

Document of
The World Bank

FOR OFFICIAL USE ONLY

Report No: PAD2943

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT PAPER

ON A

PROPOSED ADDITIONAL GRANT

FROM THE MULTI-DONOR TRUST FUND FOR CAMBODIA HEALTH EQUITY AND QUALITY
IMPROVEMENT PROJECT

IN THE AMOUNT OF US\$6.0 MILLION

TO THE

KINGDOM OF CAMBODIA

FOR AN

ADDITIONAL FINANCING FOR HEALTH EQUITY AND QUALITY IMPROVEMENT PROJECT (H-EQIP)

October 10, 2018

Health, Nutrition, & Population Global Practice
East Asia And Pacific Region

This document has a restricted distribution and may be used by recipients only in the performance of their official duties. Its contents may not otherwise be disclosed without World Bank authorization.

CURRENCY EQUIVALENTS

(Exchange Rate Effective June 30, 2018)

Currency Unit = Cambodian Riels

KHR 4075 = US\$1

FISCAL YEAR

January 1 – December 31

Regional Vice President: Victoria Kwakwa

Country Director: Ellen A. Goldstein

Senior Global Practice Director: Timothy Grant Evans

Practice Manager: Enis Baris

Task Team Leader(s): Somil Nagpal

ABBREVIATIONS AND ACRONYMS

AF	Additional Financing
AOP	Annual Operational Plan
CCS	Cervical Cancer Screening
CCS&T	Cervical Cancer Screening and Treatment
CDHS	Cambodia Demographic and Health Survey
DBF	Department of Budget and Finance
DDFC	Department of Drugs, Food and Cosmetics
CEN	Country Engagement Note
CPF	Country Partnership Framework
DLI	Disbursement Linked Indicator
DPHI	Department of Planning and Health Information
EEP	Eligible Expenditure Program
EMF	Environmental Management Framework
FA	Financing Agreement
FM	Financial Management
FP	Family Planning
GA	Grant Agreement
GDP	Gross Domestic Product
GRS	Grievance Redress Service
H/D S&T	Hypertension and Diabetes Screening and Treatment
HC	Health Center
HEF	Health Equity Fund
HEFI	Health Equity Fund Implementer
H-EQIP	Health Equity and Quality Improvement Project
HMIS	Health Management Information System
HRMIS	Human Resource Management Information System
ICT	Information and Communication Technology
IO	Intermediate Outcome
IPF	Investment Project Financing
IPPF	Indigenous Peoples Planning Framework
ISR	Implementation Status and Results Report
IUD	Intrauterine Device
KfW	<i>Kreditanstalt für Wiederaufbau</i>
LTFP	Long-term Family Planning
M&E	Monitoring and Evaluation
MDTF	Multi-Donor Trust Fund
MOH	Ministry of Health
MPA	Minimum Package of Activities
NCD	Noncommunicable Disease

NMCHC	National Maternal and Child Health Center
NQEM	National Quality Enhancement Monitoring
NQEMP	National Quality Enhancement Monitoring Process
OD	Operational District
PCA	Payment Certification Agency
PDO	Project Development Objective
PHD	Provincial Health Department
PHO	Provincial Health Office
PHRD	Policy and Human Resources Development
PMD	Preventive Medicine Department
PMRS	Patient Management Registration System
RGC	Royal Government of Cambodia
RH	Referral Hospital
RPF	Resettlement Policy Framework
SDG	Service Delivery Grant
SOP	Standard Operating Procedure
UHS	University of Health Sciences
VIA	Visual Inspection with Acetic Acid
WHO	World Health Organization

**BASIC INFORMATION – PARENT (Cambodia Health Equity and Quality Improvement Project (H-EQIP) - P157291)**

Country Cambodia	Product Line IBRD/IDA	Team Leader(s) Somil Nagpal		
Project ID P157291	Financing Instrument Investment Project Financing	Resp CC GHN02 (9317)	Req CC EACMM (8863)	Practice Area (Lead) Health, Nutrition & Population

Implementing Agency: Ministry of Health

Is this a regionally tagged project?	
No	

Bank/IFC Collaboration
No

Approval Date 19-May-2016	Closing Date 30-Jun-2021		Original Environmental Assessment Category Partial Assessment (B)	Current EA Category Partial Assessment (B)
------------------------------	-----------------------------	--	---	--

Financing & Implementation Modalities

<input type="checkbox"/> Multiphase Programmatic Approach [MPA]	<input type="checkbox"/> Contingent Emergency Response Component (CERC)
<input type="checkbox"/> Series of Projects (SOP)	<input type="checkbox"/> Fragile State(s)
<input type="checkbox"/> Disbursement-Linked Indicators (DLIs)	<input type="checkbox"/> Small State(s)
<input type="checkbox"/> Financial Intermediaries (FI)	<input type="checkbox"/> Fragile within a Non-fragile Country
<input type="checkbox"/> Project-Based Guarantee	<input type="checkbox"/> Conflict
<input type="checkbox"/> Deferred Drawdown	<input type="checkbox"/> Responding to Natural or Man-made disaster
<input type="checkbox"/> Alternate Procurement Arrangements (APA)	



Development Objective(s)

To improve access to quality health services for the targeted population groups with protection against impoverishment due to the cost of health services in the Kingdom of Cambodia.

Ratings (from Parent ISR)

	Implementation			
	08-Sep-2016	25-May-2017	15-Jan-2018	30-Jul-2018
Progress towards achievement of PDO	S	S	S	S
Overall Implementation Progress (IP)	S	S	MS	MS
Overall Safeguards Rating	S	MS	MS	MS
Overall Risk	S	S	S	S

BASIC INFORMATION – ADDITIONAL FINANCING (Additional Financing for Health Equity and Quality Improvement Project (H-EQIP) - P167351)

Project ID	Project Name	Additional Financing Type	Urgent Need or Capacity Constraints
P167351	Additional Financing for Health Equity and Quality Improvement Project (H-EQIP)	Scale Up	No
Financing instrument	Product line	Approval Date	
Investment Project Financing	Recipient Executed Activities	05-Oct-2018	
Projected Date of Full Disbursement	Bank/IFC Collaboration		
30-Nov-2021	No		
Is this a regionally tagged project?			



No

Financing & Implementation Modalities

- | | |
|---|---|
| <input type="checkbox"/> Series of Projects (SOP) | <input type="checkbox"/> Fragile State(s) |
| <input type="checkbox"/> Disbursement-Linked Indicators (DLIs) | <input type="checkbox"/> Small State(s) |
| <input type="checkbox"/> Financial Intermediaries (FI) | <input type="checkbox"/> Fragile within a Non-fragile Country |
| <input type="checkbox"/> Project-Based Guarantee | <input type="checkbox"/> Conflict |
| <input type="checkbox"/> Deferred Drawdown | <input type="checkbox"/> Responding to Natural or Man-made disaster |
| <input type="checkbox"/> Alternate Procurement Arrangements (APA) | |
| <input type="checkbox"/> Contingent Emergency Response Component (CERC) | |

Disbursement Summary (from Parent ISR)

Source of Funds	Net Commitments	Total Disbursed	Remaining Balance	Disbursed	
IBRD				<div></div>	%
IDA	30.00	9.02	21.43	<div></div>	30 %
Grants	21.00	15.27	5.73	<div></div>	73 %

PROJECT FINANCING DATA – ADDITIONAL FINANCING (Additional Financing for Health Equity and Quality Improvement Project (H-EQIP) - P167351)

FINANCING DATA (US\$, Millions)

SUMMARY (Total Financing)

	Current Financing	Proposed Additional Financing	Total Proposed Financing
Total Project Cost	174.20	6.00	180.20
Total Financing	174.20	6.00	180.20
Financing Gap	0.00	0.00	0.00



DETAILS - Additional Financing

Non-World Bank Group Financing

Trust Funds	6.00
Cambodia - Free-standing Trust Fund Program	6.00

COMPLIANCE

Policy

Does the project depart from the CPF in content or in other significant respects?

☐ Yes ☒ No

Does the project require any other Policy waiver(s)?

☐ Yes ☒ No

INSTITUTIONAL DATA

Practice Area (Lead)

Health, Nutrition & Population

Contributing Practice Areas

Poverty and Equity

Gender Tag

Does the project plan to undertake any of the following?

a. Analysis to identify Project-relevant gaps between males and females, especially in light of country gaps identified through SCD and CPF

Yes

b. Specific action(s) to address the gender gaps identified in (a) and/or to improve women or men's empowerment

Yes

c. Include Indicators in results framework to monitor outcomes from actions identified in (b)

Yes



PROJECT TEAM

Bank Staff

Name	Role	Specialization	Unit
Somil Nagpal	Team Leader (ADM Responsible)		GHN02
Sreng Sok	Procurement Specialist (ADM Responsible)	Procurement	GGOPP
Reaksmey Keo Sok	Financial Management Specialist (ADM Responsible)	Financial Management	GGOEP
Erik Caldwell Johnson	Social Specialist (ADM Responsible)	Social Safeguards	GSU02
Carmenchu D. Austriaco	Team Member	Disbursement	WFACS
Daisy Lopez Zita	Team Member	Disbursement	WFACS
Emiko Masaki	Team Member	Health financing	GHN02
Frederick Yankey	Team Member	Financial management	GGOAE
Manush A. Hristov	Counsel	Legal (primary)	LEGEN
Nareth Ly	Team Member	Operations, Safeguards	GHN02
Sabrina Gail Terry	Team Member	Administrative Support	GHN02
Sang Minh Le	Environmental Specialist	Environmental safeguards	GHN02
Saroeun Bou	Team Member	Communication	EAPEC
Simon B. Chenjerani Chirwa	Team Member	Procurement	GGOPP
Sokbunthoeun So	Team Member	Public Financial Management	GGOEP
Sophinith Sam Oeun	Team Member	Administrative support	EACSF
Sovanratnak Sao	Team Member	Service Delivery	GHN02
Thao Thi Do	Team Member	Disbursement	WFACS
Thu Ha Le	Team Member	Legal	LEGES
Tomo Morimoto	Team Member	Operations	GHN02
Voleak Van	Team Member	Operations	GHN02
Wasittee Udchachone	Environmental Specialist	Environmental safeguards	GEN2B



Extended Team

Name	Title	Organization	Location
Manveen Kohli	Consultant	World Bank	New Delhi



CAMBODIA

ADDITIONAL FINANCING FOR HEALTH EQUITY AND QUALITY IMPROVEMENT PROJECT (H-EQIP)

TABLE OF CONTENTS

I. BACKGROUND AND RATIONALE FOR ADDITIONAL FINANCING	8
II. DESCRIPTION OF ADDITIONAL FINANCING	11
III. KEY RISKS	20
IV. APPRAISAL SUMMARY	21
V. WORLD BANK GRIEVANCE REDRESS	25
VI. SUMMARY TABLE OF CHANGES	26
VII. DETAILED CHANGE(S).....	26
VIII. RESULTS FRAMEWORK AND MONITORING	29
ANNEX 1: REVISED DLI TABLE AND VERIFICATION PROTOCOL.....	40
ANNEX 2: DETAILED DESCRIPTION OF SUBCOMPONENT 3.1 FOR DLI MANUAL	55
ANNEX 3. ECONOMIC ANALYSIS.....	58



I. BACKGROUND AND RATIONALE FOR ADDITIONAL FINANCING

1. **This Project Paper seeks the approval of the Regional Vice President for an additional grant from the Multi-Donor Trust Fund for Cambodia Health Equity and Quality Improvement Project (MDTF) in the amount of US\$6.0 million equivalent, contributed by the Government of Germany through Kreditanstalt für Wiederaufbau (KfW)¹, to the Cambodia Health Equity and Quality Improvement Project (H-EQIP) (P157291).**

2. **The H-EQIP, with a total financing of US\$174.2 million, was approved by the World Bank Board of Executive Directors on May 19, 2016 and became effective on November 9, 2016.** The project is financed by International Development Association (IDA) Credit of US\$30 million equivalent; the Royal government of Cambodia (RGC)'s counterpart financing of US\$94.2 million; and the MDTF with contributions from Australia Department of Foreign Affairs and Trade, KfW, and Korea International Cooperation Agency of US\$50 million. With the additional contribution by KfW,² the total recipient-executed MDTF envelope for H-EQIP will become US\$56 million, bringing the total financing of the project to US\$180.2 million equivalent. In parallel, the Japan Policy and Human Resources Development (PHRD) Trust Fund finances activities to support the strengthening of the health sector monitoring and evaluation (M&E) through complementary financing of US\$1 million equivalent.

3. **The original PDO of H-EQIP is “to improve access to quality health services for targeted population groups, with protection against impoverishment due to the cost of health services in the Kingdom of Cambodia.”** The project has four components: Component 1: Strengthening Health Service Delivery; Component 2: Improving Financial Protection and Equity; Component 3: Ensuring Sustainable and Responsive Health Systems; and Component 4: Contingent Emergency Response.

4. **H-EQIP builds upon the innovations and achievements supported and scaled up in the previous Health Sector Support Project 2002–2008 and the Second Health Sector Support Program 2008–2016.** In particular, it consolidates and scales up proven and potentially transformative interventions such as the Health Equity Funds (HEFs) and Service Delivery Grants (SDGs). The key evolutionary shifts in project design and implementation include (a) mainstreaming the implementation of project activities through the RGC systems; (b) increasing fund flows to the decentralized, implementation level; (c) building domestic capacity to take over project implementation support and monitoring roles; and (d) strengthening the results-based focus of the project through the predominant use of output-based payments through the HEF, performance-based financing through the SDGs, and the use of DLIs. Through these initiatives, H-EQIP accelerates overall reforms in the health sector, improves social health protection for the poor and vulnerable groups, and expands access to and coverage of health care services, while

¹ As there will be changes to the Administration Agreement with KfW and other contributing partners reflecting this AF, the signing of the revised Administration Agreement by all MDTF partners is expected to be completed within six weeks after RVP approval. The signing of the Amendment Letter to the Financing Agreement and Grant Agreement will be conditional upon signing of the Administration Agreement.

² The KfW contribution to the H-EQIP MDTF is €8.35 million according to intergovernmental negotiations concluded in 2017, of which US\$6 million will flow to this AF of H-EQIP. The balance funds will be used to finance health promotion activities through the Cambodia Nutrition project (currently under preparation) for an amount of US\$2 million and for the MDTF management and supervision costs.



strengthening their quality and affordability and creating sustainable government institutions for health care management.

5. Twenty-two months after project effectiveness, H-EQIP has contributed to major progress toward RGC's objectives of ensuring quality and equitable health services to its population.

6. **Component 1 (Strengthening Health Service Delivery) supports transformation of the SDGs,** initially introduced as part of the Second Health Sector Support Program, into a mechanism for providing performance-based financing to different levels of the Cambodian primary and secondary health system based on the achievement of results, through linking financing of health facilities and respective monitoring and supervision mechanisms to their performance. Under H-EQIP, quality assessment tools to introduce a National Quality Enhancement Monitoring (NQEM) Process (NQEMP) have been developed, and to date, Phase 1 has been successfully rolled out with four rounds of assessment completed in 34 operational districts (ODs) in 14 provinces. One more phase of the NQEMP is being rolled out in October 2018 and expected to reach national coverage by April 2019. Under the leadership of the quality assurance office, an information and communication technology (ICT) system will be put in place to monitor the NQEMP by the end of 2018, meeting a prerequisite for the national rollout of coverage.

