



Results-Based Financing for Health (RBF)

Identifying Indicators for Performance-Based Contracting (PBC) is Key: The Case of Liberia

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1. Introduction

Ministries of Health and development agencies in a number of post-conflict countries have adopted Performance Based Contracting (PBC). This approach, whereby government contracts Non Government Organizations (NGO) to deliver health services, was initially tested in Cambodia^{i, ii} and was subsequently implemented in fragile settings, including Haitiⁱⁱⁱ and Afghanistan^{iv, v}. Liberia has recently adopted a PBC model, similar to that of Cambodia¹, which contracts NGOs to manage and support Ministry of Health and Social Welfare (MOHSW) health facilities but with the additional aim of building the MOHSW capacity in the process.

PBC rewards the contracted party upon achievement or progress towards pre-agreed targets with either financial or non-financial (e.g., attending training) incentives. When performance has not improved, the contracted party may be sanctioned; for example, the contract may not be extended or a portion of the fee (i.e., payment and/or bonus as incentive) may be withheld.^{vi} Intended results, such as improvements in health worker performance and subsequently health outcomes, are to be attained in PBC through the use of incentives to motivate and/or change the behavior of key actors (i.e., the NGO and/or the service provider). To bring about change it is essential that incentives be directed to the service provider and/or beneficiary level.^{vii} This trickling down of incentives to providers was found to be especially important in the case of management contracting in Cambodia.^{viii}

As PBC focuses on results, the identification and selection of indicators is vital. Indicators can be defined as “a set of key measures that help you define and track progress towards your objectives”^{ix}. Using indicators for monitoring projects or health systems development is not new; attaching a reward and/or sanction to their attainment, however, is new. Identifying performance indicators for PBC and setting targets, which will form the basis of pay, requires serious and sometimes protracted deliberations. This case study describes the rationale and the process followed in selecting indicators for the PBC of NGOs through the Rebuilding Basic Health Services (RBHS) project in Liberia. As such, the report endeavors to make a contribution to lessons learned about PBC design and implementation. The

¹ The two models tested were (i) whereby NGOs are responsible for management as well as the delivery of services- and (ii) whereby NGOs were responsible for the management of the service delivery while inputs (including staff and supplies) were provided by the MOH. In this case study, the latter form of contracting will be referred to as ‘management contracting’.

process of identifying indicators for PBC is not only a technical process but also a political one due to competing priorities of stakeholders, and time constraints.

2. Addressing multiple objectives through PBC in Liberia

Fourteen years of conflict in Liberia, which ended in 2003, resulted in about 75% of the health services being provided by relief organizations as the government health system was no longer fully functional.^x Some important health outcomes also worsened, with a maternal mortality ratio that is now amongst the highest in the world at 994 deaths per 100,000 births.^{xi} To help ameliorate these conditions, NGOs are needed to continue to support facilities and improve the availability and quality of the MOHSW's Basic Package of Health Services (BPHS). In early 2007, the MOHSW requested donors to continue funding NGOs, as their imminent departure would have created major gaps because of insufficient capacity at the Ministry.^{xii}

The MOHSW's 2008 'Policy on Contracting'^{xiii} aims to maintain and improve access to, and quality of, the MOHSW approved BPHS package. Moreover, it aims to "leverage partner capacity to prepare the County Health Teams to resume management of health facilities and the workforce"^{xiv}. The MOHSW views the contracting of NGOs as a means to facilitate the transition from relief to development by improving the management of, and collaboration with, the County Health Teams (CHTs) responsible for managing health services in their respective Counties². The capacity of CHTs is to be developed, in part, through the PBCs with the NGOs. The performance based contracts with NGOs, and the selected performance indicators contained therein, therefore needed to reflect this multiplicity of objectives.

Rebuilding Basic Health Services (RBHS) is a 5-year project funded by United States Agency for International Development (USAID) and implemented by JSI Research & Training Institute, Inc. (JSI) and its partners JHPIEGO, the John Hopkins University Center for Community Programs (CCP), and Management Sciences for Health (MSH). A major component of RBHS is to support the MOHSW in increasing access to quality basic health services and strengthening the decentralized management of the health system through PBC of NGOs in seven counties. In February-March 2009 an RBHS Request for Proposals (RFP)^{xv} was developed to contract NGOs to provide management support to 105 health

² There are 15 counties in Liberia, which are subdivided into districts

facilities. These contracts are performance based. The primary role of the contracted NGOs is to contribute to improving BPHS access through the following three objectives:

1. *Ensuring delivery of evidence-based BPHS services*
2. *Expansion of selected BPHS services to communities*
3. *Strengthening the capacity of County Health Teams to manage a decentralized health system*

RBHS introduction of performance-based contracting and the ongoing involvement of the MOHSW (particularly the MOHSW Performance Based Financing working group) in this process are intended to contribute to lessons learned for the MOHSW's own performance based contracts. The MOHSW, funded through a Pool Fund (with donors such as the Department For International Development (DFID) and Irish Aid), intended to follow a similar PBC approach in October 2009 for NGOs to provide continued support to 46 additional health facilities, and released their own RFP in July 2009.

