I. Introduction and Context

Country Context

1. Fourteen years of civil war destroyed Liberia’s basic infrastructure and health system. The years of civil war (1989 - 1997 and 2001 -2003) left Liberia one of the poorest countries in the world. The country’s level of poverty soared to 64%, and the Gross Domestic Product (GDP) per capita declined to approximately US$151 from a peak of US$1,217 in real terms in 1981. The war had a devastating effect on many of the systems that contribute to good health: basic housing, water, electricity, sanitation, roads, education, and health care. For example, much of the physical infrastructure and equipment that was crucial to the health sector was destroyed during the war—many hospitals and clinics were burned to the ground, very few county hospitals had fully functional laboratories, most county hospitals and health centers were without running water, electricity, or functioning basic sanitary systems, and many health professionals, especially physicians, left the country. Thus the already weak health and medical human resource base was compounded, resulting in a severe shortage of human resources (2.5 physicians per 100,000 population and 1 nurse per 5,000 population assuming 3.4 million inhabitants). An already dire situation was further aggravated by a lack of transportation and other communication systems, and reflected in limited access to health services by 41% of the population.

2. Liberia remains fragile, but there are signs of improvement. According to the 2010 UNDP Human Development Report’s Human Development Index (HDI), Liberia ranked 162nd out of 169
countries and 13th out of the 15 ECOWAS member countries included in the report. The report stated that the average life expectancy in Liberia was 59 years- up from 42 years at the end of the civil war (WHO 2006), the adult literacy rate was 55 percent and the combined gross school enrollment was 57 percent. Liberia’s 2010-estimated per-capita GDP was US $247- almost 40 percent higher than at the end of the war. Liberia recently completed the Heavily Indebted Poor Countries process and a total external debt burden of US $4.6 billion (equivalent to 800 percent of GDP) was cancelled by June 2010.

3. Liberia has begun the transition from humanitarian aid to development. Despite overwhelming challenges, the Government of Liberia (GoL)- with support from its development partners- has begun the transition from emergency rehabilitation to development. Aided by relative political stability, strong annual economic growth averaging 6.4% per year from 2004 to 2008, and significant donor contributions, per capita total health care expenditures doubled from 2003 to 2007, rising to US$29 (including donor health funding, the equivalent of 15% of GDP).

Sectoral and Institutional Context

4. Despite improvements, maternal and child health outcomes, as well as other health-related MDG outcomes remain poor. Post-conflict conditions place Liberia at the bottom of global rankings for maternal and child health (MCH). Indicators such as child nutrition and maternal mortality rates, for example, remain poor. The maternal mortality ratio (MMR) remains high, but has declined from close to 1000 per 100,000 births in 2007, to an estimated 770 per 100,000 (2010). Also, approximately 40% of children under five are stunted, and just over one in ten children will die before the age of five (See Table 1). That said, infant and under five mortality rates have almost halved to 71 and 110 per 1,000 births respectively over the last 20 years (due to the restoration of a number of key child health services like immunizations). Malaria, however, continues to be a major source of morbidity and mortality; 42 percent of child mortality, for example, was attributed to malaria in 2004.

5. Coverage of effective and low-cost interventions for health MDGs is low, primarily due to limited access, low quality and utilization, and a lack of trained and motivated health workers and the absence of medical leadership. While the MoHSW has been restoring health facilities in an effort to quickly scale up the delivery of the Essential Package of Health Services (EPHS) in functioning health facilities, with support from external partners, access to quality health care services remains out of reach for a large portion of the population- especially the poor. This is evidenced by low service utilization (and corresponding poor health seeking behaviors by patients, their families and their communities), and has been linked to long waiting times, a lack of drugs, and a critical shortage of adequately trained and motivated health workers, including an exceptionally small number of physicians in the country and the virtual absence of MDG-related qualified obstetricians, pediatricians, surgeons or infectious disease physicians. Also, with an emphasis on rapid scaling-up of the EPHS, less focus has been placed on the quality of services provided, including education/training and clinical leadership. Research is essentially absent in the country’s health sector and in academic medical training.