7. **Component 2 (Improving Financial Protection and Equity) continues to support and expand the HEF scheme through co-financing with the RGC costs of health services for the poor.** The HEFs finance health care user fees and other associated health care costs of eligible poor beneficiaries. The RGC is currently financing at least 50 percent of the direct benefit costs, and this share is expected to increase with the envisaged expansion of beneficiary groups, benefit packages, and health system level (to national hospitals).³ One of the major reforms introduced under H-EQIP is the establishment of an independent payment certification agency (PCA), as a public administrative establishment that will assume the role of the previous Health Equity Funds Implementer (HEFI), to conduct independent verification of the benefits provided to individual patients. The PCA will also serve as a monitoring and verification agency for the quality assessments of health centers (HCs), referral hospitals (RHs), and health administrations at provincial and district levels in the context of SDGs. The transition aims to ensure sustainability of the system by mainstreaming it into government functions managed by domestic institutions. The PCA was successfully established in September 2017, and the transfer of ownership and implementation responsibilities is currently under way.

8. **Component 3 (Ensuring Sustainable and Responsive Health Systems) has been supporting the attainment of supply-side readiness that is critical for the key reforms in the RGC's health sector.** This includes implementing comprehensive preservice and in-service training programs for health workers, equipping health facilities to meet minimum standards for the provision of obstetric and neonatal care, carrying out enhanced health service quality monitoring, improving timeliness of SDG and HEF payments, and establishing sustainable health service purchasing arrangements. To strengthen the outcome focus, the results are tracked by DLIs, a set of tracer indicators aimed at measuring performance against health system strengthening actions. This component also supports health infrastructure improvements—mainly

³ The RGC contributes 50 percent of the cost of the HEFs up to US\$12 million per year and 100 percent of the cost beyond US\$12 million. Accordingly, as the total HEF costs increase, the share of the RGC in the HEF costs will rise further, including with this AF, which is expected to improve utilization of the HEF services. This is in addition to the contribution made by the RGC to the supply-side investments through domestic budget as the HEFs reflect only a partial cost for the services rendered and the balance is also subsidized through domestic budgetary sources.



construction of 45 HCs, 15 maternity and obstetric wards in RHs, and two provincial hospitals—that are under way. In addition, the component supports project management and M&E for the entire project.

9. **Progress toward achieving the PDO has been rated Satisfactory and overall implementation progress has been rated Moderately Satisfactory in the previous two Implementation Status and Results Reports (ISRs),** . The downgrade of the implementation progress from Satisfactory was mainly due to delays in some of the key interventions such as the rollout of quality assessment and delays in all key procurement packages. Soon after the last ISR was archived, key procurement packages that were delayed, namely the recruitment of ICT firm and the HEF Promoters, have been successfully concluded and these activities are back on track. Likewise, the next phase of the quality assessment will be rolled out in the last quarter of 2018, and with the ICT firm in place, this should help speed up the process for national rollout by April 2019. The available data for the PDO-level indicators indicate that the progress against set targets is on track. Disbursement is currently at 47.2 percent for IDA and grant funding combined.⁴ This is expected to further increase when the pending payment for DLIs of Year 1 and the recently received financial report are processed for withdrawal. The fiduciary rating is Substantial; the environmental safeguards rating is Moderate and social safeguards rating is Moderate. All legal covenants including audit and financial management (FM) reporting requirements have been complied with.

10. **The proposed additional financing (AF) will provide financing to further strengthen and expand activities that scale up the impact and development effectiveness of the project.** The AF will support the supply-side readiness and availability of key services that are or will be integrated into the expanded HEF benefit package, including cervical cancer screening and treatment (CCS&T), hypertension and diabetes screening and treatment (H/D S&T), and long-term family planning (LTFP) services⁵. Additionally, overall contribution to the H-EQIP MDTF for this AF will also include bank-executed support for the costs associated with recruitment of an external verification firm for the DLIs.

11. **The project will undergo a restructuring concurrently with the preparation of the AF to reflect the scale-up activities and modifications to the Results Framework, as well as modification to some existing DLIs that need to be revised to address unexpected contextual issues and bottlenecks witnessed in the 19 months of project implementation.** The Project Development Objective (PDO) will also be revised to reflect the contingent emergency response component embedded in the project. The original project closing date and project coverage will remain unchanged.

12. **The AF continues to be fully in line with the RGC's Third Health Strategic Plan (2016–2020), which affirms the country's mission for "effectively managing and leading the entire health sector to ensure that quality health services are geographically and financially accessible and socio-culturally acceptable to all people in Cambodia."** Its policy priorities are (a) increasing equitable access to effective and efficient health services; (b) reducing maternal death; newborn, infant, and child mortality; and malnutrition; (c) reducing the burden of communicable diseases; (d) reducing the burden of

⁴ Current disbursement as of July 15, 2018 according to the Operations Portal is at 29.6 percent for IDA and 72.7 percent for the grant. The grant has a higher rate as the MDTF is on cash basis and the current denominator is US\$ 20 million instead of the total envisaged amount of US\$50 million.

⁵ LTFP services include intrauterine devices (IUDs), implants, and injectable progesterone.



noncommunicable and chronic diseases; and (e) reducing impacts on human health due to major public health concerns.

13. The AF remains highly relevant to the World Bank Group (WBG)'s Cambodia Country Engagement Note (CEN) FY2016-2017, discussed on May 19, 2016.⁶ While the new WBG Country Partnership Framework (CPF) is currently under preparation, the AF is aligned with the Cambodia's Systematic Country Diagnostic (SCD)⁷ published in 2017, which places building human capital as central to development and identifies investing in early years and protecting households from shock as priority areas. In addition, the AF remains fully aligned with the World Bank's twin goals to reduce poverty and promote shared prosperity.

14. Similarly, the project addresses the gender strategy through its first objective 'improving human endowments through investment in health, education, and social protection'. The predominant share of financing under this AF aims to address the supply-side constraints and improve availability of selected services that are critical to alleviating the burden of preventable morbidity and mortality among women, including improved access to family planning (FP) to reduce the risk of unsafe abortion and teenage pregnancies, and through screening and timely treatment for a noncommunicable disease (NCD) that only affects women, cervical cancer. While the rapidly increasing disease burden of diabetes and hypertension affects both men and women, women can often be disproportionately affected given their social status, higher longevity, and restricted access to treatment options, and the remaining financing under this AF focuses on service readiness of public health facilities for these two NCDs, to improve women's access to these services.

II. DESCRIPTION OF ADDITIONAL FINANCING

A. Additional Financing

15. While Cambodia succeeded in decreasing its crude birth rate during the last decade, and the intervals between childbirth increased, the country still faces high unmet need⁸ for FP and particularly for LTFP methods.⁹ While other health-related indicators have steadily improved in Cambodia, teenage pregnancy remains an indicator that has worsened in the past decade, with approximately 12 percent¹⁰ of women ages 15–19 becoming mothers or pregnant with their first child in 2014. Associated with this is an alarmingly high rate of abortion: approximately 12 percent of women had at least one abortion in their lifetime and 7 percent have had an abortion in the past five years, an increase from 5 percent in 2010. The

⁶ Report No. 104843 – KH. <http://documents.vseirnyjbank.org/curated/ru/173801467999088768/pdf/104843-CEN-P120312-IDA-R2016-0068-IFC-R2016-0088-MIGA-R2016-0022-Box394888B-OUO-9.pdf>

⁷ Report No. 115189-KH. <https://openknowledge.worldbank.org/bitstream/handle/10986/27149/Cambodia-SCD-May-9-SEPCO-05242017.pdf?sequence=5&isAllowed=y>

⁸ Cambodia's modern contraceptive prevalence has increased from 18.8 percent in 2010 to 38.8 percent in 2014, but the rate of progress has slowed down requiring dedicated attention to ensure that the target of 48 percent is reached by 2020. Unmet need for FP—defined as those who are fecund and sexually active but are not using any method of contraception and report not wanting any more children or wanting to delay the next child (World Health Organization [WHO])—is at 12 percent based on Cambodia Demographic and Health Survey (CDHS) 2014.

⁹ Contraceptive use is still skewed toward short-term methods: half of all women prefer the pill (50 percent) and nearly a third prefer injections (26 percent) over the IUD (12 percent) and implants (6 percent) based on CDHS 2014.

¹⁰ Unless otherwise stated, all data in this paragraph are from CDHS 2010 and 2014.



number of women reporting unsafe abortions also remains unacceptably high: among those who have had abortions, 30 percent did not receive any assistance from a health care professional.¹¹ This considerably adds to preventable morbidity and mortality among women in Cambodia.

16. **Despite improved health outcomes during the past decades, Cambodia faces new challenges that remain unaddressed—including rising disease burden of NCDs.** Risk factors for NCDs are high, as the proportion of the population age 60 and above will increase nearly by twofold in the coming 20 years, from 6.2 percent in 2010 to 11.9 percent in 2030. The recent report on Prevalence of NCD Risk Factors in Cambodia (STEP Survey 2016) estimates that the overall prevalence of hypertension among age group 25–64 was 14.5 percent (men 15.9 percent and women 13.0 percent), an increase from 11.2 percent in 2010. Compared to STEP Survey 2010, while the overall prevalence of diabetes among age group 25–64 has decreased, from 2.9 percent in 2010 to 1.5 percent in 2016, the proportion of people with impaired blood glucose has significantly increased from 1.4 percent in 2010 to 9.6 percent in 2016. Women have a higher rate of diabetes prevalence (1.7 percent) as opposed to men (1.3 percent). While the prevalence and incidence of different kinds of cancers is not known and few assessments are available in Cambodia, the burden of this preventable disease disproportionately affects women in countries where CCS&T systems are weak or nonexistent. STEP Survey 2016 revealed that less than one-fifth (14.7 percent) of targeted women ages 30–49 reported having ever received cervical cancer screening (CCS) services before, highlighting the low availability of these services.

17. **The activities proposed under the AF builds upon important lessons learned from previous programs and projects supported in Cambodia,** including the Second Health Sector Strengthening Program and a voucher program for health services. The voucher program targeted reproductive health services in Cambodia, particularly focusing on women from the vulnerable groups and the poor, between June 2010 and February 2018. Services supported under the voucher program included LTFP and CCS&T.¹² The later phase of the program focused on maintaining and extending support to these priority health services, their quality improvement, and most importantly integration of these services into Cambodia's health system through inclusion of these services into the new, expanded HEF benefit package.¹³ Along this process, it became clear that further strengthening of the supply-side readiness is imperative to improve uptake of these services at the facility level. It is against this background that the AF supports supply-side readiness for these interventions that were earlier supported by the voucher program providing data and technical inputs. In addition, the AF supports service readiness for hypertension and diabetes, which are among the highest disease burden NCDs in Cambodia, and also where some initial technical capacity and experience are available from recent technical support by the WHO through Package of Essential NCD services clinics making it possible to roll out these services faster than, say, chronic lung disease or other NCDs.

¹¹ While abortion was legalized in Cambodia in 1997, the law mandates that abortions be conducted only by medical professionals authorized by the Ministry of Health (MOH) in a health facility.

¹² Other services covered under the voucher scheme included safe motherhood, child health and nutrition, safe abortion, cataract detection and treatment, services for persons with reduced mobility, and facility improvement and supplies.

¹³ A joint *prakas* on the new HEF benefit package has been developed between the MOH; Ministry of Economy and Finance; and Ministry of Social Affairs, Veterans and Youth Rehabilitation, signed and launched in May 2018. Following the signing of the joint *prakas*, the MOH will revise the HEF benefit package guidelines to ensure consistency with the new *prakas* and is expected to include some specific benefit packages in the HEF reimbursement that may include packages for CCS&T and H/D S&T.



18. **The AF will further support the carrying out of a program of activities designed to improve the supply-side readiness of the health sector and strengthen the institutions in charge of implementing project activities.** Specifically, the AF will support enhanced services for CCS&T, H/D S&T, and LTFP, all through the provision of additional HEF grants upon the achievement of the specified DLI targets. Three additional DLIs will be added under Component 3 (Subcomponent 3.1): (a) Number of ODs enabled to provide quality cervical cancer screening and treatment (CCS&T) services (DLI 7); (b) Number of ODs enabled to provide quality hypertension and diabetes screening and treatment (H/D S&T) services (DLI 8); and (c) Number of ODs providing quality LTFP services (DLI 9). The activities against which performance will be assessed and paid are focused on setting up the processes and the initial rollout of these services, including training, equipment, and initial stock of drugs. Delivery of services will be incentivized to a certain extent, but much of the costs during and beyond the DLI period will be financed by the HEF (for those eligible), from user fees, and from domestic budgetary sources. Some of these costs are estimated in the economic analysis section of this paper.

19. **DLI 7.** The DLI on CCS&T aims to increase the number of health facilities enabled to provide these services. The preparation for the rollout of CCS&T is already at an advanced stage, and the services have been successfully established and tested in a significant number of health facilities within the six provinces that were hitherto implementing the voucher program supported by Germany. The DLI supports the larger-scale rollout of this service in other provinces that were not covered by the voucher scheme. The first set of the DLI will focus on preparatory activities that are required to establish these services at the OD level, including finalization of standard operating procedures (SOPs) for CCS&T, update of the HEF guidelines, and revision of Health Management Information System (HMIS) to effectively monitor the outcomes. The second and third years of the DLI will be disbursed against the number of new districts where CCS services have been enabled as well as where there is increase in coverage for screening using visual inspection with acetic acid (VIA)¹⁴ and cryotherapy treatment.¹⁵

20. **DLI 8.** The DLI on hypertension and diabetes will follow a similar structure as that of CCS&T, with the first set of the DLI dedicated to putting in place the requirements to enable the services, and subsequent years' disbursement against the number of new ODs where H/D S&T have been enabled according to the guidelines. This means that the ODs have met all the supply-side conditions to meet this requirement, including appropriate rooms to serve NCD services, trained staff, equipment, adequate supplies and drug availability, referral and monitoring system, and community structure to support home-based care as applicable in accordance with the guidelines. It will also reward the increase in the coverage of screening.

21. **DLI 9.** The DLI on LTFP services aims to strengthen the supply-side capacity through ensuring adequate levels of FP commodities as well as trained human resources to provide the services available at health facility levels. In Year 2, the DLI will reward against development of training modules to better forecast and plan the need for LTFP commodities and at the same time develop a regular monitoring

¹⁴ Recent studies have demonstrated that VIA is a noninvasive, inexpensive screening method that could be an alternative screening method to Pap smear. It can be carried out at HC level. Since it provides immediate results, those eligible for treatment can receive cryotherapy treatment of the precancerous lesions faster and often in the same facility at the same time.