3. Selecting performance indicators--an iterative process

In selecting indicators for the PBC, several lessons learned from other experiences were taken into account. Eichler and De in their 'Pay for Performance Blueprint' stress the importance of the following technical considerations: (i) indicators must be relevant in that they should relate to the priorities and objectives set; (ii) the outcome of each of the selected indicators should be within the influence of the implementing organization; (iii) indicators must be feasible to measure and verifiable; (iv) the number of indicators needs to be well balanced as focusing attention on one area may result in neglect to other areas while too many indicators may make verification complex.^{xvi} In addition, it has been suggested that merely focusing on quantity indicators can compromise the quality of services. Indicators that measure the *conditions* needed to provide quality care (e.g., the availability of equipment) alone do not necessarily address the quality of the *actual* care provided or the consumer's perception of quality, which requires verification at the demand side or community level.^{xvii}

The identification of performance indicators in Liberia paid attention to the afore-mentioned considerations. The different activities carried out during the indicator selection process did not unfold in a linear sequence; rather, it was a continuous and iterative process (Figure 1) with the findings of certain activities (i.e., consultation with NGOs) informing other activities (i.e., Scope of Work of NGOs).

Figure 1: The PBC indicator selection process in Liberia



As a first step, RBHS reporting requirements³ to the donor were considered. This resulted in a list of 21 'potential' PBC indicators related to the provision of the MOHSW's BPHS, which the contracted NGOs would be responsible to collect and report. A review of existing

³ As part of the cooperative agreement awarded to JSI and partners to carry out the RBHS project, they are required to report to USAID twice a year on a set of standard indicators which is used to report back to the United States Congress.

information systems was undertaken to minimize the need to set up new monitoring systems. Similarly, consideration was given to indicators the MOHSW identified as priorities, such as the MOHSW draft national list of 37 core indicators and those in relevant County Health Plans in order to appreciate monitoring priorities at that level. To ensure a clear understanding of the responsibilities of the contracted NGOs, the SoW was drafted concurrently and informed the review and assessment of potential PBC indicators.⁴

Meetings were held with both a local NGO and an international NGO which were currently providing management support to health facilities to gain insight into the indicators they believed they were able to influence and to understand their data collection processes. The importance of MOHSW involvement in the decision making was recognized; and discussions were held with the Performance Based Financing working group of the MOHSW to review performance indicators at the initial stage. Different perceptions on the appropriateness of indicators were debated. Where further information was felt to be necessary, specific meetings were held with staff from MOHSW programs (i.e., National Malaria Control Program) and with external partners, such as the Clinton Foundation, which had recently led the implementation of the national BPHS Accreditation Survey. These draft indicators were then presented to both Deputy Ministers of Health. Both were in agreement with the proposed indicators and highlighted the importance of including certain indicators, such as HMIS reporting. This process resulted in a list of 16 proposed performance indicators.

RBHS determined that the number of performance indicators for Year 1 be limited to allow for sufficient monitoring and verification, to allow NGOs to get used to PBC, and for capacity building in data collection. For that reason, a final list of 12 performance indicators⁵ was selected for the first year (See Figure 1). It was agreed that these indicators could be amended over time. In addition, 15 monitoring indicators not directly linked to incentives are being reported by the contracted NGOs (See Figure 1). This final list of 27 indicators provides a comprehensive overview of the health services provided and was reviewed by the donor prior to release of the RFP. Data collected on these indicators will enable RBHS to monitor the activities carried out by the contracted NGOs, and enable identification of any potential unintended outcomes, such as more attention being paid to indicators that are incentivized at the expense of those that are not.

⁴ Developing the Scope of Work was important as NGOs in Liberia do not directly deliver the health services but instead provide management support to MOHSW health facilities which deliver the services. Consequently, not everything is under the control of the NGOs, such as the management (e.g., hiring and firing) of MOHSW employed staff or the provision of certain supplies, such as Insecticide Treated Nets (ITNs).

⁵ The 4 indicators that were omitted as performance indicators are still being reported on by the contracted NGOs as monitoring indicators

The indicator selection process occurred incrementally, with certain indicators being added or omitted as more information became available. In addition, the priorities of different actors, such as the donor and MOHSW, had to be taken into consideration. The intention to harmonize with existing monitoring systems added another layer of complexity to the selection process. Moreover, the project was under significant time constraints because the NGOs responsible for support to the 105 health facilities in the seven counties were running on transition grants scheduled to expire in two months time. For that reason, the RFP had to be developed and proposals received, reviewed and funded in only a few weeks. Consultation with NGOs was kept to a minimum to ensure that they would not be favored in view of the upcoming release of the RFP. While involvement of the CHT's in the indicator selection process would have strengthened their understanding and contribution to the PBC, this could not be accomplished because of time constraints.

4. Rationale for indicator selection

Performance-based indicators and monitoring indicators were selected for the PBC. The performance indicators of the NGOs are linked to an annual bonus payment or are required for the release of quarterly funds from RBHS to the contracted NGO. The monitoring indicators, while not linked to payment, are important as an NGO's contract extension will depend on performance, which will be evaluated by reviewing both monitoring and performance indicators.

Every potential indicator related to the health priorities was reviewed to assess the extent to which it was under the control of the NGOs, might result in unintended outcomes if "incentivized", was feasible to measure reliably, *and* could be validated at a reasonable expense.

This section describes the rationale for the selection or rejection of indicators, and the reasoning for becoming a monitoring or a performance indicator. For each section, a table summarizes the indicators or areas reviewed and the technical considerations that helped determine the final decision. This is followed by a brief elaboration on the final rationale for the selected performance indicators, which is often broader than technical considerations alone.

