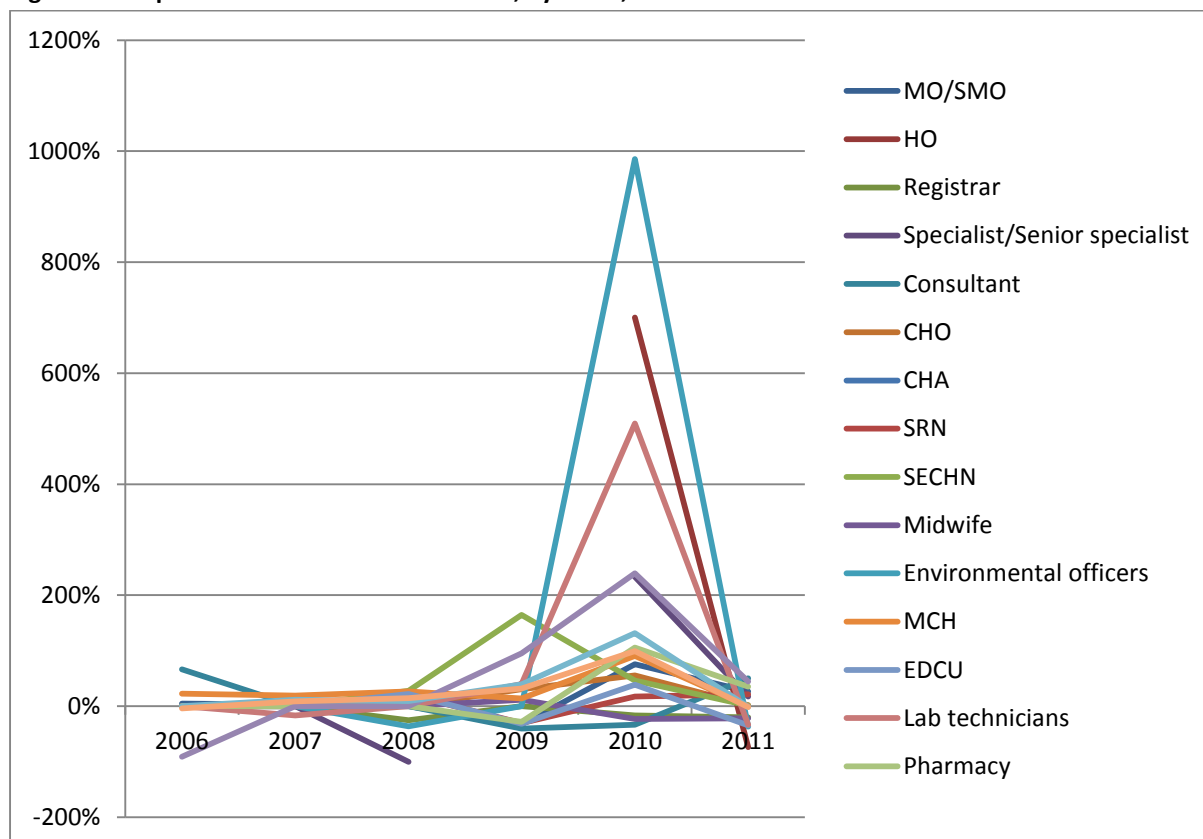
Table 12 indicates the proportionate change for the main health cadres over 2005-11. It suggests overall variability across cadres and years, but that 2010 saw a substantial leap in numbers (roughly doubling) compared to previous years. This is illustrated graphically in

Figure 10.

Table 12 Changes in staffing, by cadre, 2005-11

	Annual % change in filled posts					
	2006	2007	2008	2009	2010	2011
MO/SMO	5%	3%	0%	-33%	76%	27%
HO	-				700%	-74%
Registrar	0%	0%	-25%	0%	-17%	-20%
Specialist/Senior specialist	0%	0%	-100%		233%	18%
Consultant	67%	0%	0%	-40%	-33%	50%
CHO	0%	0%	0%	31%	55%	2%
CHA	-					24%
SRN	0%	0%	21%	-31%	17%	22%
SECHN	0%	0%	28%	165%	46%	1%
Midwife	0%	0%	0%	11%	-23%	-22%
Environmental officers	0%	0%	-36%	0%	986%	-37%
MCH	23%	19%	27%	14%	91%	0%
EDCU	0%	0%	22%	-32%	39%	-35%
Lab technicians	0%	-17%	0%	40%	510%	-34%
Pharmacy	0%	0%	0%	-28%	106%	35%
Pharmacy Technician	-91%	0%	0%	95%	240%	45%
Other	0%	12%	9%	39%	132%	-1%
TOTAL	-4%	9%	15%	32%	99%	-1%

Figure 10 Proportionate increases in numbers, by cadre, 2005-11



Overall staff numbers tripled from 3,017 in 2005 to 9,482 in 2010. However, some key cadres were still very limited in terms of absolute numbers. Medical officers increased from 62 in 2005 to 100 in 2011, which is still very few for the whole country (50% of established posts). There has been a large increase in SECHNs (from 274 in 2005 to 1372 in 2011), but much less so for registered nurses (who only grew from 227 to 271 over the same period). Midwives actually dropped over the period, from 70 in 2005 to 47 in 2011).

Attrition, which is a combination of resignations, retirement, transfers and other factors, is shown by cadre shown by cadre and year in

Table 13. Overall levels are high, but declined in the post-FHCI period. Again, there is considerable variation between cadres.