¹⁵ Though the program is primarily aimed at detection of early stages and their treatment by cryotherapy, the SOPs will specify how any incidental cases found during the screening that are more advanced will be referred for treatment to an appropriate level, using the HEF entitlements where applicable. To increase uptake, health facilities are expected to also strengthen their outreach services.



system for the uptake of LTFP services at the OD levels. In the subsequent years, disbursement will occur against the availability of certified midwives at health facility levels. In addition, with the improvement in service readiness, it is expected that service utilization will also increase. Thus, the subsequent years' disbursements will also be made against increase in the uptake of LTFP services.

Table 1. New DLI Indicators Added under AF (Subcomponent 3.1) (US\$, millions)

New DLIs	Total Value (US\$, millions)
DLI 7: Number of ODs enabled to provide quality cervical cancer screening and treatment ¹⁶ (CCS&T) services	3.0
DLI 8: Number of ODs enabled to provide quality hypertension and diabetes screening and treatment (H/D S&T) services	1.5
DLI 9: Number of ODs providing quality long-term family planning (LTFP) services	1.5

22. **Some important new features will be introduced for the new DLIs.** First, the new DLIs will be fully scalable; therefore, the DLI achievement for these new DLIs will be calculated based on a fixed value for each unit of achievement. For example, increase in the number of new ODs that are enabled to provide selected services will be rewarded at a fixed rate per district that has achieved the status. These will be fully scalable but up to a maximum ceiling for each DLI per year, as indicated in the DLI table (annex 1). Second, as opposed to the DLIs that are currently implemented at the central level through their respective technical departments, achievement of the new DLIs will rely on performance at subnational levels including provincial health departments (PHDs) and ODs with the largest share of DLI money also going to these levels.¹⁷ This will change the incentive structure as well as contribute to building more capacity at the subnational levels where services are delivered.¹⁸ Third, to allow more flexibility and fungibility across the DLIs, these noncumulative indicators will be allowed to roll over to the following year and disbursed in case the target is overachieved the following year. Furthermore, between the three new DLIs, it will also be possible to disburse funds remaining from underachievement in one DLI to overachievement in the other DLI, though such overachievement earnings will be limited to 50 percent higher than the originally indicated amounts for each DLI. The detailed arrangement on deciding the amount to be disbursed will be based on the actual DLI achievements.

23. The revised DLI table, detailed description, and verification protocol are attached in annex 1. The Project Operations Manual, which includes the DLI manual, will be updated to reflect the changes and shared for World Bank approval before the signing of the amendments to the Grant Agreement (GA). Since there will be funds flowing to subnational levels under the new DLIs, the modalities of this flow will also be specified in the manual.

24. With anticipated increase in availability of the targeted services, there is increased need for the MOH to better monitor results. Expansion of DLIs will also require a more rigorous verification mechanism to better track results against which payment will be made. Overall contribution to the H-EQIP MDTF for

¹⁶ While the trial for HPV vaccination is beyond the scope of the AF, it is worth noting that the trial is under way for the prevention of cervical cancer or other HPV-related diseases, with a perspective that the HPV vaccines will be introduced by using the RGC and Gavi resources.

¹⁷ Some funds earned from DLI achievement will still go to the central-level responsible departments for program monitoring, capacity building, and hand-holding of the subnational level, to enable the required capacity for achieving the DLIs at this level.

¹⁸ The distribution of DLI value for each indicator among the different responsible entities will be indicated in the DLI manual.



this AF will also include bank-executed support for the costs associated with recruitment of an external verification firm for the DLIs.

25. Currently, Component 1 (Strengthening Health Service Delivery) and Component 2 (Improving Financial Protection and Equity) are financed by the RGC at a minimum of 50 percent for performance-based SDGs and for 50 percent of the HEFs, respectively. During the preparation of H-EQIP, it has been agreed with the RGC that in view of ensuring financial sustainability of these programs, any increase of direct benefit costs of the HEFs (beyond US\$12 million per year) will be covered by the RGC. Thus, though the project cost table remains as agreed at the beginning of H-EQIP and the AF does not reflect additional funds allocated to Component 2 for the cost of the HEFs, it will rely on prior agreement for continued increases in contribution by the RGC, for 100 percent of the costs exceeding US\$12 million per year. In addition, it is expected that the supply-side support provided through the AF under Component 3 will lead to improved utilization of services thereby creating another significant source of increased counterpart contributions to the services supported under Component 2 to effectively cover the additional costs associated with expansion of available services under the HEF and their respective utilization.

26. Similarly, for Component 4 (Contingent Emergency Response), since this is a provisional zero allocation, no additional funds will be added. However, the principle remains, and this component will be triggered if in case a need to provide an immediate response to an eligible crisis or emergency arises.

B. Restructuring

27. **Change in PDO.** The PDO will be modified as “to improve access to quality health services for the targeted population groups, with protection against impoverishment due to the cost of health services in the Kingdom of Cambodia, and to provide immediate and effective response in case of an eligible crisis or emergency” to reflect the standard language that is advised for all new projects financed by the World Bank that have a contingent emergency response component.

28. **Change in Results Framework.** The change reflects (a) adjustment of selected PDO-level and intermediate outcome (IO) level indicators to address difficulties in obtaining data based on the original formulation and to include a stronger focus on gender; (b) additional indicators reflecting the new DLIs added under the AF; and (c) the new Health, Nutrition, and Population corporate results indicators. The proposed changes are summarized in Table 2 and reflected in the Results Framework under section VIII.

Table 2. Proposed Changes to PDO/IO-level Indicators

Indicator Name	Proposed Change	Rationale for Change
Increase in utilization of health services by HEF beneficiaries (PDO level indicator)	Change formulation to “Increase in the number of outpatient services (episodes) covered by HEF”	Due to limitations of the information system in attributing visits of specific beneficiaries to the HC, data are not available with the initial formulation. The new formulation also reflects the need to monitor HEF utilization for outpatient services, which has been low and thus a concern in the past.
Percentage of health centers having stock-outs of 14 essential medicines	Drop	Data for this indicator have not been reported in the stated source of this information (National Health Congress report) since project



Indicator Name	Proposed Change	Rationale for Change
(IO-level indicator)		effectiveness, also reflecting the unlikelihood of obtaining it in the future.
NEW (IO-level indicator)	Add a new indicator “number of women screened for cervical cancer with VIA”	To reflect the new DLI 7 and to allow for monitoring and response to changes in services uniquely targeted at women. The data are routinely collected through the HMIS and can be monitored regularly.
NEW (IO-level indicator)	Add a new indicator “number of ODs reporting an increase of over 10 percent in current LTFP service users over the previous 12 months”	To reflect the new DLI 9 and to allow for monitoring and response to changes in services uniquely targeted at women and where Cambodia has significant unmet need. The data will be collected as part of DLI reporting and through the HMIS and can be monitored regularly.
Percentage of HMIS reports submitted on time (IO-level indicator)	Drop	Submission of the HMIS has consistently been at 95 percent (end target). Decision was made to reorient this IO-level indicator to capture more the increase in utilization of services captured through the HMIS.
NEW (IO-level indicator)	Add a new indicator “People who have received essential health, nutrition, and population (HNP) services,” including a sub-indicator with gender disaggregate	In compliance with the corporate requirement of including a corporate results indicator, this will be captured through an aggregate of inpatient department and outpatient department encounters all over Cambodia, given that the project supports SDGs and HEFs, both of which cover nationwide. The data source will be the HMIS.

29. **Change in components and costs.** The change reflects the AF of US\$6 million that will finance the three new DLIs under Subcomponent 3.1. Table 3 provides details of the revised project cost with the AF (exclusive of World Bank administration and supervision costs). There will be no changes to Components 1, 2, and 4. The cost estimates for Component 2 are conservative and kept at the same level as the original financing, though expected to be significantly higher with the expansion of the HEF to national hospitals in 2018 and subsequently due to improved supply-side readiness and expected strengthening of efforts at the HEF promotion.

Table 3. Revised Project Cost and Financing by Component and Sources with AF (US\$, millions)

Project Component	IDA	MDTF (Original)	RGC	MDTF AF	Total Project Cost	PHRD (Complementary Financing) ^a
1. Strengthening Health Service Delivery	7.50	12.50	54.2	0	74.2	0
2. Improving Financial Protection and Equity	11.25	18.75	40.0	0	70.0	0
3. Ensuring Sustainable and Responsive Health Systems	11.25	18.75	0.0	6	36.0	1



Project Component	IDA	MDTF (Original)	RGC	MDTF AF	Total Project Cost	PHRD (Complementary Financing) ^a
4. Contingent Emergency Response	0.00	0.00	0.0	0	0.0	0
Total	30.00	50.00	94.2	6	180.2	1

Note: a. Since PHRD funds are complementary financing, they are not included in the total project cost.

30. **Change in DLI definition, targets, and value allocation.** Adjustments are required for some of the existing DLIs to reflect (a) changes to the targets for DLI 4 to better support the evolving NQEMP and to augment the critically important results needed from the quality enhancement process and (b) partially shifting DLI funds from DLI 2 and DLI 4 where initial targets were more ambitious than likely to be achieved by the end of the project to DLI 5 where more resources are required to further strengthen the PCA capacity to assume their increased role in mainstreaming the implementation of Component 1 and Component 2 activities into sustainable domestic systems.

31. **For DLI 5.** The new PCA was established in September 2017 and is gradually assuming its role as an independent verification and purchasing agency. Among its important roles are taking over the information system (Patient Management Registration System [PMRS]) function from the University Research Co. and ensuring continuity of the HEF monitoring using field monitoring as well as this information system and for ex post verification of SDGs where this is currently being supported by another third-party international firm. Therefore, there is urgent need to increase its capacity both in terms of human resources and financial resources to assume these roles without disruption and in an efficient and sustainable manner. The restructuring will support this increased demand by partially reallocating some DLI funds expected to remain unspent in DLI 2 and DLI 4 and deploying them to new targets under DLI 5, the achievement of which will ensure optimal and sustainable functionality of the PCA. Having these specific DLIs around PMRS transition and post verification of SDGs also helps keep the attention on these vital ingredients, which are key to the success of H-EQIP as a whole and need to be carefully transitioned to the PCA for sustaining the HEF and SDG platforms. Details of these revisions are summarized in Table 4 and reflected in the final DLI table in annex 1.

Table 4. Revised DLIs and Rationale for Change

Original DLI	Proposed Change	Rationale for Change
DLI 2: Comprehensive in-service training program on Minimum Package of Activities (MPA) for health workers implemented by MOH	Cancel targets and allocation for Year 3 and Year 4 (US\$400,000 each year) and reallocate this amount to DLI 5. The undisbursed allocation of US\$1.2 million from Years 0, 1, and 2 will be retained under this DLI and will be paid against any achievement of targets for Years 0, 1, and 2.	The targets initially set for this DLI are considered more ambitious than what could have been achieved, and it is unlikely that the full allocation of US\$2.0 million over five years will be disbursed. Therefore, it has been agreed in consultation with the RGC that while they will aim to achieve up to Year 2 targets, allocation for Years 3 and 4 targets will be cancelled and transferred to DLI 5 where increased need is anticipated for the PCA to



Original DLI	Proposed Change	Rationale for Change
		carry out the ex post verification role for SDGs and transition of PMRS.
DLI 4: Health service quality monitoring in the MOH enhanced	<p>Revise the indicator targets for Years 2, 3, and 4 to the following:</p> <p>Initial total allocation for Years 1–4 were US\$2.5 million; US\$700,000 of this value will be transferred to DLI 5. The remaining value for the three years is US\$1.8 million).</p> <p>Year 2 (total US\$800,000):</p> <ol style="list-style-type: none"> 1. All ex ante assessment teams have used ICT and tablets for conducting ex ante assessment (US\$ 500,000) 2a. Two additional assessors from every OD and PHD trained and certified as qualified assessors (US\$200,000) 2b. 30 percent of coaching activities include experts from national program managers at OD, PHD, and/or national level and/or expert from RHs (US\$100,000) <p>Year 3 (total US\$700,000):</p> <ol style="list-style-type: none"> 1. Reduction by 30 percent from the baseline in the percentage of health facilities where the ex-ante assessment score is found to be more than 10 percentage points higher than the ex post verification score (US\$200,000) 2. Existing NQEM Tool updated (to reflect the increased understanding of quality parameters) and coaching protocols for existing tools and their respective vignettes developed and used in the NQEM program(US\$200,000) 3. 25 additional/new vignettes and their respective coaching protocols developed and used in the NQEM program (US\$150,000) 4. 50 percent of coaching activities include experts from national program managers at OD, PHD, and/or national level and/or experts from RHs. (US\$150,000) 	<p>This indicator has achieved Year 0 targets and received payment. However, targets for Year 1 onwards in the original project were conditional upon the RGC's Level 2 quality assessment tools and protocols being ready and the assessment being conducted. Following the MOH's decision to discontinue the Level 2 assessment and to replace this with ex-ante^a and ex post quality assessment using the NQEM Tool^b, the targets of this DLI have been revised to better reflect the expected outcomes arising from the NQEMP and have only been included for Years 2, 3, and 4, given that Year 1 closed before the period of retroactive financing for this AF. In addition, as with DLI 2, with the Level 2 assessment no longer on the table, the initial total allocation of US\$2.5 million will not be fully disbursed by the end of the project; so, US\$0.7 million will be transferred to DLI 5 where the post verification role of the PCA also supports this NQEM program.</p>



Original DLI	Proposed Change	Rationale for Change
	<p>Year 4 (total US\$300,000):</p> <ol style="list-style-type: none"> Reduction by 50 percent from the baseline in the percentage of health facilities where the ex-ante assessment score is found to be more than 10 percentage points higher than the ex post verification score (US\$150,000) 60 percent of coaching activities include experts from national program managers at OD, PHD, and/or national level and/or experts from RHs. (US\$150,000) 	
DLI 5: Sustainable health purchasing arrangements established by RGC	<p>From the reallocated funds from DLI 2 (US\$800,000) and DLI 4 (US\$700,000), the following DLI targets will be newly added to the already existing ones (for which the PCA is the responsible entity):</p> <p>Year 2: Employment of at least 15 medical, nursing, and midwifery staff for ex-post verification function is completed, and PMRS sustainability plan is developed (new allocation of US\$500,000; total value for Year 2 targets increased to US\$1.0 million)</p> <p>Year 3: PMRS fully transitioned to the PCA and is functional for the HEFs and other population groups managed by the PCA (new allocation of US\$500,000; total value for Year 3 targets increased to US\$1.0 million)</p> <p>Year 4: PMRS documentation and module standardization as stipulated in the PMRS sustainability plan are completed (new allocation of US\$500,000 to the initial amount of US\$0; total value for Year 4 targets at US\$500,000)</p>	<p>The need for further strengthening the PCA's capacity to assume its functions as an independent purchasing agency and carrying out the HEF monitoring and ex post verification for SDGs and taking over the management of PMRS are mission-critical activities for these RGC platforms and for H-EQIP's overall success and sustainability. It is now apparent that these activities will require closer attention and more resources than initially envisaged. Therefore, this DLI's targets are revised to include the recruitment of additional personnel and to ensure the key functions for which the PCA is responsible are fully operational by the end of project.</p>

Note: a. Internal assessment conducted by certified assessment teams from the PHDs or health ODs to monitor quality of health care service delivery at their respective HCs and district/provincial RHs; b. Tools used by ex-ante assessment teams to measure improvement on quality of health care service delivery on a routine basis.