Objective 1: Ensuring delivery of evidence-based BPHS services in the catchment area

This objective is to be attained through the management of facilities (excluding hospitals) focusing on the MOHSW defined BPHS^{6, xviii}. NGOs are required to strengthen service delivery through quality assurance by reinforcing the use of HMIS for monitoring purposes, for example, and to help develop capacity of clinic staff.

Neonatal and child health

The infant mortality rate has decreased from 117 in 1999 to 71 per 1000 live births in 2007 and the under-five mortality rate from 194 to 110 in Liberia^{xix}. However, the LDHS reports that only 50 to 60% of children under five with diarrhea, symptoms of acute respiratory infection (ARI) or fever are taken to a health facility. Of those reported with diarrhea, 72% are reported to have received ORT, 50% of those with ARI received treatment and of those with fever 60% were given malaria treatment and 30% antibiotics. Furthermore, less than 40% of the children under one year of age are fully vaccinated, while malnutrition⁷ remains a problem. Only 30% of children under five months are reported to be exclusively breastfed. Consequently, child health was recognized as an area requiring improved performance.

Table 1: Neonatal and Child Health Indicators

<i>Considerations</i> Indicator reviewed:	<i>1.Improvement required based on available evidence (e.g., low coverage)</i>	<i>2. Possible for NGOs to influence (e.g., supply availability)</i>	<i>3. Feasible to establish baseline & to appropriately measure and verify</i>	Final status of indicator
Immunization coverage of < 1 year	Yes	Yes	No	Rejected
< 1 year who received DPT3/ pentavalent3	Yes	Yes	Yes	Performance indicator
< 5 year with fever receiving ACT as per MOHSW protocol	Yes	No		Rejected
< 5 year diagnosed in HF with diarrhea during the quarter and treated with ORT	Yes	Yes	Yes	Performance indicator
< 5 year with pneumonia diagnosed in HF and treated with antibiotics during the	Yes	Yes	Yes	Monitoring indicator

⁶ In line with the MOHSW defined BPHS, the focus is on maternal and newborn health care; child health; reproductive and adolescent health; communicable disease control, with an emphasis on malaria, TB and STI/HIV/AIDS, as well as diseases of epidemic potential, such as yellow fever and cholera; mental health; and emergency care

⁷ 40% of the children under five years of age are stunted and 8% wasted according to the LDHS

quarter				
< 5 year with malnutrition	Yes	No		Rejected
< 5 year who received vitamin A supplement during quarter	Yes	Yes	Yes	Monitoring indicator

'Immunization coverage' as an indicator includes different vaccinations at different points in time, making measurement less straightforward. Fully immunized would include three vaccinations with DPT. The DPT3 indicator was already reported on and was therefore selected. DPT3 will be monitored via Pentavalent vaccinations provided, as this contains the diphtheria, pertussis and tetanus (DPT) antigens⁸ and is reported on through HMIS data. Selected performance indicator: Number and % of children under one who received DPT3/Pentavalent 3

Initially, it was proposed to include the indicator 'children under five with fever receiving Artemisinin-based combination therapy (ACT) as per the MOSHW protocol' as well as those with diarrhea receiving ORT. Both are MDG indicators. Because procurement of ACT is neither under the control of the NGOs or of RBHS, this indicator was eliminated from the performance indicator list, but retained as a monitoring indicator. NGOs are also responsible for collecting and reporting on 'number and % of child pneumonia cases diagnosed in the health facility and treated with antibiotics during the quarter'; this became a monitoring indicator when the number of performance indicators was scaled down. The indicator on children treated with ORT remained a performance indicator to reflect the importance of *appropriate* treatment for sick children. Over time this may evolve to include assessments of the *timely* treatment through household level surveys. Selected performance indicator: Number and % of cases of children diagnosed with diarrhea during the quarter treated with ORT.

Malnutrition-related indicators are not included as performance indicators as it is anticipated that expected changes on such indicators will take longer than a year. However, recognizing that vitamin A deficiency is an important form of malnutrition in children, and is associated with impaired immunity and blindness, NGOs are to report the '% of children under 5 years who received a vitamin A supplement during the quarter'.

⁸ Liberia has started to provide the pentavalent vaccine which contains DPT as well as HiB for Haemophilus influenzae type B - both are MDG indicators - and Hepatitis B.

Maternal health

Considering the high maternal mortality ratio (MMR) in Liberia, it was evident that focus must be on improving MMR and its associated indicators, which are described in Table 2.

Table 2: Maternal Health Indicators

<i>Considerations</i> Indicator reviewed:	<i>1.Improvement required based on available evidence (e.g., low coverage)</i>	<i>2. Possible for NGOs to influence (e.g., supply availability)</i>	<i>3. Feasible to establish baseline & to appropriately measure and verify</i>	Final status of indicator
Skilled birth attendance	Yes	Yes	No	Rejected
Deliveries that are facility based	Yes	Yes	Yes	Performance indicator
Multiple ANC visits	Yes	Yes	Yes	Rejected
Pregnant women receiving two or more tetanus toxoid vaccinations	Yes	Yes	Yes	Monitoring indicator

Peri-natal rather than post-natal care was identified at this stage as a priority. Initially, 'skilled birth attendance' was selected, which is a USAID and MDG indicator. However, there were concerns over the accuracy of reporting on these indicators in the HMIS⁹ because deliveries at facility level are also carried out by traditional birth attendants (TBAs). TBAs are not considered skilled staff, and these deliveries are often aggregated with those by skilled attendants. For that reason, facility-based deliveries were selected as a performance indicator. In the future, greater attention will be paid to disaggregating the data in the HMIS on assisted deliveries by whether they were assisted by skilled or unskilled staff. As the quality and consistency of data collection improves, it will be possible to revert to skilled birth attendance in line with USAID and MDG indicators. Selected performance indicator: Number and % of deliveries that are facility-based.