Table 13 Attrition by cadre and year, 2005-11

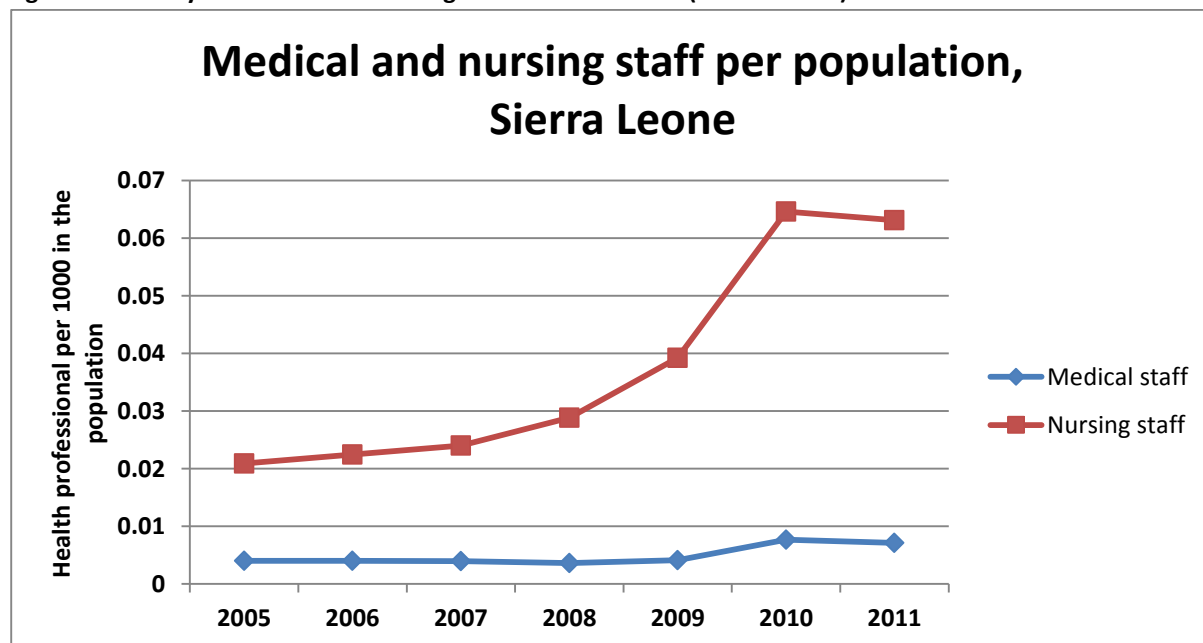
Cadre	2005	2006	2007	2008	2009	2010	2011	AVERAGE
MO/SMO	16%	9.2%	6%	15%	22%	13%	9%	13%
HO	N/A	N/A	N/A	N/A	22%	3%	11%	12%
Registrar	25%	12.5%	25%	50%	83%	40%	50%	41%
Specialist/Senior specialist	50%	33.3%	33%		50%	15%	15%	33%
Consultant	0%	0.0%	0%	60%	0%	0%	33%	13%
CHO	10%	5.8%	6%	10%	11%	5%	5%	7%
CHA					0%	0%	0%	0%

SRN	7%	5.7%	4%	6%	14%	8%	13%	8%
SECHN	11%	8.8%	7%	9%	5%	2%	4%	7%
Midwife	13%	12.9%	10%	13%	12%	48%		18%
Environmental officers	45%	45.5%	27%	71%		7%	8%	34%
MCH	6%	3.5%	2%	3%	4%	2%	3%	3%
EDCU	2%	2.4%	1%	4%	6%	2%	5%	3%
Lab technicians	39%	38.9%	40%	5%	86%	5%	13%	32%
Pharmacy	12%	12.0%	12%	20%	56%	8%	26%	21%
Pharmacy Technician	2%	27.3%	27%	3%	47%	4%	7%	17%
Other	3%	2.2%	2%	4%	3%	2%	2%	3%
Overall	16%	15%	13%	19%	26%	10%	13%	16%

Source: HR payroll department, MoHS

In relation to the population, the density of staffing remains low in Sierra Leone, but has improved over the past decade, particularly around the period of introduction of the FHCI. In Figure 11 we have created a broad grouping of cadres into nursing and medical staff. Nursing staff to population increased gradually, and accelerated in 2010 (65% increase that year, compared with 36% the year before). For medical staff, although the level is lower, the increase in ratios in 2010 was higher (86%, compared to 14% the year before).

Figure 11 Density of medical and nursing staff in Sierra Leone (2005 to 2011)



Note: For simplicity here, MO/SMO, HO, Registrars, Specialist/Senior Specialist, Consultant and CHO were classed as doctors. CHA, SRN, SECHN, Midwife, Environmental officers and

MCH were classed as nurses. Data was sourced from the Human Resources for Health Directorate at the Ministry of Health and Sanitation.

In interpreting these figures, we need to bear two caveats in mind. First, the data may not be complete and comprehensive. Secondly, as people were taken on to the payroll in 2010 who were already working as volunteers, some of the apparent increase that year was due to changes to the payroll rather than changes to actual numbers serving in the facilities. If we take the figure cited above as accurate for additions during payroll cleaning (1,000 added, according to Heywood, 2010), then roughly 20% of the new staff were volunteers who were added rather than new recruits.

The current situation of health workers

While there is no baseline (pre-FHCI) information on a number of the variables that would allow us to attribute change in any way to FHCI-related changes, the ReBUILD tools also provide some interesting insights into the current situation of the health workforce in Sierra Leone. This includes self-reported evidence from the survey on hours worked per week, number of patients seen, current amounts and sources of remuneration, and motivation. For full details, see Witter et al. (2014a).

Workload

The average number of hours reported worked per week across all respondents is 54 (CI: 51.5-56.4)¹¹ (Table 14), with significant differences across the professions. CHOs/CHAs report the highest mean. Some (e.g. the SECHNs) report very high maximums, which may reflect the fact of being on call and living near facilities.

Table 14 Number of hours worked per week by profession

	Mean	Min	Max	Std. Err.	[95% Conf Interval]		n
Doctor	63.9	48	84	4.929639	52.22	75.53	8
CHO/CHA	65.2	42	105	2.974275	59.15	71.26	34
RN	54.2	15	140	4.817565	44.20	64.13	24
SECHN	48.4	9	168	2.068727	44.26	52.47	96
EHO	51.4	40	77	3.251308	44.30	58.47	13
MCHAide	54.6	8	144	2.911434	48.71	60.46	43
EDCU Assist	58.5	46	112	5.047502	47.39	69.61	12
LabTech	56.3	9	160	5.262138	45.49	67.08	28
Pharmacist/PhTech	49.3	12	98	3.687889	41.58	57.02	20

¹¹ 24 responses were excluded as they were too high (more than 168 per week, which is impossible and may reflect poor comprehension of the question). Similarly, some appeared too low to be plausible. Analysis was done of all responses between 8 and 168 hours per week.

F = 2.76; Prob>F = 0.0042

The average number of patients seen across all the respondents who answered (n=177) was 117 per week (CI: 102.7-130.5) (Table 15). (i.e. about 19.43 per day in a 6-day week). Lab technicians and pharmacists report the highest numbers, but these are not consultations, rather provision of tests and prescriptions, which are less intensive, as reflected in their shorter working hours.