32. Disbursement arrangements. Disbursement estimates will change to reflect the AF. A retroactive financing clause will be included in the amendment letter to the Financing Agreement (FA) and MDTF GA for the AF to allow for payments made before the date of signing of the amendment letter to the FA and



GA. The aggregate amount of the retroactive financing should not exceed 20 percent of the total AF amount and will apply to expenditures incurred within a period of 12 months before the date of the signing of the legal agreements for the grant (including the relevant DLI period for Year 2). No change in funds flow is expected as funds from Ministry of Economy and Finance to the MOH will continue to flow through the MOH's budget using the RGC's SOP system, and funds from central-level MOH to subnational entities will follow the same SOP arrangement for DLI funds currently adopted at the central level.

33. **Institutional arrangement will remain unchanged with the MOH as the implementing agency acting through its technical departments; national programs; and the PHDs, ODs, RHs, and HCs.** Within the MOH, implementation of the project will continue to be managed by the Department of Planning and Health Information (DPHI) and the Department of Budget and Finance (DBF) using mainstream MOH processes. Among the technical departments and programs, increased responsibility is expected for the Preventive Medicine Department (PMD) and National Maternal and Child Health Centre (NMCHC) reflecting the new DLIs on NCDs and LTFP, while the PCA will continue to play a critical role in the monitoring and verification of the HEFs and SDGs. Similarly, the quality assurance office will maintain its integral role in driving quality improvements in service delivery.

34. **Project coverage will remain unchanged as nationwide, with project beneficiaries being the population of Cambodia, particularly the poor and vulnerable, and health care providers working in the public health sector.**

III. KEY RISKS

35. **The overall risk rating remains unchanged.** The AF will build on activities and implementation arrangements that have been tested and lessons learned from implementing the original project. The overall project risk remains "substantial".

36. **Political and governance.** This risk remains "substantial", mainly related to uncertainties around the outcomes of the election that took place in July 2018, which may affect leadership change and ownership of key reforms depending on the personnel to be selected.

37. **Macroeconomic.** Despite macroeconomic risk rating being "substantial", the macroeconomic situation has been stable, and Cambodia has experienced robust growth in recent years, which is projected to continue in the medium-term. As the project's success relies on substantial counterpart financing, although this has not been the case so far, changes in the macroeconomic situation may risk not meeting their expected contribution.

38. **Sector strategies and policies.** Risks related to sector strategies and policies are also rated "substantial" mainly due to the uncertainties around policy direction changes after the election. However, as under the original project, this AF continues to support the government's key programs by mainstreaming into their own system and fully aligning with their own policy priorities. Further, the project aims to help the government consolidate the multiple schemes into a coherent system to achieve UHC, thus emphasizing ownership.

39. **Technical design of project.** Technical design of project remains ambitious but with a clear objective of ensuring sustainability beyond the project; this risk will be mitigated through continued



extensive support through TA and analytical work. With the expansion of DLI component, concern around adequacy of data may be exacerbated by the increased need to track the new DLIs using the current system through the HMIS and PMRS, though availability of data has improved. The first year of the new DLIs includes a target to revise the HMIS and PMRS to ensure that the required information is captured in these systems, at the same time supporting the capacity building to better monitor results.

40. **Institutional capacity.** Risks associated with institutional capacity may be increased, especially at the central level to roll out the services. The central-level technical departments (mainly PMD and NMCHC) will be responsible for taking a lead role in training, monitoring, and supervision down to the HC level. While the DLIs are designed primarily to incentivize at the province and district levels, a proportion of the DLI value will be distributed to central technical departments subject to their maintaining the needed capacity. Lessons learned from neighboring countries such as Lao People's Democratic Republic and Myanmar on introducing DLIs at subnational levels will also be taken into consideration in the implementation.

41. **Fiduciary.** There are continued concerns around fiduciary risks, associated with increased use of government systems, even as this is an intended and desirable development from a sustainability perspective. The project will continue to support public financial management capacity building within the MOH as well as building public financial management capacity at subnational levels through the World Bank's ongoing health sector Programmatic Advisory Services and Analytics. Further, extensive support will continue to be provided in the establishment of and full transition to the PCA.

42. **Stakeholders.** The Bank team will place an increased emphasis on engaging various stakeholders to ensure that all implementing parties have a solid understanding of the project's development impact and how it contributes to the strategic priorities of Cambodia's health sector. Close coordination among the MDTF partners and other partners will be ensured so that all development partners take a coherent approach to supporting government's key programs.

43. **Additional Financing.** In the highly unlikely event that the additional contribution from Germany is not received due to any reason, and as the GA is on cash basis, the GA for the AF will not be signed. Further, since the AF will support enhanced services including CCS&T, H/D S&T, and LTFP services, these enhanced services will not be added to the original project in case the additional contribution is not received.

IV. APPRAISAL SUMMARY

A. Economic and Financial (if applicable) Analysis

44. **The economic analysis undertaken for the original H-EQIP project concluded a strong rationale for public financing in improving the quality of public health services and providing financial protection for the poor and other vulnerable groups in Cambodia.** The AF of H-EQIP will support supply-side readiness of ODs for the provision of four health services—screening for cervical cancer and treatment, hypertension, diabetes as well as provision of LTFP services.

45. **The AF of the project is expected to directly benefit approximately 375,143 people, which is 2.4 percent of the population of Cambodia.** It is estimated that 63,561 new cases of precancerous cervical



lesions (a fraction of which can develop into invasive cervical cancer if left untreated), 226,661 new cases of hypertension, and 38,721 new cases of diabetes will be detected through the coverage of the intervention in the targeted ODs.

46. **The estimated costs of providing screening and treatment for these health services as well as LTFP are US\$7,362,917, and the costs reflect the ‘systemic costs’ to the Government, which are even beyond the project costs.** The approximate cost per new case detected and treated for hypertension, diabetes, and cervical cancer and for providing LTFP over the three years of this project is US\$19.6, which is very cost-effective. This amount of spending will be sustainable as it is only 1.5 percent of the current government health spending and is miniscule (0.04 percent) as a share of gross domestic product (GDP). The details are included in annex 3.

B. Technical

47. **H-EQIP continues to provide an adequate and cost-effective basis for supporting the key government reforms and, more importantly, consolidating the gains from innovative approaches that were introduced under previous projects supported by the World Bank, such as the HEFs and SDGs.** Moreover, by mainstreaming implementation of project activities into government systems, it allows for building domestic capacity and sustainability in achieving the RGC’s four key priorities as stipulated in the Third Health Strategic Plan: maternal and child health, communicable diseases, NCDs, and health system strengthening. The project has adopted a strong results-based focus—including the use of DLIs in addition to the output-based payment through the HEF and performance-based SDGs, which has so far proven to be effective in bringing about the much-needed expansion of access, quality, and financial protection.

48. **The AF aims to strengthen the capacity within the public sector to better deliver NCD services, focusing on CCS&T as well as H/D S&T.** The MOH has prepared guidelines for CCS&T and H/D S&T¹⁹ but has only worked on a small scale for implementation. The nonpublic sector is currently providing such services, but it is largely unregulated and outside the reach of the poor and vulnerable segments of the population. The capacity to treat is also very limited²⁰—according to PMD estimates, an additional 100 facilities need to be providing cryotherapy. As for diabetes and hypertension, there are diabetes clinics at OD levels and HCs that implement the Package of Essential NCD Services, but these numbers are limited, and they are operational on a pilot project basis and not adequate to cover the needs of the country. The AF therefore intends to incentivize the rollout of the ‘full package’ of services as described in the respective SOP, as well as to ensure that adequate capacity is built at central, provincial, OD, and health facility levels to provide these services.

49. **The need for continued support to FP previously funded by the voucher program is justified from the high and growing rate of teenage pregnancies as well as a high rate of abortion in the country.**

¹⁹ A national Action Plan for Cervical Cancer, Prevention and Control 2017–2021 and a Draft National SOP for CCS&T program have been developed in 2017 but have not been implemented. Similarly, a National Strategic Plan for the Prevention and Control of NCD 2013–2020 as well as a National SOP have been developed but not finalized.

²⁰ While there has not been a systematic assessment on supply-side readiness of NCDs in Cambodia, data from the HMIS and past programs (such as the voucher program) highlight the limited availability of services offered. For example, there are currently eight health facilities that can provide cryotherapy and two hospitals in Phnom Penh that provide treatment (surgery, chemotherapy, and radiotherapy). CCS was not available in Cambodia apart from a small pilot and some opportunistic screening by nongovernmental organizations until select sites were covered by the voucher program.



While government budgets are now adequate to procure sufficient stock of FP commodities, there is a need to further strengthen the capacity at the facility level to forecast the need for LTFP commodities, as well as train the staff in the use of these commodities. The project also aims to further foster the uptake of modern FP methods by tracking the increase in LTFP users. While there are systemic issues that may still affect the de facto availability of LTFP commodities, the limited DLI funds still provide a reasonably strong incentive to keep the local services going somehow.

50. **The AF has a strong focus on the unique health needs of women, with three-fourths of the AF amount provisioned exclusively for services aimed at women of reproductive age including LTFP and CCS, and the balance of the AF addresses emerging health priority needs including diabetes and hypertension.** The project aims to provide them with improved access to quality maternal health services, especially given the persistently high rate of abortion and unmet needs. H-EQIP also continues to support the activities financed under the voucher program, which aims to promote and improve specific reproductive and other health services utilization for the poor and vulnerable as an integrated and complementary financing instrument to existing HEFs and community-based health insurance schemes. In response to the H-EQIP Gender Assessment, the HEF promoters will be trained to more effectively attract HC users in remote areas, with a strong focus on women and services related to safe child birth. The performance grant element of SDGs has already been revised to provide more funds for HCs in remote locations so that the HCs can address the unique needs of remote rural communities, including ethnic minorities.

C. Financial Management

51. **The FM assessment of the AF to H-EQIP in accordance with the Bank's Directive 'Investment Project Financing' is based on review of the FM system and knowledge gained from implementation support of H-EQIP.** The H-EQIP AF will adopt the existing and acceptable FM system of the current H-EQIP, which has a functioning computerized accounting system, appropriate supplementary FM manual, and an assigned FM team of the DBF having clear roles and responsibilities on the project FM.

52. **The capacity of the DBF's assigned FM team in the project FM has been gradually enhanced.** The training on FM for the SDG for core trainers at the PHDs, ODs, and provincial RHs throughout the country has been completed, and training for accounting/finance staff at the subnational level is ongoing.

53. The submission of the quarterly interim unaudited financial report, the external audit report and other FM requirements are complied with.

D. Procurement

54. **This AF will finance expansion of the DLI component of the original project and no substantive procurement activities are envisaged.** The AF will finance operational expenses associated with achievement of DLI and will be procured based on Government procedures. World Bank Procurement Regulation for IPF Borrowers (July 2016 and revised November 2017) would be applicable for this AF. However, since no substantive procurement is envisaged, no Project Procurement Strategy for Development is required. Some mitigation measures agreed during the original project have been substantially implemented (the World Bank carried annual procurement post review at the national level and provided series of procurement training to minimize the identified weak procurement oversight;



Ministry of Economy and Finance engaged an external auditor firm, KPMG, for the integrated financial audit and procurement post review for procurement activities at sub-national level; and each bidding documents/Request for Proposals provides for channels and contacts of both Government and Bank through which interested parties can lodge their procurement complaints). Based on the progress on the implementation of mitigation measures, the procurement risk is considered Substantial.

E. Social (including Safeguards)

55. **No changes are proposed to social safeguards as part of the AF.** The AF does not include any additional coverage area or physical construction. Therefore, there is no additional risk to resettlement. However, the Resettlement Policy Framework prepared under the original project remains valid as the construction of health care facilities has yet to commence. The risks and benefits to indigenous peoples remains the same with the original project as these potential beneficiaries will require unique efforts to ensure that they are not excluded from the additional services covered under the AF, but rather that their access to these services increases as a result of the AF. The Indigenous Peoples Planning Framework and Indigenous Peoples Action Plan, prepared following provincial consultations in September 2017 remain valid for the activities proposed under the AF.

F. Environment (including Safeguards)

56. **No changes are proposed to environmental safeguards as part of the AF.** The project remains an environmental category 'B' and triggers two environmental safeguards policies: OP/BP 4.01 (Environmental Assessment) and OP/BP 4.09 (Pest Management). The AF does not include any additional coverage area or physical construction; therefore, it will not have incremental impacts from civil works. Environmental risk from the AF is considered Moderate. This is because the AF will promote CCS&T and NCDs prevention and treatment, which may generate a small amount of health care wastes. These activities are not expected to have significant adverse and unprecedented environmental impacts and can be managed through the existing mechanism under the original project.

57. **No changes are anticipated to the current Environmental Management Framework (EMF) to fulfill the requirements from the two environmental safeguards policies triggered.** The EMF provides guidelines for environmental impacts screening, identification, and preparation of instruments to manage the identified impacts. The EMF also includes a generic Environmental Management Plan and Environmental Code of Practices, Health Care Waste Management Plan, and Pest Management Plan. Like the original project, the AF will also follow the MOH Health Care Waste Management guideline in managing health care wastes. The EMF was consulted and disclosed on the MOH's website and the World Bank's external website in April 2016 for the original project. It has been updated and redisclosed both in-country and on the World Bank external website on June 21, 2018.

58. The PMD, which has dedicated staff and a safeguards consultant, has overall responsibility for monitoring and ensuring compliance to environmental and social safeguards policies requirements for the original project and the AF.



V. WORLD BANK GRIEVANCE REDRESS

59. **Communities and individuals who believe that they are adversely affected by a World Bank supported project may submit complaints to existing project-level grievance redress mechanisms or the World Bank's Grievance Redress Service (GRS).** The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the World Bank's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of World Bank non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate GRS, please visit <http://www.worldbank.org/en/projects-operations/products-and-services/grievance-redress-service>. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.



VI. SUMMARY TABLE OF CHANGES

	Changed	Not Changed
Project's Development Objectives	✓	
Results Framework	✓	
Components and Cost	✓	
Disbursements Arrangements	✓	
Implementing Agency		✓
Loan Closing Date(s)		✓
Cancellations Proposed		✓
Reallocation between Disbursement Categories		✓
Safeguard Policies Triggered		✓
EA category		✓
Legal Covenants		✓
Institutional Arrangements		✓
Financial Management		✓
Procurement		✓
Implementation Schedule		✓
Other Change(s)		✓

VII. DETAILED CHANGE(S)

PROJECT DEVELOPMENT OBJECTIVE

Current PDO

To improve access to quality health services for the targeted population groups with protection against impoverishment due to the cost of health services in the Kingdom of Cambodia.