Bottlenecks to Health Services Delivery

6. Health financing constraints and sustainability. According to the 2007/8 National Health Accounts (NHA), 72% of funding came from donors and 24% from public financing. Public health spending accounts for 7% of the national budget- well below the Abuja target of 15%. The Micro-
Fiscal Analysis Unit (MFAU) of the Ministry of Finance (MoF) projects that donor funding will fall from the current high level to US$ 70 million by 2014/15. An estimated 48% of total health institutional expenditure (THIE) is used for curative care, and 28% for prevention and other public health programs. Notwithstanding the fact that curative services are generally more costly than preventive services, a benefit incidence analysis based on the same NHA showed that there is a pro-rich bias in the distribution of government subsidies which is greater in magnitude for inpatient (as compared to outpatient services), and more significant in secondary facilities (than in primary-level facilities). Also, resources allocated for service delivery in both urban and rural areas do not closely reflect the size of the catchment population and facility workload. Similarly, hardly any medical education/training is currently undertaken at decentralized or rural health facility level.

7. Whilst there has been significant growth of mid and lower level health worker cadres since 2006, Liberia continues to face a particular shortage of qualified medical doctors. Taking into account population levels, Liberia is home to approx. 0.5 doctors, nurses and midwives per 1000 population, far below WHO’s 2.3 per 1000 benchmark associated with achieving an 80% coverage rate of deliveries. While the overall ratio of clinicians to population remains low, the shortage masks significant recent increases in some health worker cadres, in particular nurses. With the aim of rebuilding a shattered health workforce (due to collapse of training institutions, and high rates of out-migration following Liberia’s civil war) the MOHSW has increased the total number of clinical health workers from 1396 in 1998 to 4653 in 2010, 3394 of which are nurses and midwives. Specifically, the number of nurses more than doubled between 2006 and 2010, and certified midwives and nurse aides increased by 28% and 31% respectively. A 2009 report found that the existing number of registered nurses, nurses aides, and medical doctors exceeded minimum requirements for the provision of Liberia’s Basic Package of Health Services (BPHS), and physician assistants came close to minimum requirements. Only certified midwives greatly fell short of need. A subsequent workforce optimization analysis, carried out by the MOHSW, and the Clinton Health Access initiative (CHAI) re-evaluated health worker need, and amongst other findings concluded that the need for certified midwives was overestimated, and the need for physicians under estimated. Although pre-service education capacity for physicians remains weak (Liberia only has one medical school), anecdotal evidence suggests that medical school graduates continue to leave the country after graduation in part to become clinically fully qualified and board certified abroad. Liberia currently does not have a formalized and accredited medical graduate residency program in place.

8. A particular challenge in Liberia is the uneven distribution of health workers (particularly of doctors and nurses), which remains urban biased. Overall, 33% of health workers— including the majority of higher level cadres—practice in the capital county of Montserrado, and of these, only 6.8% were born in the county. Consequently, hospitals and health facilities outside of Montserrado face the brunt shortage of higher level cadres. In order to comprehensively address retention in hard to reach areas, the MOHSW HR Unit and WB conducted a Discrete Choice Experiment (DCE) for nurses in June 2010, in order to identify cost-effective policy options. The study recommended the following top two interventions: (a) exposing all students to rural working conditions during their training; and (b) providing small financial incentives to nurses working in rural areas. This latter would increase the percentage of nurses willing to work in the rural areas from 34% (baseline) to 49%.

9. Health worker performance is compromised by low levels of motivation and inadequate competencies. Currently, no performance based incentives schemes exist at the secondary level to offset low salary levels and difficult working conditions, and therefore motivate health workers to
adequately perform. As a result, health worker productivity, responsiveness and absenteeism at the secondary level are serious concerns. Health worker competence on the other hand (to address Liberia’s health challenges) is also compromised, largely because of the lack of basic certified clinical skills, in particular those related to obstetrics, surgery, pediatrics, and infectious diseases. Part of the problem lies in the fact that Liberia currently does not have the teaching expertise in these areas. Consequently, medical school graduates do not have the opportunity to engage in a formalized and accredited medical residency after they graduate from medical school which would allow them to become board certified specialists. The lack of teaching expertise – as well as the absence of medical residents which provide hands-on training- also means that front line health workers (those working in health facilities across Liberia, such as nurses and midwives for example) currently do not have the opportunity to benefit from short term courses and training opportunities (i.e. continued professional development) in emergency obstetrics, pediatrics, surgery and infectious diseases.

10. Uneven access to functioning health infrastructure. Physical access to health facilities, while improving, remains a barrier to obtaining health care, particularly for those in more remote areas of the country. Whilst almost 40% of all households must travel one hour or more to reach the nearest health facility, fifty percent of government clinics are serving catchment populations smaller (40%) or larger (11%) than the catchment criteria established by the MoHSW. Country wide, 80 percent of government facilities met the criteria for delivering the Basic Package of Health Services (BPHS), which has been scaled up to the EPHS. Anecdotal evidence and direct World Bank staff observations suggest that the situation is worse in rural than in urban areas, where many health facilities are considered to be non-functional, due in part to a lack of equipment and/ or staff. In addition to this, physical infrastructure in teaching hospitals is often very weak, restricting the extent to which quality training can be provided (or developed) to medical students. A recent assessment of the capacity of training institutions in Liberia points towards significant problems including inadequate space, and a lack of running water and electricity, and available teaching equipment and supplies.