Table 15 Number of patients seen per week, by profession

	Mean	min	max	Sd
Doctor	109.6	5	210	82.6
CHO/CHA	117.5	50	420	95.0
RN	90.4	16	200	65.2
SECHN	107.9	5	480	101.3
EnvironHO				
MCHAide	117	50	345	70.6
EDCUAsst				
LabTech	190.1	50	350	94.6
Pharmacist/PhTech	177.4	14	432	165.5

F = 1.44; Prob>F = 0.2026

Remuneration

Salary

Respondents were asked about their last month's salary. The scale of differences between doctors and other cadres is striking (Table 16 and

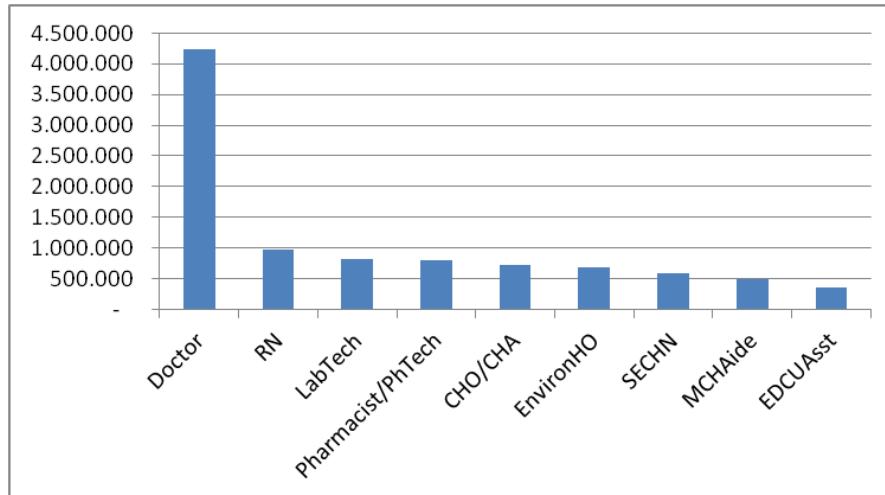
Figure 12).

Table 16 Salary received last month, by profession (mean, max, min, sd) (n=300)

CADRE	SALARY				N
	mean	max	Min	sd	
Doctor	4,237,830	9,100,000	2,399,000	2,061,578	10
CHO/CHA	730,250	900,000	480,000	98,306	40
RN	981,652	1,600,000	300,000	371,090	23
SECHN	588,837	780,000	250,000	93,991	98
EnvironHO	684,214	1,100,000	300,000	259,057	14
MCHAide	486,927	599,000	172,000	56,832	53
EDCUAsst	348,563	400,000	250,000	47,173	16
LabTech	819,643	2,300,000	325,000	304,544	28
Pharmacist/PhTech	805,944	1,300,000	584,000	156,614	18

F=92.31; F>Prob = 0.0000

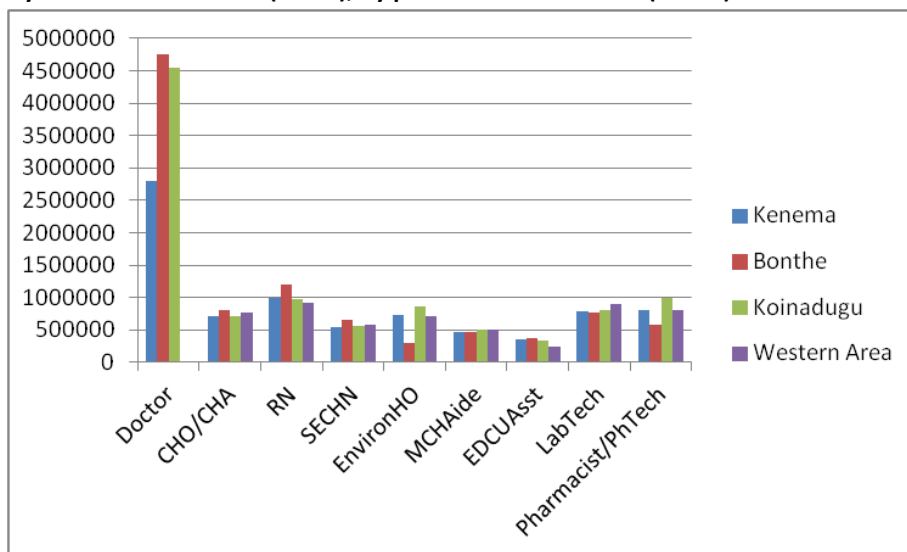
Figure 12 Salary received last month (mean), by profession



Differences across sector of employment were tested and found not to be significant. This may be because the staff sampled in PNFP facilities were seconded from the public sector and therefore on similar terms and conditions.

Some differences are observable across the districts, but this may reflect the different mix of seniority across these areas (Figure 13).

Figure 13 Salary received last month (mean), by profession and district (n=300)



Across the genders, women are significantly less well paid in general, though this is not significant when broken into different cadres, except for CHOs/CHAs, where women are paid significantly less (

Table 17).

Table 17 Salary received last month (mean), by profession and gender (n=300)

CADRE	GENDER	
	male	female
Doctor	4,741,572	3,062,433
CHO/CHA	754,781	632,125
RN	749,500	1,030,526
SECHN	608,875	584,927
EnvironHO	677,417	725,000
MCHAide	554,040	485,637
EDCUAsst	348,562	
LabTech	823,167	798,500
Pharmacist/PhTech	814,067	765,333

- Overall across cadres: p-value= 0.0042
- Doctor: p-value= 0.2607
- CHO/CHA: p-value=0.0009
- RN: p-value=0.1741
- SECHN: p-value= 0.3539
- EHO: p-value= 0.8208
- MCHA and ECDU Assist: only one male and only males, respectively
- Lab Tech: p-value=0.8841
- Pharmacist/Ph Tech: p-value= 0.6372

The majority of the respondents (94%) received their salary regularly. Only 2% did not and 4% did not know or reply. There was no difference between cadres and by type of employment.

Payments from user fees

Of the 312 respondents, 299 stated that they did not receive any payment from user fees, in the last month. Thirteen stated that they did receive a payment from user fees and stated the amount. These HWs are included in the analysis below (Table 18). The low number of observations may be due to the fact that user fee revenues are low at primary level and the sharing of user fee revenues is now discouraged by the Anti Corruption Commission (ACC) at hospital level. Since the introduction of its Service Delivery Charter, which is meant to encourage and support public institutions to become more transparent in their dealings with the public¹², all fees should now go to the consolidated fund of the facility.

Table 18 Payment from user fees received (min, max, mean, sd), by profession (n=13)

CADRE	PAYMENTS FROM USER FEES				
	mean	Max	Min	sd	N
Doctor	20,000	20,000	20,000		1

¹² <http://www.cottontreenews.org/health/3527-acc-unveils-service-delivery-charter-for-two-hospitals>

CHO/CHA	283,333	500,000	50,000	225,463	3
RN					
SECHN	90,000	150,000	30,000	84,853	2
Environ H Off					
MCHAide	30,000	40,000	20,000	8,165	4
EDCU Asst					
Lab Tech	32,500	60,000	5,000	38,891	2
Pharmacist/Ph tech	600,000	600,000	600,000		1
TOTAL					13

Other payments, such as gifts

Of the 312 respondents, 15 HWs stated that they received other payments beyond what was already reported (Table 19). These HWs are included in the analysis below.