Proposed New PDO

To improve access to quality health services for the targeted population groups, with protection against impoverishment due to the cost of health services in the Kingdom of Cambodia, and to provide immediate and effective response in case of an eligible crisis or emergency.

COMPONENTS

Current Component Name	Current Cost (US\$, millions)	Action	Proposed Component Name	Proposed Cost (US\$, millions)
Component 1: Strengthening Health Service Delivery	74.20	No Change	Component 1: Strengthening Health Service Delivery	74.20
Component 2: Improving Financial Protection and Equity	70.00	No Change	Component 2: Improving Financial Protection and Equity	70.00
Component 3: Ensuring Sustainable and Responsive Health Systems	30.00	Revised	Component 3: Ensuring Sustainable and Responsive Health Systems	36.00
Component 4: Contingent Emergency Response	0.00	No Change	Component 4: Contingent Emergency Response	0.00
TOTAL	174.20			180.20

DISBURSEMENT ARRANGEMENTS

Change in Disbursement Arrangements

Yes

Expected Disbursements (in US\$)

Fiscal Year	Annual	Cumulative
2016	0.00	0.00
2017	8,694,002.00	8,694,002.00
2018	11,052,478.00	19,746,480.00
2019	23,462,000.00	43,208,480.00
2020	23,341,950.00	66,550,430.00



2021	15,807,124.00	82,357,554.00
2022	3,642,446.00	86,000,000.00
2023	0.00	86,000,000.00

SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)

Risk Category	Latest ISR Rating	Current Rating
Political and Governance	● Substantial	● Substantial
Macroeconomic	● Substantial	● Substantial
Sector Strategies and Policies	● Substantial	● Substantial
Technical Design of Project or Program	● Substantial	● Substantial
Institutional Capacity for Implementation and Sustainability	● Substantial	● Substantial
Fiduciary	● Substantial	● Substantial
Environment and Social	● Moderate	● Moderate
Stakeholders	● Substantial	● Substantial
Other		
Overall	● Substantial	● Substantial

LEGAL COVENANTS – Additional Financing for Health Equity and Quality Improvement Project (H-EQIP) (P167351)

Sections and Description

No information available

Conditions

Type	Description
Signing	The amendment letter to the Financing Agreement and Grant Agreement will be signed after the signing of the revised MDTF Administrative Agreement with all the donors.



VIII. RESULTS FRAMEWORK AND MONITORING

Results Framework

COUNTRY: Cambodia

Additional Financing for Health Equity and Quality Improvement Project (H-EQIP)

Project Development Objective(s)

To improve access to quality health services for the targeted population groups, with protection against impoverishment due to the cost of health services in the Kingdom of Cambodia, and to provide immediate and effective response in case of an eligible crisis or emergency.

Project Development Objective Indicators by Objectives/ Outcomes

Indicator Name	DLI	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	
Improve access to quality health services (Action: This Objective is New)								
Increase in the number of health centers exceeding 60% score on the quality assessment of health facilities. (Number)		49.00						700.00
Improve financial protection and equity (Action: This Objective is New)								
Reduction in the share of households that experienced impoverishing health spending during the year. (Percentage)		0.90		0.80			0.70	0.70
Reduction in out of pocket health expenditure as percentage of the total		62.30	59.00	58.00	57.00	56.00	55.00	55.00



Indicator Name	DLI	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	
health expenditure. (Percentage)								
Increase in the number of outpatient services (episodes) covered by HEF (Number)		2,651,843.00						3,100,000.00

Intermediate Results Indicators by Components

Indicator Name	DLI	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	
Strengthening Health Service Delivery (Action: This Component is New)								
Percentage of health center, CPA-1, CPA-2, and CPA-3 facilities that receive payments based on performance that includes quality scores within 90 days of the end of the quarter. (Percentage)		0.00	50.00		60.00		70.00	70.00
Reduction in the variance in score on Health Center quality assessment. (Text)		53 percentage points						43 percentage points
Percentage of CPA-1, CPA-2 and CPA-3 facilities having a 60% quality score in the previous quality		0.00						Baseline +50%



Indicator Name	DLI	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	
assessments. (Text)								
Action: This indicator has been Revised								
Percentage of health centers having stock-outs of 14 essential medicines. (Percentage)		4.73						5.00
Action: This indicator has been Marked for Deletion								
Improving Financial Protection and Equity (Action: This Component is New)								
Number of operational districts reporting an increase of over 10 percent in current LTFP service users over the previous 12 months (DLI 9) (Text)		TBD in the first year of DLI (Year 2), based on HMIS by method						20% increase over baseline
Ensuring Sustainable and Responsive Health Systems (Action: This Component is New)								
Number of women screened for cervical cancer screening with VIA (cumulative) (Number)		37,267.00						130,000.00
Percentage of health centers, hospitals and OD/PHD receiving HEF and SDG payments within specified timelines (DLI 6). (Percentage)		0.00	40.00	50.00	60.00	70.00	80.00	80.00



Indicator Name	DLI	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	
Number of University of Health Sciences courses that adopt competency-based curricula with trained faculty and use of skills laboratory (DLI 1). (Number)		0.00	2.00	9.00	17.00	22.00	25.00	25.00
Outpatient Department (OPD) consultations (new cases only) per person per year. (Number)		0.59	0.75	0.80	0.85	0.90	0.95	0.95
Proportion of health centers with functioning health center management committees. (Text)		64%						Baseline + 25%
Percentage of HMIS reports submitted on time. (Percentage)		95.00						95.00
Action: This indicator has been Marked for Deletion								
People who have received essential health, nutrition, and population (HNP) services (CRI, Number)		13,221,685.00						16,000,000.00
People who have received essential health, nutrition, and population (HNP) services - Female (RMS requirement) (CRI, Number)		7,800,000.00						9,600,000.00



Monitoring & Evaluation Plan: PDO Indicators

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Increase in the number of health centers exceeding 60% score on the quality assessment of health facilities.	Based on a composite Health Facility Quality Index covering structural, process, and outcome domains.	MOH	Standardized supervisory checklist		Six monthly
Reduction in the share of households that experienced impoverishing health spending during the year.	Reduction in the number of households that experienced impoverishing health spending during the year.	CSES	Socioeconomic survey		Every three years
Reduction in out of pocket health expenditure as percentage of the total health expenditure.	Level of out-of-pocket expenditure expressed as a percentage of total expenditure on health (Indicator 67 in HSP3 M&E framework).	MOH	National Health Accounts (1 year in arrears) Administrative reporting system Household surveys		Annually
Increase in the number of outpatient services (episodes) covered by HEF	Defined as total number of individual HEF users in both HCs and hospitals using outpatient services/ total eligible HEF population,	DPHI in MOH	Health Management Information System (HMIS)		Annually



	expressed as %.				
Monitoring & Evaluation Plan: Intermediate Results Indicators					
Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Percentage of health center, CPA-1, CPA-2, and CPA-3 facilities that receive payments based on performance that includes quality scores within 90 days of the end of the quarter.	Percentage of health centers, C1,C2 and C3 hospitals having quality assessments done , through a standardized supervisory and paid within 90 days of end of quarter.	MOH	SOA quarterly review reports		Annually
Reduction in the variance in score on Health Center quality assessment.	Difference in percentage points between highest and lowest scores in health center quality assessments (measuring structural process and outcomes quality).	MOH	A health facility survey building on the Level 2 Assessment measuring structural process and outcome measures.		Every 2 years (in 2017 and 2019)
Percentage of CPA-1, CPA-2 and CPA-3 facilities having a 60% quality score in the previous quality assessments.	% of C1, C2 & C3 hospitals out of total C1,C2 & C3 hospitals that had a quality assessment and received a 60% aggregate quality score.	MOH	Standardized supervisory checklist		Quality Score measured quarterly through a Standardized Supervisory Checklist.



Percentage of health centers having stock-outs of 14 essential medicines.	Number of essential drugs (14 listed) that experienced stock-outs at health centers x 100/14 List of essential items endorsed by MOH.	DPHI in MOH	Health Management Information System (HMIS)		Annually
Number of operational districts reporting an increase of over 10 percent in current LTFP service users over the previous 12 months (DLI 9)					
Number of women screened for cervical cancer screening with VIA (cumulative)					
Percentage of health centers, hospitals and OD/PHD receiving HEF and SDG payments within specified timelines (DLI 6).	% of health centers and hospitals out of total eligible hospitals that receive payment within specified timeline.	MOH	MOH Annual report		Annually
Number of University of Health Sciences courses that adopt competency-based curricula with trained faculty and use of skills laboratory (DLI 1).	Number of courses following the new competency based curricula and use of skill laboratories.	MOH	UHS annual report		Annually
Outpatient Department (OPD) consultations (new cases only) per person per year.	Utilization of outpatient services at public health facilities among the total population. Total OPD consultations (new cases)/ Total population. In addition, utilization of outpatient services at public health facilities	DPHI/MOH	HMIS		Annually



	among children under 5 years will also be monitored. Total OPD consultations of children under 5 years (new cases)/ Total children under 5 years				
Proportion of health centers with functioning health center management committees.	There will be a mid-year and end-year assessment of JAAPs and a score card to measure the progress of implementation.	MOH OD	Commune Councils & HCMCs		Annually
Percentage of HMIS reports submitted on time.	Number of HC1 and HO2 reports submitted to the ODO on time x 100 / Total number of HC1 and HO2 reports	DPHI/PHDs /ODs/RHs/ HCs	HMIS		Annual
People who have received essential health, nutrition, and population (HNP) services			This will be measured as an aggregate number of (1) number of outpatient department cases and (2) number of inpatient department cases for all over Cambodia,		



			given that the project support SDGs and HEFs that have nationwide coverage and therefore could be considered that every transaction in the public health system in the country could be an indirect contribution by the project. Data source National Health Congress Report.		
People who have received essential health, nutrition, and population (HNP) services - Female (RMS requirement)			This will be measured as an estimated number of outpatient department		



			<p>cases (since gender-disaggregated data is not available for this at present) and actual number of inpatient department cases for all over Cambodia. This is the same rationale as the indicator on total project beneficiaries given that the project support SDGs and HEFs that have nationwide coverage and therefore could be considered that every</p>		
--	--	--	---	--	--



			transaction in the public health system in the country could be an indirect contribution by the project. Data source: National Health Congress Report and HMIS. For the baseline, the share of female beneficiaries is estimated at 60 percent based on reported IPD numbers in HMIS.		
--	--	--	---	--	--



ANNEX 1: REVISED DLI TABLE AND VERIFICATION PROTOCOL

Table 1.1. Revised Disbursement Linked Indicators (DLIs) Value and Targets (AF)

DLIs	Year 0 ^a	Year 1 ^b	Year 2 ^c	Year 3	Year 4	Means of Verification
	DLI Target:	DLI Target:	DLI Target:	DLI Target:	DLI Target:	
DLI 1: Comprehensive pre-service training program in foundational courses ²¹ for medical and nursing professionals implemented by the University of Health Sciences (UHS)	1. Competency-based pre-service curricula in foundational courses updated for at least 2 training courses to be delivered by UHS for medical and nursing professionals 2. Standards of operation adopted by UHS for faculty on how to use and maintain the UHS integrated skills laboratory	1. Competency-based pre-service curricula updated for at least 7 additional training courses 2. At least 12 faculty trained on how to use the integrated skills laboratory	1. Competency-based pre-service curricula updated for at least 8 additional training courses 2. At least 29 additional faculty trained on how to use the integrated skills laboratory 3. At least 230 medical and nursing students trained based on the new competency-based curricula	1. Competency-based pre-service curricula updated for at least 5 additional training courses 2. At least 59 additional faculty trained on how to use the integrated skills laboratory 3. At least 510 additional medical and nursing students trained based on the new competency-based curricula	1. Competency-based pre-service curricula updated for at least 3 additional training courses 2. At least 69 additional faculty trained on how to use the integrated skills laboratory 3. At least 875 additional medical and nursing students trained based on the new competency-based curricula	Statement of DLI Achievement Approved by Rector UHS
	DLI Value: US\$800,000	DLI Value: US\$800,000	DLI Value: US\$800,000	DLI Value: US\$800,000	DLI Value: US\$800,000	Total: US\$4,000,000
DLI 2: Comprehensive in-service training program on MPA for health workers	1. At least 13 MPA in-service training modules reviewed and updated by the MOH.	1. At least 20 PHDs have reduced the number of health workers requiring training on 5	1. At least 20 PHDs have reduced the number of health workers requiring training on 5	(Cancelled targets and allocation)	(Cancelled targets and allocation)	MOH Annual Report

²¹ A set of foundational courses have been identified for revision to become competency based, covering subjects of dissemination anatomy; clinical examination skills; clinical diagnostic; maternal nursing 1, 2, and 3; operative nursing; emergency nursing and first aid; and pediatric nursing.



DLIs	Year 0 ^a	Year 1 ^b	Year 2 ^c	Year 3	Year 4	Means of Verification
	DLI Target:	DLI Target:	DLI Target:	DLI Target:	DLI Target:	
implemented by the MOH	2. At least 20 PHDs complete a health workers training needs assessment for at least 5 prioritized in-service training modules to quantify number of persons requiring training.	prioritized in-service training modules by at least 10% 2. At least 10 PHDs have provided annual training activity reports on in-service MPA training to MOH based on MOH's new human resource management information system (HR MIS)	prioritized in-service training modules by at least 20% 2. At least 15 PHDs have provided annual training activity reports on their in-service MPA training to MOH based on the new HR MIS			
	DLI Value: US\$400,000	DLI Value: US\$400,000	DLI Value: US\$400,000	DLI Value: US\$0	DLI Value: US\$0	Total: US\$1,200,000
DLI 3: C2 hospitals fully equipped to provide emergency obstetric care and neonatal care	1. Updated guidelines adopted by MOH, detailing the facilities and human resources criteria to be met by C2 hospitals for the provision of emergency obstetric and neonatal care 2. Baseline survey carried out and costed plan developed by MOH for addressing C2 hospitals' facilities and human resources gaps for the provision of emergency	At least 10% of C2 hospitals above the baseline have met the criteria specified in the updated guidelines	At least 20% of C2 hospitals above the baseline have met the criteria specified in the updated guidelines	At least 30% of C2 hospitals above the baseline have met the criteria specified in the updated guidelines	At least 40% of C2 hospitals above the baseline have met the criteria specified in the updated guidelines	MOH Annual Report and verified through a performance assessment