The need for 'multiple Ante Natal Care visits' was considered another important indicator of maternal and neonatal health. It was not included, however, because the malaria indicator (see under malaria heading) on Intermittent Preventive Treatment, which is provided in the 2nd and 3rd trimesters, was thought to be sufficient. In addition, the 'number and % of

⁹ In line with UNFPA "skilled attendant refers exclusively to people with midwifery skills (for example, doctors, midwives, and nurses) who have been trained to proficiency in the skills necessary to manage normal deliveries and diagnose, manage, or refer obstetric complications" as described on <http://www.unfpa.org/mothers/skilled_att.htm>.

pregnant women receiving two or more tetanus toxoid vaccinations’ became a monitoring indicator.

Family planning and (adolescent) reproductive health

Family planning counseling was considered highly important in view of both the high teenage pregnancy rates (25% of girls aged 15-19 years having borne a child) and insufficient family planning access (25% of all births generally wanted later and 4% not wanted at all), as reported in the LDHS. Family planning services were also believed to be important because child spacing plays an important role in reducing child mortality.

Table 3: Family Planning Indicators

<i>Considerations</i> Indicator reviewed:	<i>1.Improvement required based on available evidence (e.g., low coverage)</i>	<i>2. Possible for NGOs to influence (e.g., supply availability)</i>	<i>3. Feasible to establish baseline & to appropriately measure and verify</i>	Final status of indicator
Unmet need for family planning	Yes	Yes	No	Rejected
Number of women provided with contraceptives	Yes	Yes	Yes	Monitoring indicator
Number of service delivery points providing FP counseling services	Yes	Yes	Yes	Monitoring indicator
Staff responsible for FP counseling at time of visit competent to perform counseling on informed choice for FP	Yes	Yes	Yes	Performance indicator
Number of visits that include FP counseling	Yes	Yes	Yes	Monitoring indicator

It was not considered feasible at the outset of RBHS to measure, through annual surveys, the ‘unmet need for family planning’, a MDG indicator, which is measured in the multi-annual LDHS. However, USAID policy sets clear guidelines for maintaining the voluntary nature of family planning projects, as outlined in the ‘Guidance for implementing the “Tiahrt” requirements for voluntary family planning projects”^{xx}.

In view of these requirements, it was decided to focus on the knowledge and skills to counsel for informed choice of family planning method which can be verified during supervision visits and health facility assessments. In addition, NGOs are required to report

on a number of quantitative family planning monitoring indicators such as number of women provided with contraceptives and number of counseling visits for family planning/reproductive health. Selected performance indicator: % of facilities with a staff member competent to perform counseling on informed choice of family planning method.

Malaria

Prevention of malaria is critically important in Liberia where it is reported to be the leading cause of death in hospitals (18%) and the basis for about 40% of all clinic consultations.^{xxi} Prevention of malaria was consequently seen as important.

Table 4: Malaria Indicators

<i>Considerations</i> Indicator reviewed:	<i>1.Improvement required based on available evidence (e.g., low coverage)</i>	<i>2. Possible for NGOs to influence (e.g., supply availability)</i>	<i>3. Feasible to establish baseline & to appropriately measure and verify</i>	Final status of indicator
Use of ITN's for children <5 year	Yes	No	No	Rejected
ITN distribution	Yes	No	Yes	Rejected
Pregnant women provided with IPT2 for malaria	Yes	Yes	Yes	Performance indicator

'Use of Insecticide Treated Nets (ITN's) for children under five' is one of the MDG's, as well as MOHSW, indicators, but not feasible for RBHS to measure on an annual basis. Consideration was therefore given to 'ITN distribution'. However, discussions with the National Malaria Control Program (NMCP) revealed that distribution of ITN's is not done solely through health facilities. In addition, it was explained that it would not be feasible to ensure the availability of supply to NGOs. Moreover, bed net distribution had already been completed in some of the RBHS counties. RBHS is also not tasked with specific responsibility of procuring and distributing ITNs under the United States President's Malaria Initiative (PMI)¹⁰. It was therefore decided not to include this as an indicator.

The LDHS reports that 76% of pregnant women did take some kind of malarial drugs during pregnancy but only 12% reported to have taken only once the recommended dose of Fansidar during pregnancy. This highlights the importance of ensuring IPT2 is given on the spot. This indicator is a MDG as well as a USAID required indicator. Selected

¹⁰ While RBHS is funded in part by the United States President's Malaria Initiative (PMI), the main PMI partner for procuring and distributing ITNs is USAID/Deliver Project implemented by John Snow, Inc., which works with other organizations such as Mentor or Equip.

performance indicator: Pregnant women provided with 2nd dose of Intermittent Preventive Treatment for malaria.

HIV/AIDS

Only 14% of women and 26% of men used a condom when engaging in high risk intercourse during the previous year according to the LDHS.