11. The country aims to shift toward Performance based financing (PBF). In order to improve the efficiency and effectiveness of the health system, the MoHSW is shifting away from input-based financing towards PBF. Experiences in Rwanda, Burundi, Cambodia, Haiti and Afghanistan have shown that performance-based approaches can be effectively deployed to: (i) clearly signal health priorities to all levels of the health system; (ii) ensure that health facilities focus on delivering targeted health services to the population not yet reached, and monitoring these stringently; and (iii) empower decision-makers in the field to set priorities and improve health facilities according to more local needs.

12. Progress in PBF at the secondary level and referral system are limited. In Liberia, most donors’ have supported Performance-based contracting (PBC) (using implementing partners) at the primary level. About 65% of primary-level facilities receive financial and other support from USAID, the Pool Fund donors and the EU. Conversely, secondary level facilities receive no major support from external donors. This helps to explain why- despite its commitment to primary health care- the GoL continues to channel a large proportion of its own limited resources into secondary-level hospitals -38 percent of Government funds are spent on centralized and regional clinical facilities. The continuing disparity in funding and weak focus on results at the hospital level is reflected in accreditation scores on the quality of services being worse in secondary vis a vis
primary facilities. In addition to this, the referral linkages between the various levels of the system
do not function well (or at all), resulting in significant inefficiencies in the health system.

Relationship to CAS

13. The proposed project is consistent with the Joint Country Assistance Strategy (CAS) for
Liberia (FY2009-FY2011) that was developed jointly by the Bank and the African Development
Bank (AfDB). The CAS underpins improvements in human development (health, education, and
social protection) as one of the Bank’s strategic areas of focus in Liberia, and supports the
implementation of the GoL’s two-pronged approach to improving health outcomes: (i)
strengthening the delivery and management of an equitable, effective, efficient, responsive, and
sustainable health care system; and (ii) securing and expanding access to basic and secondary health
care of acceptable quality. The Project is also consistent with the new CAS which is under
development, and the Poverty Reduction Strategy Paper (PRSP).

II. Proposed Development Objective(s)

Proposed Development Objective(s) (From PCN)

14. The Project Development Objective (PDO) is to “improve the utilization and quality of medical
interventions under the EPHS in target counties”. Medical interventions are expected to focus
largely on MDGs 4, 5 and 6. While pregnant women and children are expected to especially benefit
from this project, project beneficiaries include all who seek health care services at secondary and
primary-level facilities through: performance-based incentives at the secondary level; incentives to
improve the referral chain; and, support to improving health-worker skills and competencies. This
project is expected to be implemented over a 4 year period (June 2013 – June 2017).

Key Results (From PCN)

15. Achievement of the PDO will be measured through the following key performance indicators
(KPIs). KPIs will be measured in project target facilities, in project target areas, and will be
disaggregated by county.

- # [and %] of deliveries attended by skilled health workers.
- [# and] % of children under 5 years of age with fever confirmed malaria receiving treatment
for malaria within 24 hours of the onset of fever.
- # of deliveries adequately referred by health centres or clinics to decentralized regional
training/teaching clinics/ hospitals for EmONC.
- Aggregate Health Facility Quality Index.
- Health workers (at the clinical facility level) who score 80% or more on tracer vignettes
related to minimum MDG 4, 5 and 6 related clinical competencies.

16. Equity Considerations: The pro-poor focus of the project will be achieved in four ways: (i)
project interventions target vulnerable groups such as women and children who face a
disproportionate risk of mortality and morbidity due to avertable causes; (ii) the project aims to
enhance the delivery of specific services for which the coverage among the poor is
disproportionately low; (iii) payments made to health facilities under PBF will be adjusted to reflect
their geographical location so that facilities located in remote areas can earn more; and (iv)
household and health facility surveys will carefully track the use of services by the poor

III. Preliminary Description

Concept Description
17. The proposed Liberia Health Systems Strengthening (HSS) Project aims to strengthen the institutional foundations of the health sector needed to improve MDG 4, 5, and 6 related health outcomes. Specifically, the project aims to improve these health-related MDGs and specific MCH outcomes by improving supply side conditions through: a) improving the availability of: qualified graduate physicians (pediatricians, obstetricians, general surgeons and infectious diseases internists); b) upgrading appropriate clinical and medical training equipment and clinical training infrastructure; c) improving access to essential drugs; d) improving health worker motivation (through PBF); and e) strengthening the referral chain. These improvements should provide a thrust towards demand-side utilization, and outcomes.