Triangulating the information about what these payments are and who paid them, it emerges that these payments are mostly gifts from patients or parents (13 – 87%).

Table 19 Other payments received (min, max, mean, sd), by profession (n=15)

CADRE	OTHER PAYMENTS				N
	mean	max	Min	sd	
Doctor					
CHO/CHA	240,000	700,000	5,000	398,403	3
RN/Nurse or Midwife	5,000	5,000	5,000		1
SECHN/Nurse or Midwife	9,000	20,000	5,000	6,519	5
EnvironHOff					
MCHAide/Nurse Aide	4,000	7,000	1,000	4,243	2
EDCU Asst					
Lab Tech	100,000	100,000	100,000	100,000	1
Pharmacist/Ph tech	73,333	150,000	20,000	68,069	3

Total main income

Combining all sources of income linked to their main public sector job,

Table 20 shows the totals by profession.

Table 20 Total income from all sources (main employment) last month – min, max, mean by profession (n=310)

	Mean	Std. Err.	[95% Conf Interval]		N
Doctor	4,444,936	843,580	2,565,323	6,324,550	11
CHO/CHA	1,033,065	60,801	910,182	1,155,948	41
RN	1,157,320	168,073	810,435	1,504,205	25
SECHN	705,688	31,161	643,858	767,519	100
EHO	1,092,548	151,174	765,957	1,419,139	14
MCHAide	724,270	36,313	651,467	797,072	55
EDCU Assist	409,083	24,342	357,199	460,967	16
LabTech	999,667	110,659	772,614	1,226,719	28
Pharmacist/PhTech	793,850	77,319	632,019	955,682	20
					310

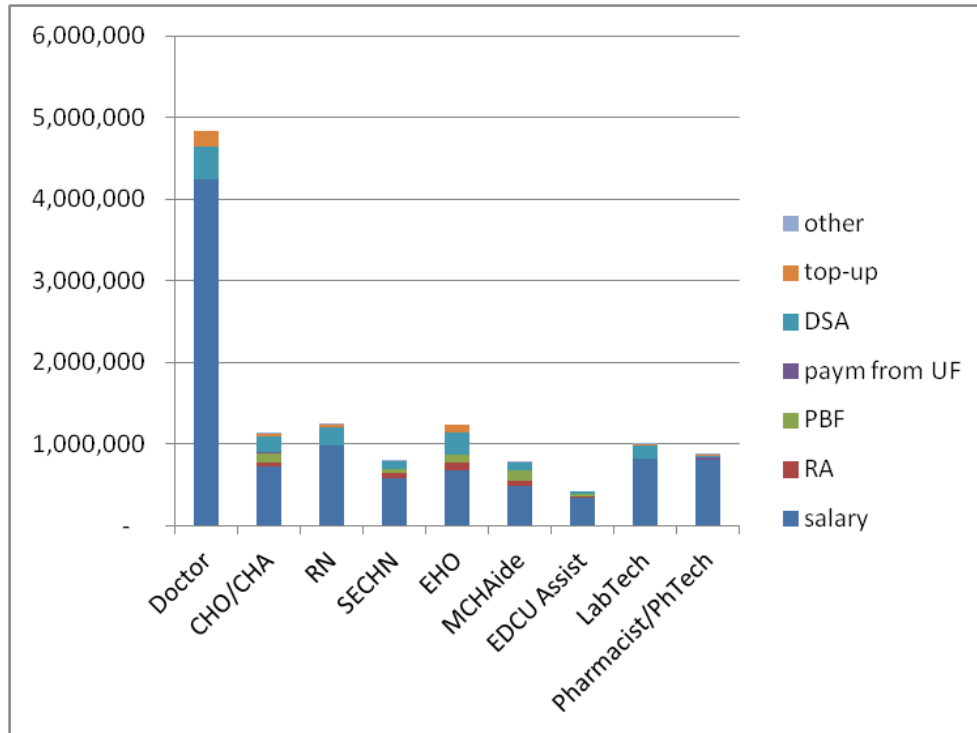
F = 43.20; Prob>F = 0.0000

Overall totals show the difference in scale of overall income, as well as the dominance of the salary element. Apart from additional funds from per diems, other sources constitute a small proportion of total public sector income (

Figure 14). It is likely that this pattern of salary dominance is one of the legacies of the FHCI, as reliance on informal payments was thought to be a key coping strategy of health workers prior to 2010.

There are no statistically significant differences in the income from main employment by district ($F = 1.03$; $\text{Prob}>F = 0.3814$), nor by type of facility ($F=1.17$; $\text{Prob}>F = 0.3225$). However, the difference in mean income from main employment is significant by gender (p -value = 0.0054), with women earning less than men (across the sample as a whole).

Figure 14 Bar chart with breakdown of sources of primary income, by profession (n=310)



The proportion of primary income from different sources is shown in

Table 21 and Figure 15. Salary represents 55% (EHOs) to 92% (pharmacists) of primary income. Per diems are the next most substantial source, ranging from 3% (pharmacists) to 21% (EHOs). Other top ups provide 0-8% of primary income. PBF payments provide 0-16%, remote allowance 0-8% and user fees 0-3%. The only payments that are received by all of the cadres sampled here are salaries and per diems.

Figure 15 Breakdown of sources of primary income, by profession

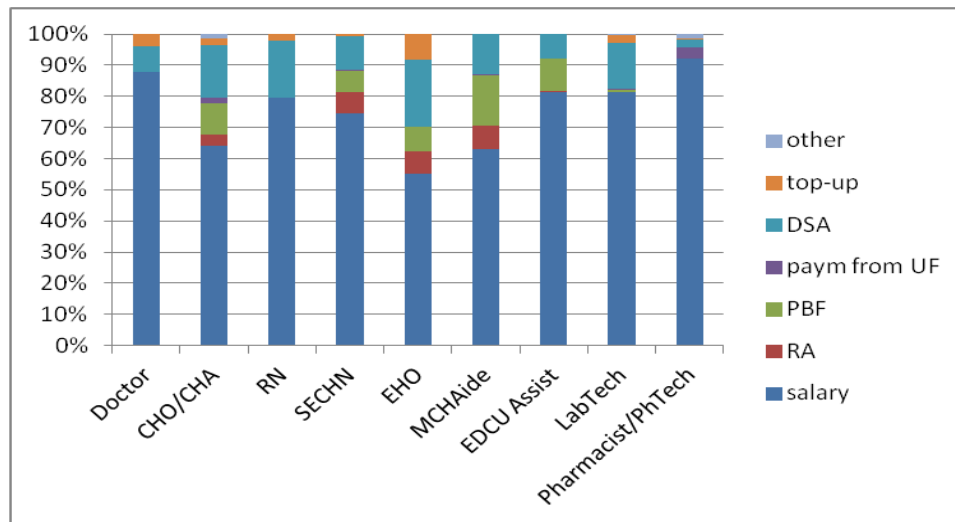


Table 21 Sources of primary income (% , by profession)

	salary	RA	PBF	paym from UF	DSA	top-up	other	Total
Doctor	88%	0%	0%	0%	8%	4%	0%	100%
CHO/CHA	64%	3%	10%	2%	17%	2%	2%	100%
RN	79%	0%	0%	0%	18%	2%	0%	100%
SECHN	74%	7%	7%	0%	11%	1%	0%	100%
EHO	55%	7%	8%	0%	21%	8%	0%	100%
MCHAide	63%	8%	16%	0%	13%	0%	0%	100%
EDCU Assist	81%	0%	10%	0%	8%	0%	0%	100%
LabTech	82%	0%	1%	0%	15%	2%	0%	100%
Pharmacist/PhTech	92%	0%	0%	3%	3%	1%	1%	100%