Table 5: HIV/AIDS Indicators

<i>Considerations</i> Indicator reviewed:	<i>1.Improvement required based on available evidence (e.g., low coverage)</i>	<i>2. Possible for NGOs to influence (e.g., supply availability)</i>	<i>3. Feasible to establish baseline & to appropriately measure and verify</i>	Final status of indicator
Condom utilization	Yes	Yes	No	Rejected
Number of condoms distributed	Yes	Yes	Yes	Monitoring indicator
Number of health facilities providing appropriate HIV counseling and testing as per MOHSW plan	Yes	Yes	Yes	Rejected
Individuals who received HIV counseling and testing and received their test results	Yes	Yes	Yes	Monitoring indicator
Pregnant women who received HIV counseling and testing for PMTCT and received their test results.	Yes	Yes	Yes	Monitoring indicator

Following discussions with the National AIDS Control Program (NACP), it was decided that 'condom utilization' was not an appropriate indicator due to the difficulty in obtaining data. Incentivizing the 'number of condoms distributed' was not considered appropriate by RBHS since it could result in perverse effects whereby the focus was on the quantity of condoms distributed rather than on the intended outcomes, such as reduction in high-risk behavior.

NACP representatives explained that stigmatization, especially of clinical staff, is a major impediment both for prevention and treatment activities. The government's intention to ensure that, by 2011, 70% of health facilities will provide appropriate HIV counseling and

testing (HCT)¹¹ may influence this positively as staff certification through NACP training is a precondition. Training opportunities were declared to be sufficiently available through NACP, in line with the phased plan at national and county level. It was felt by RBHS that these measures were critical to include in NGO contracts, though not necessarily as performance indicators in the first year. Nevertheless, the NGOs are responsible for reporting on two monitoring indicators, which are USAID required as well as MDG indicators, related to number of individuals counseled and tested.

Pre-requisites for providing quality BPHS services

It was agreed that NGOs providing management support can most directly influence the *pre-requisites* for providing quality services at facility level (equipped, with trained staff demonstrating correct knowledge and practices, etc). This is reflected in the selection of several performance indicators.

Table 6: Indicators on Pre-requisites for Providing Quality Services

<i>Considerations</i> Indicator reviewed:	<i>1.Improvement required based on available evidence (e.g., low coverage)</i>	<i>2. Possible for NGOs to influence (e.g., supply availability)</i>	<i>3. Feasible to establish baseline & to appropriately measure and verify</i>	Final status of indicator
Mean score from accreditation survey	Yes	Yes	Yes	Performance indicator
Facilities adhering to proper medical waste disposal (solid/infectious waste, sharps, latrines)	Yes	Yes	Yes	Monitoring indicator
Facilities with adequate infection control standards ¹²	Yes	Yes	Yes	Monitoring indicator
Facilities surveyed with no stock-out of tracer-drugs	Yes	Yes	Yes	Performance indicator

Accreditation is a recent MOHSW tool that aims to ensure the pre-requisites for providing quality BPHS services are in place in the relevant health facilities.¹³ In an effort to support this process and take advantage of a new data set, the 'mean score from the accreditation survey' is included as a performance indicator. At this stage most health facilities in the

¹¹ HCT includes both voluntary counseling and testing as well as prevention of mother to child transmission (PMTCT), required USAID and MDG indicators

¹² Including issues such as availability of water and soap, gloves, high level disinfection and/or sterilization of equipment, etc

¹³ It is important to recognize that the accreditation of health facilities is a key Heavily Indebted Poor Country (HIPC) debt relief requirement and failure to meet these requirements has an impact beyond the health sector.

country have a low accreditation score (average 68%)^{xxii}. Accreditation assessments are to be carried out at least once per year¹⁴ and reviews a wide range of factors such as health talks; ANC provision; conditions and equipment present in the delivery room and the out-patient department; child health and communicable disease control and prevention services provided; stocks of drugs and supplies; laboratory conditions; waste disposal; infrastructure needs; availability of staff and capacity to carry out certain tasks. Adequate water and sanitation in facilities, critically important to improving quality of health services, are also assessed and therefore not included as distinct performance indicators.

The evaluation is meant to be carried out jointly by CHT and Central Ministry or NGO staff (at least one of them a clinician) through observation and medical staff interviews. Results are compiled in a scorecard for each health facility. The focus is more on the conditions necessary to provide quality services rather than assessing the actual quality of services provided. In order to meet a goal of having 40% of all health facilities meet accreditation standards, the MOHSW has identified 168 facilities as priorities for achieving provisional accreditation by December 31, 2009. As a result, the RBHS indicator list includes improvement in accreditation by the end of the year for each NGO. *Selected performance indicator: Mean score from accreditation survey.*

RBHS provides drugs to the contracted NGOs, which then are to deliver them to the relevant health facilities. It was viewed as one of the essential tasks NGOs were to carry out with the funds provided. *Selected performance indicator: Number and % of facilities surveyed with no stock-out of tracer drugs (amoxicillin, cotrimoxazole, paracetamol, ORS, iron folate) during the quarter.*

Ensuring staff is available to carry out the required services is vital. Moreover, it was recognized that increasing the quantity of any services provided will only lead to improved health outcomes if the care provided is also of the appropriate quality. Hence, availability of human resources and quality of care were considered important areas of attention.