18. Specifically, component 1 will strengthen and advance the current contracting-in approach, in which County Health and Social welfare Teams (CHSWTs) are responsible for supporting health facilities to achieve results and in-turn are remunerated based on their performance (i.e. the achievement of results). Under a PBF approach, health facilities will develop their business plans to improve utilization and quality at their facilities, implement business plans while providing services, receive financial incentives directly based on their performance and results, and manage the funds received for further improvement of their services (including those directly and indirectly emanating from improved training/teaching by residents and medical graduates to nurses, midwives and outreach workers at rural decentralized clinical facilities). As such, there is emphasis on both strengthening separation of functions and verification to avoid misreporting; and providing rural and more remote health facilities with sufficient autonomy to manage funds. Notably, incentives can be used to address supply-side gaps (e.g. health facility operational and capital costs, support to training, and health worker motivation).

19. Component 2 will complement efforts to improve MDG 4, 5, and 6 outcomes under component 1 by focusing on addressing the existing gaps in health worker competencies (in obstetrics, pediatrics, surgery and infectious diseases), through: a) developing and implementing an innovative Graduate Medical Residency Program (GMRP) for physicians (in selected clinical teaching facilities), with mechanisms to facilitate the transfer of skills from residents to frontline health workers (for example nurses and midwives in rural health facilities) as part of residency requirements, and; b) simultaneously strengthening specialized teaching and education capacity at the emerging Graduate Medical Residency Program (GMRP), at the country’s main -and only- teaching hospital, at (envisaged) associated rural decentralized teaching hospitals and clinics, and at selected related pharmacy and diagnostic teaching facilities.

Component 1: Improving the coverage and quality of Key MDG 4, 5, and 6 related services through PBF at Secondary levels of care (US$10 million)

20. In recognition of the focus of significant external funds on primary health care (health clinics, and lower level service delivery points) and challenges in the proper-functioning of the referral chain, Component 1 will focus on delivery of the EPHS through PBF at (targeted) secondary level facilities- hospitals and health centers run by government and non-profit agencies- with supervisory and referral links to the primary level. This approach will provide a financial subsidy directly to service providers contingent upon delivery of services defined in the EPHS. This component will be rolled out in a phased approach (i.e. pre-pilot and larger roll out), and will involve both investments (PBF incentives) and technical assistance (where needed). Technical assistance will focus on strengthening capacities (e.g. institutional capacity- at all levels of the
health system, and CHSWTs- for PBF), and the development of a robust M&E system. This component is organized into two sub-components: a) Performance-based contracts with secondary-level facilities ($8.5 million); and, b) Management and Capacity building PBF ($1.5 million).

Component 2: Improving health worker competencies to address MDG 4, 5, and 6 related concerns (US$4.2 million)

21. Whereas PBF is expected to narrow the gap between what health workers know how to do, and actually do (by motivating them to perform better), further performance improvements are dependent on an increase in the quality and quantity of health workers with sufficient skill sets in MDG 4, 5, and 6 relevant areas - obstetrics, pediatrics, surgery and infectious diseases.

22. The lack of a well developed, high quality and innovative medical residency programs in Liberia, in part because of insufficient training capacity (in terms of specialized faculty and other training solutions, including e-training solutions), and weak physical capacity at teaching hospitals, have prevented medical students in Liberia from obtaining, and transferring needed skills (linked to obstetrics, surgery, pediatrics and infectious diseases), to front line health workers, particularly in rural areas.

23. In recognition of these challenges, the project will support the government through the following two sub-components: a) Development and Implementation of a Progressive Graduate Medical Residency Program (GMRP) to benefit both students and front line health workers; and b) Enhancing the Technical and Physical Capacity of the Teaching Hospitals and secondary level partner facilities to provide relevant training under the Medical Residency Program.

Component 3: Project Management (US$8 million)

24. This component will support the operational capacity of the MoHSW to effectively manage the project. This will include support to the operational costs of a project-specific unit within the MoHSW (Project Management Unit) that will be responsible for coordinating project activities.

IV. Safeguard Policies that might apply

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V. Tentative financing
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