DLIs	Year 0 ^a	Year 1 ^b	Year 2 ^c	Year 3	Year 4	Means of Verification
	DLI Target:	DLI Target:	DLI Target:	DLI Target:	DLI Target:	
	obstetric and neonatal care					
	DLI Value: US\$400,000	DLI Value: US\$400,000	DLI Value: US\$400,000	DLI Value: US\$400,000	DLI Value: US\$400,000	Total: US\$2,000,000
DLI 4: Health service quality monitoring in the MOH enhanced	1. Supervisory checklists measuring service delivery performance for HCs and C1, C2, and C3 hospitals field tested and disseminated by the MOH to at least 80% of PHDs and ODs by the MOH 2. The quality assurance office of the MOH adequately staffed according to the MOH plan with full-time qualified experts and contractual staff		1. All ex ante assessment teams have used ICT and tablets for conducting ex ante assessment 2a. 2 additional assessors from every OD and PHD trained and certified as qualified assessors 2b. 30% of coaching activities include experts from national program managers at OD, PHD, and/or national level and/or expert from RHs	1. Reduction by 30% from the baseline in the percentage of health facilities where the ex-ante assessment score is found to be more than 10 percentage points higher than the ex post verification score 2. Existing NQEM Tool updated (to reflect the increased understanding of quality parameters) and coaching protocols for existing tools and their respective vignettes developed and used in the NQEM program 3. 25 additional/new vignettes and their respective coaching protocols developed	1. Reduction by 50% from the baseline in the percentage of health facilities where the ex-ante assessment score is found to be more than 10 percentage points higher than the ex post verification score 2. 60% of coaching activities include experts from national program managers at OD, PHD, and/or national level and/or experts from RHs	MOH Annual Report



DLIs	Year 0 ^a	Year 1 ^b	Year 2 ^c	Year 3	Year 4	Means of Verification
	DLI Target:	DLI Target:	DLI Target:	DLI Target:	DLI Target:	
				and used in the NQEM program 4. 50% of coaching activities include experts from national program managers at OD, PHD, and/or national level and/or experts from RHs		
	DLI Value: US\$500,000	DLI Value: US\$0	DLI Value: US\$800,000	DLI Value: US\$700,000	DLI Value: US\$300,000	Total: US\$2,300,000
DLI 5: Sustainable health purchasing arrangements established by RGC	1. Transition manual adopted by MOH, specifying the roles, responsibilities, functions, operational milestones, and costs for the transition of health purchasing functions from HEFI to PCA 2. PCA has been formally established	1. PCA management board and operational guidelines established 2. PCA has established counter-verification capacities	1. PCA fully staffed and operational for the HEFI role 2. PCA has established integrated health output and FM software 3. Employment of at least 15 medical, nursing, and midwifery staff for ex post verification function is completed, and PMRS sustainability plan is developed	1. PCA carries out HEFI functions 2. PMRS fully transitioned to PCA and is functional for HEFs and other population groups managed by PCA	1. PMRS documentation and module standardization as stipulated in the PMRS sustainability plan are completed	MOH Annual Report and verified through a performance assessment
	DLI Value: US\$500,000	DLI Value: US\$500,000	DLI Value: US\$1,000,000	DLI Value: US\$1,000,000	DLI Value: US\$500,000	Total: US\$3,500,000
DLI 6: Timeliness of HEF and SDG payments improved	Financial procedure guidelines and standards for HEF and	At least 50% of HCs and hospitals have received HEF and SDG	At least 60% of HCs and hospitals have received HEF and SDG	At least 70% of HCs and hospitals have received HEF and	At least 80% of HCs and hospitals have received HEF and SDG	MOH Annual Report and verified through a



DLIs	Year 0 ^a	Year 1 ^b	Year 2 ^c	Year 3	Year 4	Means of Verification
	DLI Target:	DLI Target:	DLI Target:	DLI Target:	DLI Target:	
	SDG disseminated by MOH among key OD, PHD and central staff	payments within the timelines specified in the guidelines	payments within the timelines specified in the guideline	SDG payments within the timelines specified in the guideline	payments within the timelines specified in the guideline	performance assessment
	DLI Value: US\$400,000	DLI Value: US\$400,000	DLI Value: US\$400,000	DLI Value: US\$400,000	DLI Value: US\$400,000	Total: US\$2,000,000
DLI 7: Number of ODs enabled to provide quality cervical cancer screening and treatment (CCS&T) services			1. Guidelines specifying detailed OD readiness criteria to deliver CCS&T services are adopted 2. Baseline data provided on the percentage of eligible target groups screened in ODs enabled for CCS&T services 3. Up to 20 new ODs enabled to provide CCS&T services 4. HEF guidelines updated and HMIS revised to reflect reimbursement and M&E requirements of DLIs 7 and 8	1. Up to 20 new ODs enabled to provide CSS&T services 2. Up to 20% of eligible target groups screened with VIA within the last 12 months and reported in HMIS, with at least 50% of the VIA positive cases receiving cryotherapy treatment	1. Up to 10 new ODs enabled to provide CSS&T services 2. Up to 25% of eligible target group screened with VIA within the last 12 months and reported in HMIS, with at least 60% of the VIA positive cases receiving cryotherapy treatment	Reported by MOH and verified by independent verification agent
	DLI Value: US\$0	DLI Value: US\$0	DLI Value: US\$1,000,000	DLI Value: US\$1,000,000	DLI Value: US\$1,000,000	Total: US\$3,000,000
DLI 8: Number of ODs enabled to provide quality			1. Guidelines specifying detailed OD readiness criteria to	1. Up to 16 new ODs enabled to provide H/D S&T services	1. Up to 16 new ODs enabled to provide H/D S&T services	Reported by MOH and verified by an



DLIs	Year 0 ^a	Year 1 ^b	Year 2 ^c	Year 3	Year 4	Means of Verification
	DLI Target:	DLI Target:	DLI Target:	DLI Target:	DLI Target:	
hypertension and diabetes screening and treatment (H/D S&T) services			deliver H/D S&T services are adopted and baseline data for new diabetes and hypertension cases from HMIS for all ODs are provided 2. List of ODs already enabled for H/D S&T services provided 3. Up to 4 new ODs enabled to provide H/D S&T services 4. PMRS revised to include monitoring of the continued treatment of patients with hypertension and diabetes	2. ODs achieve more than 10% increase in identification and treatment of new diabetes and hypertension cases vis-à-vis baseline reported in HMIS 3 A system to monitor the quality of treatment for hypertension and diabetes developed, implemented, and used as part of HMIS	2. ODs achieve more than 20% increase in identification and treatment of new diabetes and hypertension cases vis-à-vis baseline reported in the HMIS 3. Information on the quality of treatment of hypertension and diabetes from the HMIS analyzed and used to inform and further develop the HMIS	independent verification agent
	DLI Value: US\$0	DLI Value: US\$0	DLI Value: US\$500,000	DLI Value: US\$500,000	DLI Value: US\$500,000	Total: US\$1,500,000
DLI 9: Number of ODs providing quality LTFP services			1. Training module for calculating need for FP commodities prepared by the DDFC 2. Training module for provision of LTFP services and for calculating need for FP commodities prepared by NMCHC	1. A reduction of 40% (or a reduction by 150 whichever is lower) in the number of health facilities in the country without a certified midwife 2. Up to 50 ODs have a 10%-increase (or an increase of 100 whichever is more) in	1. A reduction of 80% (or a reduction by 300 whichever is lower) in the number of health facilities in the country without a certified midwife 2. Up to 50 ODs have a 20% increase (or an increase of 200 whichever is more) in	Reported by MOH and verified by an independent verification agent



DLIs	Year 0 ^a	Year 1 ^b	Year 2 ^c	Year 3	Year 4	Means of Verification
	DLI Target:	DLI Target:	DLI Target:	DLI Target:	DLI Target:	
			3. Baseline data on the number of HCs and OD hospitals in the country without an LTFP-certified midwife provided 4. HMIS OD-wise data on uptake of LTFP services by method and by province provided	current LTFP service users over the previous 12 months	current LTFP service users over the previous 24 months	
	DLI Value: US\$0	DLI Value: US\$0	DLI Value: US\$500,000	DLI Value: US\$500,000	DLI Value: US\$500,000	Total: US\$1,500,000

Note: C1 = Category 1; C2 = Category 2; C3 = Category 3; MPA = Minimum Package of Activities; DDFC = Department of Drugs, Food and Cosmetics; a. Year 0 refers to the one year preceding effectiveness; b. Year 1 refers to the period between effectiveness and June 30, 2017; c. Year 2 refers to the one-year period after Year 1.

Table 1.2. Revised DLI Definitions and Verification Protocol (AF)

DLI 1	Indicator Identification Data and Compliance Information
Indicator	Comprehensive pre-service training program in foundational courses²² for medical and nursing professionals implemented by University of Health Sciences (UHS)
Compliance Condition	Based on the Health Workforce Development Plan, UHS will develop a detailed paper outlining key steps to strengthen the quality of health professionals' preservice education and training to produce competency-based and highly skilled health workforce.
Compliance Specification	The paper will include a phasing plan for making foundational courses competency based, target indicators, and key costs for the rollout of the strategy for strengthening preservice education. The paper will be approved by the Rector UHS.
Means of Verification	Statement of DLI achievement approved by the Rector UHS
Compliance Verification Procedure	Semiannual Partners Mission will verify performance by review of records, physical observation of facilities, and meetings with faculty and students. The record of findings will be incorporated in the Aide Memoire.
DLI Milestones	Baseline: (a) Competency-based preservice curricula in foundational courses updated for at least 2 training courses to be delivered by UHS for medical and nursing professionals and (b) standards of operation adopted by UHS for faculty on how to use and maintain the UHS integrated skills laboratory Target Year 1: (a) Competency-based preservice curricula updated for at least 7 additional training courses and (b) at least 12 faculty trained on how to use the integrated skills laboratory Target Year 2: (a) Competency-based preservice curricula updated for at least 8 additional training courses, (b) at least 29 additional faculty trained on how to use the integrated skills laboratory, and (c) at least 230 medical and nursing students trained based on the new competency-based curricula Target Year 3: (a) Competency-based preservice curricula updated for at least 5 additional training courses, (b) at least 59 additional faculty trained on how to use the integrated skills laboratory, and (c) at least 510 additional medical and nursing students trained based on the new competency-based curricula Target Year 4: (a) Competency-based preservice curricula updated for at least 3 additional training courses, (b) at least 69 additional faculty trained on how to use the integrated skills laboratory, and (c) at least 875 additional medical and nursing students trained based on the new competency-based curricula.
Responsible Department	UHS, Cambodia

DLI 2	Indicator Identification Data and Compliance Information
Indicator	Comprehensive in-service training program on MPA for health workers implemented by the MOH
Compliance Condition	Human Resources, MOH develops (a) detailed plan for competency-based development needs for health workers posted in HCs, at CPA hospitals, and at Regional Training Centers and (b) a plan for introduction of a new HRMIS for provinces to report annually on the in-service trainings.

²² A set of foundational courses have been identified for revision to become competency based, covering subjects of dissemination anatomy; clinical examination skills; clinical diagnostic; maternal nursing 1, 2, and 3; operative nursing; emergency nursing and first aid; and pediatric nursing.

Compliance Specification	The Plan for Competency-based Development for health workers in HCs will include a phasing plan, target indicators, and key costs for the rollout. In addition, a plan will also be developed for the introduction of HRMIS, which includes phasing, dissemination strategy, costs, indicators, and targets. The plan will be endorsed by the Secretary of State, Ministry of Health.
Means of Verification	MOH Annual Report
Compliance Verification Procedure	Semiannual Partners' Mission will verify performance by review of hospital and PHD training records, post-training evaluation score, and meetings with faculty and trainees. Record of findings will be incorporated in the Aide Memoire.
DLI Milestones	Target Year 0: (a) At least 13 MPA in-service training modules reviewed and updated by the MOH and (b) at least 20 PHDs complete a health workers training needs assessment for at least 5 prioritized in-service training modules to quantify the number of persons requiring training Target Year 1: (a) At least 20 PHDs have reduced the number of health workers requiring training on 5 prioritized in-service training modules by at least 10% and (b) at least 10 PHDs have provided annual training activity reports on in-service MPA training to the MOH based on the MOH's new HR MIS Target Year2: (a) At least 20 PHDs have reduced the number of health workers requiring training on 5 prioritized in-service training modules by at least 20% and (b) at least 15 PHDs have provided annual training activity reports on their in-service MPA training to the MOH based on the new HR MIS
Responsible Department	Human Resources Department

DLI 3	Indicator Identification Data and Compliance Information
Indicator	C2 hospitals fully equipped to provide emergency obstetric care and neonatal care
Compliance Condition	Based on a facility assessment survey, the NMCHC will develop a strategic plan for facility strengthening for improved emergency obstetric care and neonatal care and identify gaps.
Compliance Specification	Strategic plan for facility strengthening for emergency obstetric care and neonatal care includes a phasing plan, target indicators, and key costs for the rollout. The strategic plan will be endorsed by PS, MOH
Means of Verification	MOH Annual Report
Compliance Verification Procedure	Before the Semiannual Partners Mission, a contractor hired by the World Bank will carry out a rapid sample-based performance assessment. Results of the performance assessment feed into the mission and key agreements recorded in the Aide Memoire.
DLI Milestones	Target Year 0: (a) Updated guidelines adopted by the MOH, detailing the facilities and human resources criteria to be met by C2 hospitals for the provision of emergency obstetric and neonatal care and (b) baseline survey carried out and costed plan developed by the MOH for addressing C2 hospitals' facilities and human resources gaps for the provision of emergency obstetric and neonatal care Target Year 1: At least 10% of C2 hospitals above the baseline have met the criteria specified in the updated guidelines Target Year 2: At least 20% of C2 hospitals above the baseline have met the criteria specified in the updated guidelines Target Year 3: At least 30% of C2 hospitals above the baseline have met the criteria specified in the updated guidelines

	Target Year 4: At least 40% of C2 hospitals above the baseline have met the criteria specified in the updated guidelines
Responsible Department	NMCHC; National Blood Transfusion Center

DLI 4	Indicator Identification Data and Compliance Information
Indicator	Health service quality monitoring in the MOH enhanced
Compliance Condition	<p>Target Year 0: (a) Supervisory checklists measuring service delivery performance for HCs and C1, C2, and C3 hospitals field tested and disseminated by the MOH to at least 80% of PHDs and ODs and (b) the quality assurance office of the MOH adequately staffed according to the MOH plan with full-time qualified experts and contractual staff.</p> <p>Target Year 2: (a) ICT system is established and functional appropriately, with all assessor teams collecting data electronically using tablets and submitting data through the ICT system; (b) 2 additional assessors from every OD and PHD trained and certified as assessors after undergoing the standard NQEM program; and (c) external clinical experts from RHs and public health program managers for national health programs are engaged in coaching activities depending on the specific needs of the health facilities, for the specified share of coaching activities.</p> <p>Target Year 3: (a) There is a reduction by 30 percent from the baseline (that is, the first ex post assessment done for NQEMP) in the share of health facilities where the ex- ante assessment score is found to be more than 10 percentage points higher than the ex post verification score; (b) existing NQEM tools used since 2017 are updated to reflect the increased understanding of quality parameters and used in the NQEM program; (c) 25 additional/new vignettes and their respective coaching protocols developed and used in the NQEM program; (d) external clinical experts from RHs and public health program managers for national health programs are engaged in coaching activities depending on the specific needs of health facilities, for the specified share of coaching activities.</p> <p>Target Year 4: (a) There is a reduction by 50 percent from the baseline (that is, the first ex post assessment done for NQEM program) in the share of health facilities where the ex-ante assessment score is found to be more than 10 percentage points higher than the ex post verification score and (b) external clinical experts from RHs and public health program managers for national health programs are engaged in coaching activities depending on the specific needs of health facilities, for the specified share of coaching activities.</p>
Compliance Specification	Plans, tools, or other relevant compliance documentation and details of staffing, key outputs, and activities and costs, as applicable. All documents endorsed by the MOH Secretary of State
Means of Verification	<p>MOH Annual DLI Report (or optional semiannual DLI report) with relevant outputs as attachments</p> <p>For Year 2, contract documentation showing that a consulting firm for developing an ICT system has been selected; the MOH's confirmation that a tablet-based data collection application for the quality measures created and in use by all assessor teams and that data are being electronically reported to Quality Assurance Office and consolidated through the ICT system. Training summary for additional assessors trained, and their listing by provinces and ODs. Summary of coaching visit records indicating participation by subject matter experts to the extent required under the respective DLI.</p>
Compliance Verification Procedure	Semiannual Partners Mission will verify performance by review of outputs, reports, and government orders and supported by independent verification as needed. Record of findings will be incorporated in the Aide Memoire.