Table 7: Human Resources Indicators

<i>Considerations</i> Indicator reviewed:	<i>1.Improvement required based on available evidence (e.g., low coverage)</i>	<i>2. Possible for NGOs to influence (e.g., supply availability)</i>	<i>3. Feasible to establish baseline& to appropriately measure and verify</i>	Final status of indicator
NGO supported staff paid on time	Yes	Yes	Yes	Performance indicator

¹⁴ The first accreditation survey had just been carried out with support from the Clinton Foundation

Responsible staff competent to perform Active Management of Third Stage Labor, and have all necessary equipment	Yes	Yes	Yes	Monitoring indicator
Responsible staff competent to perform neonatal resuscitation, and all necessary equipment	Yes	Yes	Yes	Monitoring indicator
Number of staff trained (with disaggregate info on type, etc.)	Yes	Yes	Yes	Monitoring indicator

MOHSW has the responsibility to recruit and manage human resources. However, a number of the health staff are currently paid directly by NGOs and ensuring they are paid on time has been selected as one of the performance indicators. Whenever possible, and in the spirit of sustainability, RBHS encourages NGO supported staff be placed on the MOHSW payroll. *Selected performance indicator: % of NGO supported staff paid on time.*

All NGOs are responsible for carrying out training and reporting on this work. 'The number of people trained' was believed to be inappropriate to incentivize because the intent was not simply to increase the number of people trained, but rather to ensure staff were competent to provide the services with all necessary equipment in place. Therefore, three staff competency indicators¹⁵ were initially considered to be performance indicators, whereby verification would be done during supervision and health facility assessments. After a series of conversations with the donor, however, it was decided not to select these indicators as performance indicators, with the exception of the family planning indicator although both are to still be reported on by the NGOs, next to the number of CHT and health facility staff attending training.¹⁶

¹⁵ Competency indicators related to 'Active Management of the Third Stage of Labor (AMTSL)'; 'neonatal resuscitation', and family planning counseling were considered. The staff member responsible for providing such services at the time of the visit was to be competent (so not just midwives who may be on leave) and all necessary equipment was to be available.

¹⁶ Information is disaggregated by sex, position, county and training type (e.g. malaria, nutrition, HIV/AIDS, national protocols, life-saving skills, etc).

Other Areas Initially Considered

Table 8 Indicators on Mental Health, Gender-Based Violence and Tuberculosis

<i>Considerations</i> Indicator reviewed:	<i>1.Improvement required based on available evidence (e.g. low coverage)</i>	<i>2. Possible for NGOs to influence (e.g. supply availability)</i>	<i>3. Feasible to establish baseline & to appropriately measure and verify</i>	Final status of indicator
Access to mental health care	Yes	No	Yes	Rejected
Care for SGBV	Yes	Yes	Yes	Rejected
TB case detection rate	Yes	Yes	No	Rejected
TB treatment completion rate	Yes	Yes	Yes	Rejected

Mental health related illnesses such as post traumatic stress disorders are considered to be highly prevalent in Liberia. At this stage there is no finalized mental health policy and limited options exist for providing or referring clients to receive appropriate care. It was therefore not considered appropriate to include an indicator related to access to mental health care. In future, the availability of mental health care is to be included in the accreditation survey.

Gender-Based Violence is another serious issue and a growing concern in Liberia. According to the LDHS, approximately 44% of women between 15-49 years of age were reported to have experienced violence, with 18% of them experiencing sexual violence. At this stage the BPHS concentrates on health facilities recognizing the symptoms and organizing appropriate referrals for both kinds of violence. Understanding and implementation of guidelines to treat victims of Sexual- and Gender-Based Violence (SGBV) is still very low and it was therefore deemed inappropriate to include indicators for care for SGBV at this stage, despite the need and importance of these services. The availability of care for victims of SGBV services will be included in future in the accreditation survey.

The BPHS describes a tuberculosis (TB) 'case detection rate' of 51% in 2005 with the aim of increasing this to 70% for 2010. The 'treatment completion rate' for smear positive cases of TB was 75% in 2004 with a target set at 85% in 2005.^{xxiii} For year 1, RBHS did not target TB as one of its priorities and for that reason no corresponding performance indicator was identified.

Emergency preparedness teams for epidemic response at health facility level, while considered important, was considered less of a priority at this stage as NGOs are likely to respond in case of an emergency; such as an outbreak of yellow fever or cholera.

Objective 2: Expansion of selected BPHS services to communities

Expanding selected BPHS services to communities is important, in line with the new Community Health Strategy developed by MOHSW. NGOs are to help strengthen the link between communities and the health facilities they manage through, for example, ensuring adequate supervision to community based workers and promoting involvement of the Community Health Committees in health services management.

It is recognized that increasing the 'Use of Basic Health Services' is unlikely to be achieved merely by expanding the provision of health services. The LDHS notes that about half of the children who had symptoms for some of the most common diseases were actually not taken to a health facility. Creating demand for health services and improving its quality from a community perspective are therefore important.

Table 9: Indicators on BPHS at Community Level

<i>Considerations</i> Indicator reviewed:	<i>1.Improvement required based on available evidence (e.g. low coverage)</i>	<i>2. Possible for NGOs to influence (e.g. supply availability)</i>	<i>3. Feasible to establish baseline & to appropriately measure and verify</i>	Final status of indicator
Coverage of services (household level)	Yes	Yes	No	Rejected
Community perception of services	Yes	Yes	No	Rejected
Community Health Development Committees established and meeting quarterly	Yes	Yes	Yes	Performance indicator

Measuring the 'coverage of services' at household level and 'community perceptions of services provided' was not thought to be feasible to implement in the first year of the project. Instead the focus for this objective became Community Health Development Committees (CHDCs), as there are currently few functioning CHDCs in Liberia. It was felt that CHDCs could strengthen the link between communities and the health facilities. CHDC meetings could facilitate progress on community involvement for mobilization and behavior change strategies as well as providing insight into community perception of the care provided: both are important approaches for achieving most objectives and indicators of RBHS and MOHSW. In addition, the CHDC can play a significant role in overseeing the work

of community based workers who are to bring selected BPHS services closer to the community as described in the MOHSW National policy and strategy for Community Health^{xxiv}, once this newly developed strategy becomes more operationalised. Yet it was acknowledged that holding meetings and producing minutes may in itself not reflect CHDCs are active. Nevertheless it was felt to be an important first step and recognized that the indicator could expand and evolve over the years. Selected performance indicator: Number and % of community health committees (CHDCs) established and having met in the last quarter, by facility, as evidenced by written documentation.