Although the survey intended to examine how overall income has changed in the last three years, the few observations for previous income meant that we could not analyse change meaningfully.

Outstanding challenges for HRH

The 2010 Performance Report showed progress on most objectives, in particular those relating to the preparation of policy documents, the fast-track recruitment and retention of HWs, and the motivation of HWs. Unfortunately, there have been no performance reviews since that date.

Table 22 Progress on 2010 targets of the HRH pillar of the NHSSP

Strategic objectives	Targets	Actual progress
Provide and maintain a policy and strategic framework to guide HR development and management	A comprehensive HRH policy in place that is in harmony with major HRH stakeholders and national policies by 2010	Partially achieved
	A revised HRH strategic plan in place that is based on flexible and sustainable HRH projections by 2010	Partially achieved (HRH strategic plan is being reviewed by the Directorate of HRH)
	Fast track the recruitment process and improve retention for HRH, including special packages for hard to reach areas	(Partially achieved) revised the salary structure of entire health workforce and subsequently scaled up recruitment for the implementation of the Free Health Care Initiative in 2010; remote area allowance to be implemented under the Global Fund project
	Develop and implement a comprehensive training plan	Not achieved
Strengthen institutional capacity for HR policy, planning and management	An integrated HRH information system as part of the HMIS in place whereby health managers at appropriate levels keep the HR inventory up-dated and maintained	Not achieved (only a scoping mission complete)
Enhance capacity and relevance for training	Strengthen the capacities of health worker training institutions/ programmes and	Partially achieved

of health workers, in partnership with other stakeholders	introduce accreditation schemes	
	Strengthen training management capacity at national and institutional levels in collaboration with partners in human resource development	Not achieved
Upgrade and enhance competencies and performance of health workers	Health worker motivation schemes, including defined career paths and incentive packages institutionalised at central level and all DHMTs	Partially achieved (Performance Based Financing established at primary health care level); health worker scheme of service has been developed but is yet to be finalized by HRMO
	Continuous training programmes introduced in various priority areas of work	Not achieved
	On-the-job training, mentoring and skills development schemes introduced and implementation commenced in all DHMTs	Partially achieved
Promote research into HRH interventions to provide evidence-based information for the improvement of service delivery	Establish functional partnership with research institutions and other relevant stakeholders	Not achieved

Source: Health Sector Performance Report, June 2010

This section focuses on the outstanding challenges that emerged from the research tools in relation to production, recruitment and deployment, distribution, remuneration/motivation and management of HRH. Some of those remain unaffected by the FHCI and are issues yet to be addressed.

Production and training challenges

Very few documents describe the HRH training situation before and during the conflict. A 2006 MoHS HRH document laments the lack of a coherent national human resource plan, which leads to training based on personal rather than corporate needs (MoHS, 2006 n.d.-a).

The HRH Country Profile, referring to the situation in 2011, reports that the Government of Sierra Leone (GoSL), through the Ministry of Education, Science and Technology and the MoHS, currently owns 7 of the 12 pre-service training schools. The largest school is the College of Medicine and Allied Health Sciences (COMAHS), which offers training across nine disciplines. Njala University College in the Southern Region focuses on four disciplines. The two universities belong to the Ministry of Education, Science and Technology. There are 4 private training institutions ran by the Christian Health Association of Sierra Leone (CHASL), focusing mainly on the production of state enrolled community health nurses (SECHN), while the private for profit sector has one school to train SECHN. In terms of geographical distribution, the highest concentration of schools is in the Western Area (5), while each of

the other three regions has two schools or more. Midwifery training is provided only in the Northern Region and the Western Area (AHWO, 2011).

Beyond the low availability and maldistribution of training institutions, there are some issues regarding the training curricula. Training for medical doctors and nurses is clinically-oriented, rather than focused on public health. Some experts have pointed out that community health nurses can address most of Africa's disease burden. Yet Sierra Leone continues to emphasise the training of diploma/degree-level nurses (registered nurse) rather than the community health nurse (enrolled nurse). The programme to become a registered nurse can take 3-4-years and is expensive whereas the training is shorter (2.5 years) and less expensive to become an enrolled nurse (ReBUILD, n.d.). The research done for the HRH Country Profile also showed that Ministry of Education, Science and Technology institutions, as well as private ones, do not discuss training targets for all disciplines of health staff with the MoHS. Instead, they set their own targets based on internal capacity. Until 2011, there was no central coordination of training and no unified effort to meet the workforce training needs of the country (AHWO, 2011). To make matters worse, students meeting the minimum requirements for admission into the health training institution, particularly for medicine, nursing and pharmacy, are few (MoHS presentation, 2012).

The key informant interviews suggested that training, and in particular pre-service training, had been overlooked to focus on the issues that were most compelling, but which also demanded less time to be addressed. Many respondents agreed that the rush to launch the FHCI focused on the quantity of HWs available, rather than providing training to improve their quality.

“Because of the free healthcare initiative, the focus was more on trying to get people to get access to health, the focus was on that. Now the tide is changing, because the focus is now on quality services, on the delivery of quality health service. And so again training becomes more permanent, so the climate is right to address these issues”.
(9006, line 90 – MoHS).

In recent years, more attention has been given to training and an HRH Training Policy and Plan is currently being developed. This is envisaged to focus initially on higher levels of training, specifically post-graduate training.

It is interesting to note that only one respondent explained how, before the FHCI period, nursing schools were set up in each of the districts. This was an important step to ensure the pre-service training of lower cadres of HWs.

“They shifted training schools out of Freetown, accrediting nursing schools up-country. This happened around 2005-6. There are now training schools in every district”. (8003, line 31 – MoHS).