DLI Milestones	<p>Target Year 0: (a) Supervisory checklists measuring service delivery performance for HCs and C1, C2, and C3 hospitals field-tested and disseminated by the MOH and (b) the quality assurance office of the MOH adequately staffed according to the MOH plan with full-time and contractual qualified experts.</p> <p>Target Year 2: (a) All ex ante assessment teams have used ICT and tablets for conducting ex ante assessment (US\$500,000); (b) (i) 2 additional assessors from every OD and PHD trained and certified as qualified assessors (US\$200,000) (ii) 30 percent of coaching activities include experts from national program managers at OD, PHD, and/or national level and/or expert from RHs (US\$100,000).</p> <p>Target Year 3: (a) Reduction by 30 percent from the baseline in the percentage of health facilities where the ex-ante assessment score is found to be more than 10 percentage points higher than the ex post verification score (US\$ 200,000); (b) existing NQEM Tool updated (to reflect the increased understanding of quality parameters) and coaching protocols for existing tools and their respective vignettes developed and used in the NQEM program (US\$ 200,000); (c) 25 additional/new vignettes and their respective coaching protocols developed and used in the NQEM program (US\$ 150,000); (d) 50 percent of coaching activities include experts from national program managers at OD, PHD, and/or national level and/or experts from RHs (US\$ 150,000).</p> <p>Target Year 4: (a) Reduction by 50 percent from the baseline in the percentage of health facilities where the ex-ante assessment score is found to be more than 10 percentage points higher than the ex post verification score (US\$ 150,000) and (b) 60 percent of coaching activities include experts from national program managers at OD, PHD, and/or national level and/or experts from RHs (US\$ 150,000).</p>
Responsible Department	Quality Assurance Office

DLI 5	Indicator Identification Data and Compliance Information
Indicator	Sustainable health purchasing arrangements established by RGC
Compliance Condition	<p>Target Year 0: (a) Transition manual adopted by the MOH, specifying the roles, responsibilities, functions, operational milestones, and costs for the transition of health purchasing functions from the HEFI to PCA and (b) the PCA has been formally established through a <i>prakas</i>.</p> <p>Target Year 1: (a) The PCA management board and operational guidelines established and (b) the PCA has established counter-verification capacities.</p> <p>Target Year 2: (a) The PCA fully staffed and operational for the HEFI role; (b) the PCA has established integrated health output and FM software; and (c) employment of at least 15 medical, nursing, and midwifery staff for ex post verification functions for SDGs is completed, and a PMRS sustainability plan is developed outlining the MOH's approach and strategy to ensure the sustained availability, reliability, and maintenance of PMRS.</p> <p>Target Year 3: (a) The PCA carries out the HEFI functions in full, including a network of monitoring and verification officials at the subnational level and (b) PMRS fully transitioned to the PCA and is functional for the HEFs as well as other population groups managed by the PCA</p> <p>Target Year 4: PMRS documentation and module standardization as stipulated in the PMRS sustainability plan are completed.</p>
Compliance Specification	<p><i>Prakas</i> for the establishment of a PCA issued</p> <p>Plans, tools, or other relevant compliance documentation and details of staffing, key outputs, and activities and costs, as applicable. All documents endorsed by the MOH Secretary of State or Chairman of the PCA Board.</p>

Means of Verification	MOH Annual DLI Report (or optional semiannual DLI report) with relevant outputs as attachments
Compliance Verification Procedure	Semiannual Partners Mission will verify performance by review of outputs, reports, meeting minutes, and government orders. In addition, where required before the Semiannual Partners Mission, a consultant hired by the World Bank or pooled fund partners will carry out a rapid sample-based assessment of activities completed including counter-verification. Record of findings will be incorporated in the Aide Memoire.
DLI Milestones	<p>Target Year 0: (a) Transition manual adopted by the MOH, specifying the roles, responsibilities, functions, operational milestones, and costs for the transition of health purchasing functions from the HEFI to PCA and (b) the PCA has been formally established.</p> <p>Target Year 1: (a) The PCA management board and operational guidelines established and (b) the PCA has established counter-verification capacities.</p> <p>Target Year 2: (a) The PCA fully staffed and operational for the HEFI role; (b) the PCA has established integrated health output and FM software (a and b have a combined value of US\$ 500,000 as per the original financing); (c) employment of at least 15 medical, nursing, and midwifery staff for ex post verification function is completed, and PMRS sustainability plan is developed (US\$ 500,000).</p> <p>Target Year 3: (a) The PCA carries out the HEFI functions (US\$ 500,000) and (b) PMRS fully transitioned to the PCA and is functional for the HEFs and other population groups managed by the PCA (US\$ 500,000).</p> <p>Target Year 4: PMRS documentation and module standardization as stipulated in the PMRS sustainability plan is completed (US\$ 500,000).</p>
Responsible Department	PCA

DLI 6	Indicator Identification Data and Compliance Information
Indicator	Timeliness of HEF and SDG payments improved
Compliance Condition	Implementation Plan for 'SDG and HEF' detailing fund flow instruments, processes, World Bank accounts, and standards for the HEF and SDG payments established
Compliance Specification	MOH Secretary of State approves the Implementation Plan
Means of Verification	MOH Annual Report verified through a performance assessment
Compliance Verification Procedure	Before the Semiannual Partners Mission, a contractor hired by the World Bank will carry out a rapid sample-based performance assessment. Results of the performance assessments will feed into the mission, and key agreements will be recorded in the Aide Memoire.
DLI Milestones	<p>Target Year 0: Financial procedure guidelines and standards for the HEF and SDG disseminated among key OD, PHD, and central staff by the MOH</p> <p>Target Year 1: At least 50% of HCs and hospitals have received the HEF and SDG payments within the timelines specified in the guidelines</p> <p>Target Year 2: At least 60% of HCs and hospitals have received the HEF and SDG payments within the timelines specified in the guidelines</p> <p>Target Year 3: At least 70% of HCs and hospitals have received the HEF and SDG payments within the timelines specified in the guidelines</p> <p>Target Year 4: At least 80% of HCs and hospitals have received the HEF and SDG payments within the timelines specified in the guidelines</p>
Responsible Department	DBF

DLI 7	Indicator Identification Data and Compliance Information
Indicator	Number of ODs enabled to provide quality cervical cancer screening and treatment (CCS&T) services
Compliance Condition	Guidelines specifying detailed OD readiness criteria to deliver CCS&T services are adopted by the MOH by July 31, 2018. These guidelines provide detailed requirements for declaring an OD enabled to provide CCS&T. This includes that at least one RH and a minimum of 3 HCs have the required trained staff, equipment, quality control, referral, supervision and monitoring system, and supplies as detailed in the SOP for that disease program. All criteria must be met for the OD to be declared as enabled. The screening targets can be achieved at HCs or district RHs located in the OD (but not including the performance of provincial RHs).
Compliance Specification	Guidelines specifying equipment, supplies, service, supervision and monitoring systems, and supplies, which must be available in an OD for it to be enabled to provide CCS&T, must be available in the OD facilities. Only if all elements included in the guidelines are available will the OD be qualified as enabled to provide CCS&T.
Means of Verification	A list of ODs currently enabled to provide CCS&T is maintained by the PMD; information on women ages 30–49 screened and treated will be recorded in the HMIS. Updated HEF guidelines specifying the reimbursement rate for these services will be prepared by the DPHI.
Compliance Verification Procedure	Following the submission by the MOH of the DLI achievement report, an independent verification agency contracted by the MOH will carry out a rapid sample-based performance assessment. Results of these performance assessments will feed into agreements regarding achievements of the DLI milestones and will be recorded in the Aide Memoire in the subsequent mission.
DLI Milestones	<p>Target Year 2: (a) Guidelines specifying detailed OD readiness criteria to deliver CCS&T services are adopted by the MOH; (b) baseline data provided on the percentage of eligible target groups screened in ODs enabled for CSS&T services (US\$300,000 for the achievement of both (a) and (b) together); and (c) up to 20 new ODs enabled to provide CSS&T services (US\$25,000 per OD- up to a total value of US\$500,000), and (d) the HEF guidelines updated and the HMIS revised to reflect reimbursement and M&E requirements of DLIs 7 and 8 (US\$200,000²³).</p> <p>Target Year 3: (a) Up to 20 new ODs enabled to provide CSS&T services (US\$25,000 per OD enabled up to a total value of US\$500,000); and (b) Up to 20% of eligible target groups screened with VIA within the last 12 months and reported in HMIS, with at least 50% of the VIA positive cases receiving cryotherapy treatment (US\$5,000 per OD per 5 percentage point increase in that district – up to a total value of US\$500,000).</p> <p>Target Year 4: (a) Up to 10 new ODs enabled to provide CSS&T services (US\$25,000 per OD enabled up to a total value of US\$250,000);and (b) Up to 25% of eligible target group screened with VIA within the last 12 months and reported in HMIS, with at least 60% of the VIA positive cases receiving cryotherapy treatment (US\$5,000 per OD per 5 percentage point increase in that district – up to a total value of US\$750,000).</p>
Responsible Department	DPHI, PMD, and Provincial Health Office (PHO)

²³ The work plan for this work would cover a 3 year period and address HMIS monitoring of both CCS&T and H/D S&T as well as any revisions required for the HEF guidelines.

DLI 8	Indicator Identification Data and Compliance Information
Indicator	Number of ODs enabled to provide quality hypertension and diabetes screening and treatment (H/D S&T) services
Compliance condition	Guidelines specifying detailed OD readiness criteria to deliver H/D S&T services approved by July 31, 2018; these guidelines provide detailed requirements for declaring an OD enabled to provide H/D S&T. This includes that at least one RH and a minimum of 3 HCs have the required trained staff, equipment, quality control, referral, supervision and monitoring system, and supplies as well as community structures for patient support. All criteria must be met for the ODs to be declared as enabled. In Year 4, the achievement of analysis of the HMIS data does not have a value but is a prerequisite for the payment of the other two sub-indicators, if the quality system was established toward achievement of the Year 2 DLI.
Compliance Specification	Guidelines that specify equipment, supplies (including medicines), services, supervision and monitoring systems, and community structures that must be available in an OD for it to be enabled to provide H/D S&T services must be available in the OD facilities. Only if all elements included in the guidelines are available will the OD be qualified as enabled to provide H/D S&T services.
Means of Verification	A list of ODs currently enabled to provide H/D S&T according to guidelines is maintained by the PMD; information on eligible target group screened will be recorded in the HMIS.
Compliance Verification Procedure	Following the submission by the MOH of the DLI achievement report, an independent verification agency contracted by the MOH will carry out a rapid sample-based performance assessment. Results of these performance assessments will feed into agreements regarding achievements of the DLI milestones and will be recorded in the Aide Memoire in the subsequent mission.
DLI Milestones	<p>Target Year 2: (a) Guidelines specifying detailed OD readiness criteria to deliver H/D S&T services are adopted and baseline data for new diabetes and hypertension cases from all ODs provided through the HMIS; (b) a list of ODs already enabled for H/D S&T provided (US\$200,000 for the achievement of both (a) and (b) together); (c) up to 4 new ODs enabled to provide H/D S&T services (US\$25,000 per OD up to a total value of US\$100,000; and (d) PMRS revised to include the monitoring of the continued treatment of patients with hypertension and diabetes (US\$200,000).</p> <p>Target Year 3: (a) Up to 16 new ODs enabled to provide H/D S&T services (US\$25,000 per OD up to a total value of US\$400,000); (b) ODs achieve more than 10% increase in identification and treatment of new diabetes and new hypertension cases vis-a-vis the baseline reported in the HMIS (US\$5,000 per OD which has achieved the benchmark, up to a total value of US\$100,000); and (c) a system to monitor the quality of treatment for hypertension and diabetes developed, implemented, and used as part of the HMIS (achievement already paid out of DLI 7 Year 2 value- listed here for reference).</p> <p>Target Year 4: (a) Up to 16 new ODs enabled to provide H/D S&T services (US\$25,000 per OD up to a total value of US\$400,000); (b) ODs achieve more than 20% increase in the identification and treatment of new diabetes and hypertension cases vis-a-vis the baseline reported in the HMIS (US\$5,000 per OD which has achieved the benchmark, up to a total value of US\$ 100,000); and (c) information on the quality of treatment of hypertension and diabetes from the HMIS analyzed and used to inform and further develop the HMIS (achievement already paid out of DLI 7 Year 2 value- listed here for reference).</p>
Responsible Department	PCA, DPHI, PMD, and PHO

DLI 9	Indicator Identification Data and Compliance Information
Indicator	Number of ODs providing quality LTFP services
Compliance Condition	Based on the training modules for forecasting of FP commodity needs, staff at the provincial, OD, and facility levels (pharmacist and midwives) will be trained in forecasting of FP commodity needs; midwives who have satisfactorily undergone training in insertion of IUD and implant based on training modules are certified by the NMCHC to provide LTFP services. The requirement for reduction in HCs without trained midwives applies to the capacity for both IUDs and implants.
Compliance Specification	LTFP methods are in this context defined as the use of IUD and implant. These methods are selected as tracers of use of modern FP as they require the assistance of a health care service provider and their use can therefore be recorded and monitored. A compliance condition for this DLI is baseline information on the number of HCs and OD hospitals in the country without a midwife certified to provide LTFP; OD-wise data on 'women ages 15–49 who are current users of LTFP methods of FP' during July 2017–June 2018 will be provided by July 31, 2018, through the HMIS, stratified by the method depicted in the HMIS. Reductions in HCs without trained midwives specified as indicators for Years 3 and 4 are calculated on this baseline.
Means of Verification	Number of women who are current users of LTFP stratified by the method is maintained in the HMIS; the NMCHC will maintain a list of HCs and OD hospitals that do not have a midwife who is certified to provide LTFP.
Compliance Verification Procedure	Following the submission by the MOH of the DLI achievement report, an independent verification agency contracted by the MOH will carry out a rapid sample-based performance assessment. Results of this performance assessments will feed into the agreements regarding achievements of the DLI milestones and will be recorded in the Aide Memoire in the subsequent mission.
DLI Milestones	Target Year 2: (a) Training module for calculating need for FP commodities prepared by the DDFC (US\$100,000) ²⁴ ; (b) training module for provision of LTFP services including calculation of need for FP commodities prepared by the NMCHC; (c) baseline data on number of HCs and OD hospitals in the country without an LTFP-certified midwife provided; and (d) the HMIS OD-wise data on uptake of LTFP services (by method and by province) provided (US\$400,000 for the achievement of (b), (c) and (d) combined). Target Year 3: (a) A reduction of 40% (or reduction by 150 whichever is lower) in the number of health facilities in the country without a certified midwife (US\$200,000); and (b) up to 50 ODs have a 10 percent increase (or an increase of 100 whichever is more) in current users of LTFP services over the previous 12 months (US\$10,000 per OD up to a total value of US\$300,000). Target Year 4: (a) A reduction of 80% (or a reduction by 300 whichever is lower) in the number of health facilities in the country without a certified midwife (US\$200,000); and (b) up to 50 ODs have a 20 percent increase (or an increase of 200 whichever is more) in the current users of LTFP services over the previous 24 months (US\$10,000 per OD up to a total value of US\$300,000).
Responsible Department	DDFC, NMCHC, and PHO

²⁴ The work plan of the DDFC would include training of OD level staff in this calculation during the following year.