Objective 3: Strengthening the capacity of County Health Teams to manage a decentralized health system

This is to be achieved through joint supervision and evidence-based planning, whereby NGOs are to develop the capacity of the relevant CHT members.

Table 10: Indicators on County Health Team Capacity

<i>Considerations</i> Indicator reviewed:	<i>1.Improvement required based on available evidence (e.g., low coverage)</i>	<i>2. Possible for NGOs to influence (e.g., supply availability)</i>	<i>3. Feasible to establish baseline & to appropriately measure and verify</i>	Final status of indicator
Facilities submit HMIS report to CHT	Yes	Yes	Yes	Performance indicator
Submission of timely and complete reports by NGO to RBHS	Yes	Yes	Yes	Performance indicator
Number of supervisory visits to HF (joint with CHT and total) in line with CHT plan	Yes	Yes	Yes	Performance indicator

The National Health Plan and Policy highlights the importance of improving health systems performance by enhancing capacity to plan, manage and monitor the decentralized health service systems. Improving the information base to support evidence-based decision making is an important first step. Selected performance indicator: Number and % of facilities submitting a timely, accurate and complete HMIS report to the CHT during the quarter.

Moreover, the data reported through the HMIS forms is an important basis for the monitoring of the indicators selected. Hence, NGOs submitting their reports to RBHS is vital for PBC. Selected performance indicator: Complete (progress and HMIS data) quarterly report submitted timely by the NGO to the RBHS project.

A relevant indicator was identified to ensure that the capacity of relevant MOHSW supervisors would be built and that NGOs would carry out joint supervision visits with the MOHSW. *Selected performance indicator: Number of supervisory visits to health facilities during the quarter, as evidenced by proper documentation, disaggregated by joint visit with CHTs and total visits, in line with CHT plan.*

Table 11: Other Indicators Initially Considered for CHT XCapacity

<i>Considerations</i> Indicator reviewed:	<i>1.Improvement required based on available evidence (e.g., low coverage)</i>	<i>2. Possible for NGOs to influence (e.g., supply availability)</i>	<i>3. Feasible to establish baseline & to appropriately measure and verify</i>	Final status of indicator
Joint NGO/CHT plan for FY2011	Yes	Yes	Yes	Monitoring indicator
Number of CHT coordination meetings	Yes	No	Yes	Rejected
Number of County Health Board meetings	Yes	No	Yes	Rejected

A 'joint NGO/CHT plan for FY2011' was originally considered as an indicator because it was thought this would ensure collaboration between the NGO and CHT and thereby improve performance. Furthermore, the NGOs could play a capacity building role if needed, while such a plan could become the basis for the future performance based contracts¹⁷. RBHS finally decided not make this a performance indicator at this stage but NGOs are still required to report on it.

In addition, consideration was given to including indicators related to relevant meetings at county level, such as 'CHT coordination meetings' and 'County Health Board meetings'. While the latter may play a vital role in validating for RBHS some of the information reported on by NGOs, it was not believed to be under the control of the contracted NGOs for either of these meetings to take place.

5. Performance indicators--what does it mean for the NGOs?

There are two types of performance-based indicators in the RBHS performance based contracts with NGOs: *Annual* performance indicators to assess NGOs eligibility for an

¹⁷ Contracts are provided for a two year period, with an initial one year funding pending availability of funds and the satisfactory performance of the NGO.

annual bonus (maximum 6%¹⁸ of the negotiated lump sum amount the NGO receives for the contract) and *quarterly* indicators to ensure appropriate administrative and management practices prior to the quarterly release of funds. Other indicators are reported on to monitor progress of the health services which will be considered for NGOs' contract extension and allow RBHS to monitor for any potential perverse effects by incentivizing some indicators over others.

The final *annual bonus indicators* included in NGO contracts are as follows:

1. Number and % of children under one year who received DPT3/pentavalent immunization
2. Number and % of children under 5 years diagnosed in the health facility with diarrhea treated with oral rehydration therapy (ORT)
3. Number and % of pregnant women provided with 2nd dose of Intermittent Preventive Treatment (IPT2) for malaria
4. Number and % of deliveries that are facility-based
5. Number and % of health facilities with a staff member responsible for family planning counseling at time of visit who is competent to perform counseling on informed choice for family planning
6. Mean score from accreditation survey
7. Number and % of facilities surveyed with no stock-out of (of tracer drugs) during the quarter (amoxicillin, cotrimoxazole, paracetamol, ORS, iron folate)

The final *quarterly performance indicators* conditional for the release of funds are:

1. Number and % of community health committees established and having met in the last quarter, by facility, as evidenced by written documentation
2. Number of joint (CHT and NGO) and total supervisory visits per facility during the quarter, as evidenced by proper documentation
3. Number and % of facilities submitting a timely, accurate and complete HMIS report to the CHT during the quarter
4. Timely and complete (progress and HMIS data) quarterly report submitted by the NGO to the RBHS project
5. Number and % of staff funded by NGOs paid on time in the quarter

¹⁸ Initially 10% was envisaged but following discussions with the NGOs this was reduced due to funding constraints. RBHS intends to monitor the effect of this closely

The RFP requested NGOs to submit proposals which included activities that would lead to the achievement of the selected indicators. RBHS acknowledged that to improve performance at the provider level and/or change behavior of users (e.g., to access the services), motivational incentives (whether financial or non-financial) needed to be directed to that level. NGOs were therefore requested to describe not only how they intended to achieve and monitor performance indicators, but also how they intended to use the performance bonus.