Recruitment and deployment of health workers

Despite the policies and the important changes introduced in recent years to tackle these issues, the HRH situation remains dire. In 2011, the *HRH Country Profile* highlighted very high vacancy rates prevailing for health professional staff at MoHS (Table 21). Furthermore, the high vacancies seen in the technical grades also affect administrative staff, such as Hospital Managers (vacancy rate of 100%) and the Births and Deaths Registrar (82%) (AHWO, 2011)¹³.

Table 23 MoHS Health Professionals (2011)

Staff Category	Authorised	No. in-post	Vacancy Rate
Specialists (includes 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%

¹³ The *Sierra Leone HRH Country Profile* (AHWO, 2011) is a key reference for data on the current HRH situation, reporting important information including disaggregated by gender and age of HWs.

Source: Personnel Unit MOHS (October, 2011) cit. in (AHWO, 2011)

Note: the calculation of vacancy rates is based on 'staffing norms', i.e. how many HWs and which cadres are envisaged to work in each type of facility. Currently, such norms are based on the *Basic Package of Essential Health Services for Sierra Leone*, which provides guidelines on the staffing of some health facilities (MoHS, 2010: p. 21). Other documents presenting 'staffing norms' do not seem to be available. Therefore, it is not clear how vacancy rates were calculated before 2010.

In Sierra Leone recruitment of HWs is done centrally and the process involves a high degree of bureaucracy. Currently, applications are received by the MoHS at central level and are forwarded to the Human Resource Management Office (HRMO). HRMO then processes the applications and, if the applicants meet the minimum requirement for the job, it forwards them to the Public Service Commission (PSC), which then summons the applicants for interview. The PSC then sends back the results to HRMO and orders it to appoint the successful applicants. The HRMO informs the Department of HRH (DHRH) in the MoHS and the DHRH opens a file and deploys the new employee (AHWO, 2011; ReBUILD & COMAHS, 2012). Deployment is done centrally by a posting committee within the MoHS headed by the Chief Medical Officer (AHWO, 2011).

The recruitment process is lengthy (3-6 months) and the MoHS needs the approval of two bodies outside its control (i.e., the HRMO and the PSC). This delay in recruitment, as well as the fact that employment in the public sector is not guaranteed for all graduates, disincentivises HWs and can lead to young health professionals leaving Sierra Leone long before they are appointed (AHWO, 2011; ReBUILD & COMAHS, 2012).

Other HWs choose to work in facilities without a civil service contract and regular salary (i.e. as volunteers), in the hope of being eventually included on to the payroll and because of what they can earn (officially and unofficially) directly from patients (Ensor, Lievens, & Naylor, 2008). Changes to this centralized recruitment process were envisaged for 2012 with the creation of the Health Service Commission.

To increase the number of HWs in preparation for the FHCI, and ensure they were distributed equitably across the country, HWs were recruited locally through a mobile recruitment programme. However, this remained a one-off exercise.

At the same time, the establishment of a Health Service Commission (HSC) was planned to facilitate the routine recruitment of HWs. The HSC was supposed to replace the Public Service Commission (PSC) and Human Resources Management Office (HRMO) and deal with recruitment, deployment, career progression, leave, retirement, etc. The idea was that the

HSC would have a specific focus on workers in the health sector, rather than in the entire civil service, and would deal with recruitment and deployment more effectively. Despite the HSC being established by a Governmental Act in 2011 and the Commissioners being already nominated, the HSC appeared to be non-functional at the time of interview (March 2013).

“Yes, there were going to be a Health Service Commission. Ok, I have seen their new office on the outside, but I am not really sure they are really functional at the moment”. (9001, line 224 – NGO).

One of the respondents points out at how this is an example of the unfinished process in carrying out the necessary reforms to address the most pressing HRH challenges and issues.

“But reforms are still partial. For example, the HSC has been set up but there is no consensus what it will do.” (8002, line 40 – donor).

Another issue discussed was the centralisation of the recruitment process. Beyond the one-off mobile recruitment programme, HRH recruitment and deployment remained a highly centralised procedure. This was despite the ongoing devolution process that should have seen some of these functions devolved to DHMTs or Councils.

“Recruitment was very centralised and slow: after training, people filled in PSC forms. The MoHS endorsed them and they were sent to the HRMO for appointment. However, appointments depended on vacancies and budgets and often took time. Individuals were posted, rather than having any choice in where they went.” (8001, line 19 – MoHS).

“In terms of recruitment, the bottleneck there is [that] recruitment was centralised. And now with the devolution, the district councils are supposed to also be involved in recruitment, but as far as I know recruitment is still it's centrally placed. [...] That's another serious issue in terms of the Human Resource at district and central level: the communication between central level the district level. Sometimes the District Medical Officers, they just see a group of health workers being sent to them with a list that these are the ones that are coming to work [...]. The postings committee is seated here [in Freetown]”. (9007, line 680 – donor).

The centralisation of the HRH management means district level staff are unable to see the geographical distribution of HWs to their districts or make decisions on HW deployment.

“I believe we have a Postings Committee in Freetown, that is in the Ministry of Health. I believe this posting committee consists of several expats who sit there and work on

the staffing situation together with Human Resource Management and then they will make their decisions etc. [Interviewer: are you a member of that postings committee?]. I wish I were but I am not". (7001, line 70 – MoHS district level).

"I am not directly involved in staff and recruitment. I only get staff that is posted to me. I am not even a part of the recruitment team. [...] Hmm (laughs). It is strange, it is a strange process, [...] you don't hire and you cannot fire. So that has many implications from staff discipline, staff commitment you know. [...] They do the postings from head office, from Ministry of Health and they don't even seek your opinion. That too is not right, especially if you have a worker that is helpful, and then that worker is suddenly withdrawn and sent elsewhere and then someone that is not as competent as that person is brought in to take his or her place. You find such situations quite difficult to cope with". (7002, line 32 – MoHS district level).

The in-depth interviews with health workers also found that the recruitment process for health workers in Sierra Leone was too centralised and sometimes caused inordinate delays, allowing local managers no role in staff selection and performance management. One respondent had to offer a bribe to fast track his Public Service Commission (PSC) application.