ANNEX 2: DETAILED DESCRIPTION OF SUBCOMPONENT 3.1 FOR DLI MANUAL

DLI 7: Cervical Cancer Screening and Treatment

1. **The DLI will support supply-side readiness and availability of this service at the facility level.** Establishment of this DLI in the ODs requires finalization of the SOPs, which provide detailed requirements for declaring an OD as enabled to provide this service. This includes that at least one RH and a minimum of three HCs in the OD have the required trained staff, equipment, quality control, referral, supervision and monitoring system, and supplies as detailed in the SOP for that disease program. All the specified criteria must be met for the OD to be declared as enabled. The SOP will also specify the process by which any OD will be internally verified for readiness to provide the service.

2. **Furthermore, a monitoring system needs to be established using the HMIS to track the results of this indicator**, and for this purpose, the HMIS needs to produce the required information periodically. Currently, the following information is reported through the HMIS:

- Number of women screened at the HC level
- Percentage of positive cases receiving cryotherapy at the RH level

3. **For quality control and effective monitoring of end outcomes from this DLI, it will also be useful to track individual patients to allow for systematic follow-up of women seeking cryotherapy (if required) and for repeated screening every three years according to the guidelines.** To fully track the indicator, this may need a PMRS customization to record the percentage of women referred for cryotherapy (based on positive VIA result) who were adequately treated with cryotherapy. Part 4 of the DLI expects this solution for quality control.

4. For ensuring continued utilization of this service, efforts will be needed to ensure the HEF reimbursement structure for these services should be clear and should be attractive for facilities to provide these services.

5. **In addition to rewarding ODs for readiness to deliver the services, the DLI will also reward based on the volume of CCS achieved by the ODs, in increments of 5 percentage points, up to 25 percentage points by the final year of DLIs.** However, a quality criterion must be achieved for this screening volume payout—at least 50 percent (in Year 3) or 60 percent (in Year 4) of all cases found to be positive on VIA screening must have received cryotherapy treatment.

DLI 8: Diabetes and Hypertension

6. **This DLI will follow a similar structure to DLI 7 in that it requires finalization of the SOP, which provides detailed requirements for declaring an OD enabled to provide H/D S&T services.** This includes that at least one RH and a minimum of three HCs have the required trained staff, equipment, quality control, referral, supervision and monitoring systems, and supplies (including medicines) as well as a community structure for patient support. All criteria must be met for the OD to be declared as enabled. The SOP will also specify the process by which any OD will be internally verified for readiness to provide the service.



7. **Further, a monitoring system needs to be established using the HMIS to track the results of this indicator, and for this purpose, the HMIS needs to produce the required information periodically.** Currently, the following information is reported through the HMIS: ‘Number of new patient consultations for hypertension’ and likewise for Type 2 diabetes.

8. **For quality control and effective monitoring of end outcomes from this DLI, it will also be useful to track individual patients to allow for systematic follow-up of hypertension and diabetes patients.** To fully track the indicator, this may need a PMRS customization to record the monitoring of the continued treatment of patients with high blood pressure and diabetes.

9. **There is also a need to track whether individual patients are regularly monitored and provided their medicines.** This quality control system will need to be developed using the HMIS, the PMRS, or otherwise to track such regular treatment and follow-up. For individual tracking of patients, local facility-based records will initially be used. The solution may initially be acceptable.

10. For ensuring continued utilization of this service, efforts will be needed to ensure the HEF reimbursement structure for these services are clear and attractive for facilities to provide these services.

For Both DLIs 7 and 8

11. **The PMD at the central level will be responsible for completing the SOPs and providing baseline data on the percentage of the eligible target group²⁵ screened in already enabled ODs.** They will further be responsible for the training of trainers in the provinces and overseeing that training in line with the SOPs takes place in the ODs.

12. **The PHDs will undertake the training; ensure adequate rooms and staff for providing NCD services; ensure provision of supplies, equipment, and medicines; and set up systems for supervision and monitoring.** In the case of diabetes and hypertension, they will also support the decentralized levels in setting up of any community structures that can assist with home-based care of uncomplicated cases of hypertension and diabetes.

13. **The DPHI will upgrade the HMIS as may be required, and also ensure that the HEF system facilitates reimbursement of services provided for both CCS&T and H/D S&T.** It will also develop a mechanism to monitor the quality of treatment provided. Such a mechanism to monitor quality may also need the PCA to upgrade the PMRS to track the regular follow-up of patients.

14. **Based on information from similar activities in the voucher program and pilot projects for hypertension and diabetes screening, a rough, preliminary costing suggests that establishing both CCS&T and H/D S&T at a typical OD on average has a cost of US\$25,000.** Accordingly, the envisaged budget in principle allows for a significant rollout of services.

²⁵ Eligible target group for CCS&T defined as all women in the age group 30–49 in the facility catchment area. Eligible target group for hypertension and diabetes screening defined as all people more than 40 years living in the facility catchment area.



DLI 9: Long-term Family Planning

15. **While the unmet need for FP is at 12 percent, the persistently high abortion rate indicates that it is relevant to continue LTFP activities as supported under the former voucher program.** Government budgets are now adequate to procure sufficient stock of FP commodities; a further strengthening of the capacity at the facility level to forecast the need for LTFP commodities (that is, implants, IUDs, and injections) to prevent stock-outs is still required. Therefore, a DLI focusing on building capacity to calculate the need for FP commodities as well as increasing the number of midwives who are certified in providing IUD and implant is proposed. To foster further uptake of modern FP methods, this DLI will track increase in continued LTFP users, which is monitored through the HMIS. According to the HMIS definition, 'continued users' means any person who uses LTFP—if they never used or if they used other methods before.
16. **Facility midwives and the district pharmacist are jointly responsible for making the monthly request for additional FP commodity supplies.** The pharmacists will therefore be trained by the DDFC and the midwives will be trained by the NMCHC in proper estimation of the FP commodity requirements—taking both previous consumption and population size and unmet need into consideration.
17. **The NMCHC will provide a list of all facilities (HCs and district hospitals) that do not have at least one certified midwife.** They will also provide OD-level data on the uptake of FP services by method and by province. This will help finalize values for these indicators.
18. **When deciding on the amount to be based on DLI achievement, the following arrangement will be made, which will be reflected in the Project Operations Manual:**
 - For DLIs 7, 8, and 9 (fully scalable and fungible with a defined value for each unit of output), the reliability percentage of the number of units sampled by the external verification agent will be applied to the total number reported. If targets are not fully achieved in each year, and as these DLIs are noncumulative, the undisbursed amount from the year will automatically be rolled over to the following year and disbursed in case the target is overachieved in the following year. It will also be possible to disburse funds remaining from underachievement in one DLI indicator within the same DLI to overachievement in the other DLI indicator and from underachievement in one DLI to overachievement in the other DLI. This will be subject to a cap of 50 percent above the assigned value of the DLI. If, at the end of the project, all funds for Component 2 have not been disbursed due to nonachievement of DLIs, the remaining amount may be cancelled or the RGC may request for restructuring to use the unspent amount.



ANNEX 3. ECONOMIC ANALYSIS

Benefits of the Project

- 1. The AF will support supply-side readiness to districts for the provision of four health services—screenings for cervical cancer, hypertension, and diabetes and provision of LTFP services.** Each of these services have been found to be extremely cost-effective for provision of NCD care and to enable birth spacing for women leading to better maternal and child health outcomes. Given the high burden of NCDs and unmet need for FP in Cambodia, these are appropriate interventions to address these health needs. Early detection and subsequent treatment of cervical cancer, diabetes, and hypertension have health and economic benefits—more years lived in healthy life, lower health care costs in the long term, and increases in labor market productivity. A new WHO report launched in May 2018 shows that for every US\$1 invested in scaling up actions to address NCDs in low-income countries and low- and middle-income countries, there will be a return to society of at least US\$7 in increased employment, productivity, and longer life.²⁶ This is through investing in the WHO list of 16 cost-effective ‘best buys’ for NCDs of which CCS is one.
- 2. The project interventions extend to about half of the national population (50 ODs or about 5 million people), and the number of direct beneficiaries of this project is approximately 375,143 people, which is 2.4 percent of the population of Cambodia (15.6 million people).**²⁷ Of these, it is estimated that 63,561 new cases of precancerous cervical lesions (a fraction that can develop into invasive cervical cancer if unchecked), 226,661 new cases of hypertension, and 38,721 new cases of diabetes will be detected through the coverage of the intervention in a subset of ODs (50 ODs for cervical screening and 36 ODs for hypertension and diabetes).
- 3. For cases of precancerous lesions, this number is based on the population of women of reproductive age (11.5 percent) in the 50 ODs (with an estimated population of 100,000 people per OD) and percentage of women who are screened who test positive for precancerous lesions from other studies in Cambodia (6.2 percent).**²⁸ For diabetes and hypertension, this number is based on the population in the 36 ODs who screen positive for hypertension (prevalence of 11.2 percent) and are unaware then of their status (82 percent), and for diabetes, the number is based on prevalence estimates (2.9 percent) and are then found to not be on medication (55 percent). Approximately 46,200 users of LTFP services are also expected based on targeted coverage of 30 ODs, demographic projections of women ages 30–50 years, and uptake of LTFP in a voucher pilot (11 percent of women). All data are based on studies conducted in Cambodia at a smaller scale and are assumed to be reflective of national averages.

²⁶ WHO. 2018. *Saving Lives, Spending Less*. Geneva: May 2018. <http://www.who.int/ncds/management/ncds-strategic-response/en/>.

²⁷ Calculations based on prevalence rates for hypertension and diabetes available from STEP Survey 2010 and studies based in Cambodia (Oum et al. 2010). FP estimates based on data from pilot voucher program in Cambodia. All calculations available from authors on request.

²⁸ Hav et al. 2016.



Costs of Project Interventions: A Systems Approach

4. **Data on the costs of providing these services at the OD level are hard to estimate**, but during project preparation, rough costs were estimated to determine DLI values, and it was estimated that the costs for readying each OD are approximately US\$25,000 for cervical screenings and US\$25,000 for hypertension and diabetes. This cost mostly includes the setup costs for ensuring ODs are service ready, including training, equipment, and initial supply of consumables. Given that no new staff are planned to be hired and the services are being managed within the existing labor capacity, the marginal costs for labor are taken as nil—other than the price paid as HEF or user fee payments as a performance incentive, which partly compensates for labor.

5. **The costs of consumables for VIA test and cryotherapy for cervical cancer are also negligible, though there may be costs for transportation of health workers to conduct outreach activities (estimated at US\$20 for every set of 20 women screened, or US\$1 per screening)**. For diabetes and hypertension, the cost of medication is estimated at US\$6 per patient per year based on international reference pricing and assuming 20 percent diabetics will need insulin; all diabetics will need quarterly blood glucose; and all hypertensive patients will be treated with low-cost oral drugs such as Enalapril. It is also assumed that one-third of the detected target population is screened (and subsequently treated) in the first year and so will require three years of drugs; one-third is detected in the second year and so will require two years of drugs; and one-third is detected in the third year and so will require one year of drugs over the project period.

6. **For LTFP, the project only supports supplementary training to ensure service readiness, which is a small cost that is included.** The main costs for LTFP will be linked to the costs of the consumables themselves. Based on an analysis of a maternal voucher scheme in Cambodia, the proportion of LTFP users of IUDs to users of implants was 1:4 with IUDs costing US\$20 and implants costing US\$30 (including insertion costs; products last for three years).

7. Therefore, the approximate cost per new case detected and treated for hypertension, diabetes, and cervical cancer over the three years of this project is US\$19.6, which is very cost-effective.

8. **These costs reflect the ‘systemic costs’ to the Government (and not just what the project will spend), and even beyond the project, a similar cost-effectiveness threshold will exist.** This amount of spending will be sustainable as it is only 1.5 percent of the health budget (the total public spending on health will be over US\$500 million per year by the end of the project) and is miniscule as a share of GDP (GDP is estimated at US\$20 billion). It is multiple times cheaper than the treatment for cancer, diabetes, and cardiovascular disease complications that could stem from a lack of early detection and treatment (that is, the counterfactual).

Table 3.1. Summary of New Patients Detected and Costs to Screen and Provide Medication over 3 Years

	Number of New Patients	Cost for Providing Screening and Treatment (US\$)	Cost per New Patient (US\$ per Person)
Cervical cancer	63,561	2,275,175	35.80
Diabetes and hypertension	265,382	3,766,129	14.19



	Number of New Patients	Cost for Providing Screening and Treatment (US\$)	Cost per New Patient (US\$ per Person)
LTFP	46,200	1,321,613	28.61
TOTAL	375,143	7,362,917	19.63

9. **A cost-benefit analysis converts the health gains achieved by a project or intervention into monetary terms.**²⁹Although this exercise may not be acceptable universally, it can be useful for policy purposes and typically serves to underline the very high value attached to better health. The standard economic approach for quantifying the benefit of better health in monetary terms is based on the concept of the 'value of statistical life' (or life-year). Studies from around the world suggest that the value of a statistical life-year is at least five times higher than GDP per capita, which translates into nearly US\$6,400 in Cambodia. With this value, and if project spending (including recurrent costs for drugs, and so on) is on average about US\$7.4 million per year, then the project will have to achieve an average of 1,162 additional life years annually to 'break even'. With an estimated 375,000 new patients who are screened and treated for cervical cancer, diabetes, hypertension, or LTFP, this threshold is very feasible and consistent with the literature, which find these interventions very cost-effective. In brief, the potential cost-benefit ratios that can be achieved by the project are favorable.

²⁹ Arguments and language taken from economic analysis in the World Bank's Armenia Disease Prevention and Control Project: Project Appraisal Document, 2013, and adapted to the Cambodian context.