NGOs were to furthermore submit a proposed M&E plan which included all 27 indicators, while highlighting the 12 performance indicators. NGOs were requested to submit baselines and propose targets, to the extent possible, for all annual and quarterly performance indicators as well as the 15 additional monitoring indicators.

Once the NGOs were selected¹⁹, negotiations took place with each NGO around the targets for each indicator for which they would be held accountable. This involved a review of the baseline data, review of previous NGO work to achieve that target (where relevant), and coming to a mutual understanding and agreement on targets that were both challenging and feasible. Interestingly, all of the NGOs suggested at least some targets that were considered overly ambitious. RBHS project staff consequently encouraged NGOs to agree to lower targets in the first year. One of the main challenges in establishing targets was the lack of clear and reliable baseline data for many of the indicators.

6. Lessons learnt on selecting performance indicators in Liberia

Many different performance indicators were considered for measuring progress toward achievement of the relevant objectives of the Scope of Work of the NGOs. The selection of appropriate performance indicators was particularly difficult in Liberia as the NGOs are not responsible for delivering the health services but are contracted to provide management support to MOHSW health facilities. Consequently, not everything is under the control of the NGOs, such as the management (e.g., hiring and firing) of MOHSW employed staff or the provision of certain supplies such as Insecticide Treated Nets (ITNs), and therefore the ability to influence certain changes at community and/or provider level may be more

¹⁹ RBHS strongly encouraged local NGOs and Community Based Organizations, representative of the populations they serve, to apply, in line with the MOHSW contracting policy. Where such organizations lacked experience and/or capacity, partnership with international organizations was promoted while international organizations were encouraged to partner with local organizations in order to build local capacity and ensure long term sustainability. Two of the five NGOs contracted are local organizations while one international NGO initially proposed to partner with a local organization but revised this later due to budgetary concerns and potential value that would be added to the program. All international organizations do intend to access local expertise by engaging local organizations for various specific activities such as training.

complicated. As a result, some indicators were not suitable to be linked to performance incentives as they could not be sufficiently influenced by the NGOs. For that reason, the Scope of Work was developed concurrently with identification of performance indicators and due consideration was given whether NGOs were in a position to influence the indicators. Additional measures, such as agreements between the NGOs and CHTs describing respective roles and responsibilities, will need to be implemented to achieve the improved health system performance. A key lesson learned is that utilizing performance based contracting in the case of management contracting is especially challenging. Selection of performance indicators requires substantial consideration to ensure they will be feasible to achieve.

In coming to the final determination of indicators, several were not considered appropriate from the start. Impact level indicators related to mortality (infant, under-five and maternal), fertility, HIV/AIDS prevalence and cure rate for TB were not considered appropriate due to problems of attribution and difficulties in measuring them at annual intervals. The availability of baseline data and the feasibility of accurately measuring the indicator plus capacity to measure them on an annual basis were important criteria for indicator selection. It was realized at the outset that capacity to monitor and verify the indicators was still limited. Hence, a phased approach in the types of indicators selected would be more feasible in Liberia. The data collection methods employed by the project during the first year will therefore focus on the facility level, whereas in future years it is anticipated that RBHS will also rely on household surveys to better assess use, coverage and perceived quality of care. It was found that MDG indicators were not necessarily appropriate as performance indicators for the project at this stage. Consideration of sustainability and ensuring sufficient budget allocation for such verification activities were also found to be important issues. *It was vital to begin with a limited number of indicators feasible to collect and relevant to the objectives while building the capacity in data collection to allow for evolution of performance indicators over the life of the project.*

The performance indicators selected for the PBC in Liberia RBHS were not based only on technical considerations. The indicators also had to reflect the projects objectives and the priorities of both the MOHSW and the donor. To align with these priorities and to harmonize monitoring systems, the suitability of many different indicators as performance indicators was considered. *One of the key challenges was found to be juggling the different, and sometimes competing, interests of the different stakeholders when identifying suitable performance indicators.*

The project was under significant time constraints to release the RFP. However, consideration of the appropriateness of indicators takes time and requires the involvement of multiple stakeholders to address the different priorities, especially since in the Liberia case this was the first time the PBC approach was being introduced. Moreover, the suitability of selected performance indicators can only be tested once operationalised. *Another lesson learned is that sufficient time must be allocated for indicator selection and to ensure an inclusive approach whereby stakeholders at all levels are involved jointly. In addition, piloting of performance indicators is recommended to establish the feasibility and efficiency linked to data collection and aggregation, prior to implementation on a larger scale.*

Finally, it was acknowledged that NGOs and other stakeholders (like CHT and health facility staff) needed to enhance their understanding of their role in PBC, the rationale of the pay for performance concept and the possible results. The ambitious performance targets proposed by the NGOs are a case in point. *They highlighted the need for appropriate capacity building to be carried out to make PBC work so that it will not be viewed as a punitive system of rewards and punishments but an overall approach to improve performance on health outcomes.*

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