'..... let me start first the recruitment process because we are not responsible for training and recruiting some of the nurses and even the health workers so that is a problem because since we are not recruiting and we are not doing the postings we have a lot of challenges because now these nurses when they are posted in the hospitals they don't really report for duty so as the Matron even taking care of the hospitals sometimes it's a problem like, like for instance in budget if we are involved in the initial preparation of budgets but the final drafts and even sometimes the implementation is a problem so as the Matron these are some of the problems. Even some of the cleaning of the hospital for instance in some hospitals it was devolved, I mean it was contracted to some of these cleaning agency and the Matron and even the medical superintendent even some of the hospital management is not directly involved in some of this activity so see those are some of the problems' (Female, Koinadugu, IDI-9)

'I made the application.....the forms were there for over a year; I am sorry but what I am telling you is a reality. Then somebody told me if you are going to leave this form there then I will not be employed. I came about once or twice and when you come down in Freetown I was determined I should be interviewed. In 2007 I was determined that I must be interviewed.....I had to bribe 300,000 Leones so that I could get an interview with the PSC' (Male, Koinadugu, IDI-12)

The ReBUILD report recommended that this should be addressed as part of the establishment of the new Health Service Commission, whose mandate is to recruit

human resource for health. Decentralisation of the process might also reduce the time that is currently taken to engage new staff, something that causes demotivation and attrition (Wurie & Witter, 2014). The issue of controlling political interference was also raised by health workers, which may be addressed through the new Health Service Commission, but also requires organisational culture changes of a broader nature.

Distribution challenges

No information is available on the geographical distribution of the HWs before 2010-2011. Recent data reveals that the deployment of HWs, which is under the control of MoHS at central level, is highly skewed to urban areas, particularly towards the capital Freetown in the Western region (Table 24). Concentration curves and indices for HWs in the public, private and NGO sector confirm this skewed distribution. The exception to this is the NGO sector where staff distribution appears to be more equal, reflecting the strong rural presence of NGOs (Newlands, Ensor, & McPake, 2011). As a consequence, the availability of higher level professional health cadres outside of the Western Area is extremely low and the health system has to rely on maternal and child health (MCH) aides for the delivery of reproductive, maternal and newborn healthcare. These staff are not considered skilled birth attendants according to international standards (Oyerinde et al., 2011 cit. in Newlands et al., 2011).

Table 24 Distribution of publicly-employed medical officers (2011) and SRNs (2010)

District	Population (2011)	MOs (2011)	MOs/ 100,000 pop.	SRNs (2010)	SRNs/ 100,000 pop
Kambia	433,203	2	0.46	2	0.46
Koinadugu	612,276	3	0.49	6	0.98
Pujehun	608,730	3	0.49	3	0.49
Port Loko	404,244	2	0.49	7	1.73
Bombali	518,307	3	0.58	7	1.35
Moyamba	317,958	2	0.63	3	0.94
Kailahun	314,412	2	0.64	3	0.95
Tonkolili	312,048	2	0.64	1	0.32
Kenema	461,571	3	0.65	4	0.87
Kono	256,494	2	0.78	3	1.17
Bo	300,228	3	1	9	3
Bonthe	156,615	3	1.92	0	0
Western	1,219,233	24	1.97	109	8.94
Total	5,910,000	54	0.91	157	2.66

Source: (Newlands et al., 2011)

Incentives (non-financial and financial)

Although much attention has been given to providing financial incentives to motivate and retain HWs (including salary increase, PBF bonus, remote allowance), respondents felt non-financial incentives have been overlooked. It is important to note that it was mainly NGOs and respondents at district level, i.e. those who work more closely to HWs, who raised this issue.

One NGO conducted a survey into non-financial incentives for HWs. They found that HWs are generally demotivated, unsatisfied with their own quality of work, and that 'relationships' are key to influencing performance and job satisfaction.

"So you can see from these statistics that [the HWs] are not feeling very good about their jobs. Most of them are just really unsatisfied, which does not come as a surprise. [...] This is about recognition and respect. They [the HWs] are not feeling respected by their supervisors, they are not feeling respected by their communities, so you are getting a picture that they are pretty unhappy. But what's really interesting is that they also have really negative assessments of their own performance. So when asked, can they provide high quality of care?, almost all of them are saying 'no' or 'rarely'. Can they use their abilities and skills to do their job well? 'No' or 'rarely'. Are they punctual? they say, 'rarely'. These are all the common things that people say about health worker, that they don't come on time or they don't give me a good quality of care. But health workers themselves are feeling very negatively about what they are doing" (9015, line 49 – NGO).

The NGO is now implementing two projects; one to facilitate peer-to-peer support of HWs and another to provide counselling and training to HWs to help them cope with any problems in their professional life. The impact of these projects is still being evaluated. A third project, which involved organising a competition among PHU staff, has also been implemented in some chiefdoms. Initial results show that the provision of a non-financial award to the successful PHUs contributed to the staff feeling supported and valued for their work. These projects remain at pilot program-scale and it is not clear whether they will be included under the official policies of the MoHS.

Respondents also pointed out the poor conditions of service, such as transport, housing and other benefits for HWs and their families, especially for those working in remote areas. Many suggested these factors cannot be simply replaced by a remote allowance to complement the salary, but need to be addressed in a more comprehensive way.

"I mean, the remote allowance is a nice idea but it will not solve everything. Why does someone not want to work in a remote rural area? There are many reasons. It's not

accessible, you have a problem with transport, but also there is no staff quarter, yeah. A lot of those places there is no proper place, there is no school for your children, there are no shops, ...” (9001, line 526 – NGO).

Finally, another area that has been insufficiently addressed is that of career progression.

“I believe we need to be fair and transparent. Tell them opportunities that are available, future developments programmes, etc. Because, you see, if somebody is sitting at one level for ages and is not growing professionally, they stay put, they give up and they become disgruntled with everything themselves inclusive” (7001, line 742 – MoHS district level).

“Good salaries should form a part of the package but that is not the whole answer. A salary which is in line with your competences, yes, but that is not all that the worker needs to be happy and to be satisfied and that is not all you need to retain a worker. They should have a career path to advance themselves to increase their knowledge, to be promoted and so on” (7002, line 378 – MoHS district level).

These remaining HRH challenges emerged clearly from the interviews and demonstrate how these reforms remain incomplete. After the launch of the FHCI, the momentum for reforms was reduced. Some policies affecting HWs were introduced (e.g. PBF and remote allowance), but they were not effective in their implementation. The adoption and implementation of other measures to address the remaining issues slowed down or entirely stalled.

Recommendations arising from the health worker interviews reinforced these findings from the key informant interviews, and included the following:

1. A full package of measures should be introduced to address the rural/urban divide for health staff. These should go beyond the currently erratic RAA to include: specific tours of duty (e.g. two years), which are respected; preferential training access for those who are working in rural areas; and provision of housing close to facilities (especially for female staff, for security reasons)
2. Routes into the medical profession for those of low income should be encouraged as it is likely that these staff, especially if mid-level, will more easily be retained in rural areas.
3. The development of a career structure with options for progression in pay and responsibility for CHOs should be developed (e.g. through the Scheme of Service which is currently being developed for Health Workers in Sierra Leone).
4. The PBF scheme should be reformed so that payments are regular (monthly, rather than quarterly), paid on time, and transparent. It was clear that as well as the financial top-up, health workers appreciated getting feedback on their work in the form of an

appraisal system, and a way of providing this in a supportive way should be built into the PBF process.

5. The RAA should be reviewed to establish the additional costs of living and working in rural areas. It is not just a motivation scheme but also needs to cover the extra costs which health workers face. Greater involvement in its design would also ensure that health workers understand how it is meant to operate.

HRH management challenges

Until 2011, the MoHS had a department for human resources that was in charge of dealing with all issues relating to HRH. The limited capacity within the MoHS to deal with HWs challenges limited the effectiveness of the HRH function (AHWO, 2011). In 2011, the HRH unit was upgraded to a directorate (AHWO, 2011; MoHS, 2012a). However, despite the restructuring that took place to strengthen it, most HRH policies come from the HRMO in collaboration with the Public Service Commission, with the DHRH operating as an implementation unit with limited input into the MoHS's strategic planning process (AHWO, 2011).

While there is a decentralisation process in place, at district level there is no HRH unit and the personnel administration is left to the general clerks. HRMO is the only body with the authority to terminate contracts (others can only recommend it). Councils are not responsible for paying HWs. They can at most recommend them for promotion (AHWO, 2011).

Discussion

The story of the FHCi in Sierra Leone and its impact on human resources for health is an interesting one, which contrasts with the wider literature on user fee removal and HRH. Most studies to date in other countries point to a variety of issues which have arisen, including lack of consultation with staff about fee removal policies, lack of compensation to staff for the increase in workload which they usually face, and general lack of linkage between health financing (user fee) and HRH policy-making (McPake, Witter S., Ensor, Fustukian, Newlands, & Martineau 2013; Witter, Kusi, & Aikins 2007). Evaluations have generally found staff supportive of the fee removal policies in principle, while also resentful in some cases of being 'taken for granted' by users who now expect all services to be fully free. A realist evaluation in four countries examined the way in which staff and managers adapt or adopt fee removal policies, dependent on their context and room for manoeuvre (Witter et al. 2014b).

Sierra Leone started from a difficult position when the FHCI was announced in 2009. The health system was still weak from the war that ended only in 2002 and most of the basic building blocks, such as adequate staffing, were absent. Perhaps because of this weaker starting position, a much more holistic approach was adopted, which saw the need to address critical weaknesses in the health system pillars prior to the launch of the FHCI in April 2010. A combination of political momentum, donor buy-in and deployment of rapid technical assistance worked to bring in a series of major changes for health staff (Bertone, Samai, Edem-Hotah, & Witter S. 2014b), which were not just one-off but continued to be rolled out over 2010-12. The closest parallel may be the abolition of user fees in Uganda in 2001, when staff salaries were raised in tandem and drug supply systems improved (Nabyongo et al. 2008). However, the FHCI in Sierra Leone led to an even more systematic attempt to address health system barriers, including innovative use of civil society monitors at facility level (something which was not always welcomed by staff, who commented in in-depth interviews on the difficulty of being monitored by untrained community workers).

This does not mean that the FHCI was able to address all HRH (or other health system) challenges effectively. It was introduced at speed and reforms were prioritised. Removing 'ghost workers' and conducting a rapid recruitment exercise, raising salaries and bringing in a system to ensure that staff were actually at work were the top priorities, and the evidence suggests that these were done with some effectiveness. Providing small flexible resources and incentives to focus on essential services at the primary level, as well as support for those working in rural areas, came next. At the time of writing, these policies were less effective, with payment to health workers for the PBF and RAA scheme limited, erratic and poorly understood by the health staff themselves. More generally, there is a sense of the wave of reforms stalling, with some more long-standing issues, such as improving and decentralising the recruitment, deployment and management of HRH still unresolved. This report also highlights ongoing challenges (ones which predated the FHCI and still remain to be addressed), such as lack of certain cadres, unequal distribution of staffing across districts, the need for a revised training policy, and for a more systematic package of financial and non-financial incentives, especially for those working in rural areas.

The study faced a number of limitations. For a number of variables (such as distribution and absenteeism), data and documents were absent, particularly for the pre-FHCI period. Amongst its other impacts, the FHCI helped to bring in better monitoring systems, which is helpful for the period since 2010 but limits judgements in relation to changes before and after the FHCI. Some areas that are harder to measure, such as measures of technical quality of care provided by health staff are lacking, both before and after the FHCI. Informal payments, which were known anecdotally to be a significant coping strategy before the FHCI, are thought to be reduced, but this requires more in-depth study to confirm.

The study's strength is that it is able to triangulate information and opinions from official documents, key informants, routine data and health workers (using both survey and in-depth interviews). This gives a very well-rounded picture. Moreover, as the study was focused on changes to health workers' incentives post-conflict in Sierra Leone (not specifically on the FHCI), it is able to set the changes brought about by the FHCI in context and also highlight the current situation and challenges faced by health staff.

The biggest changes for health workers in the health system post-conflict, according to our in-depth interviews, have been decentralisation, improvements in the primary health system, and gradually improving working conditions, most especially affected by the FHCI in 2010. They see the FHCI as having increased their workload but also produced investments in facilities and services, even if these are sometimes under strain with the new demands.

Staff were articulate on some policies, but were less aware (unsurprisingly) about higher level changes, such as the payroll cleaning, the performance management contracts and the creation of the HSC. In relation to financial incentives, salaries are clearly the most important and reliable element, and the recent substantial pay increase is appreciated, though there is still a sense that it is not adequate in relation to the cost of living. Other allowances are woeful in terms of reliability and regularity. The rural area allowance and PBF payments are not received regularly by health workers. The PBF programme has the potential to give them a sense of accomplishment but requires changes to its design and regularity to enable this to be realised. Private business is an important source of supplementary income in Western Region. In rural areas, some reported gifts as being a significant part of their coping strategies.

Conclusions

The FHCI has had a major effect on health workers in Sierra Leone, triggering a series of reforms that significantly changed their number, pay and attendance. It also increased their workload, though this has yet to be quantified given the problems with the health information system. Overall, motivation has improved, though there remain tensions between different cadres (higher level staff benefited more than lower level staff) as well as a demand for a more consistent package of financial and non-financial incentives, particularly in rural areas.

The health system remains weak, and long-standing needs for more decentralised recruitment and management, for example, remain to be addressed. The momentum of the 'big bang' of FHCI, which brought together high-level political will and donor support (reconciling divergent agendas under the pressure of an agreed urgent priority) was effective for a period, but now risks slowing down.

The FHCI experience showed what can be achieved when user fee removal is tackled in a more wholesale way, identifying and addressing the health system 'blocks' which need to be functioning effectively for the reform to work. However, sustaining and extending the gains is the current challenge – not only in terms of the number of staff still needed, but also their distribution and ensuring that they are enabled to work effectively and to provide high quality care for all.

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