

**World Health Organisation Cambodia
2015 CLOSURE REPORT
for Human Resource for Health and Collaborative Efforts between MoH,
WHO and DFAT in Maternal, Newborn & Child Health
01 July 2012 to 31st December 2015**

**EOL No. 50078/56 WHO Award 59589
17 March 2016**

Signed: 21 May 2012
End Date: 31 December 2015
Reporting period: Closure Report 2016

Table of Contents

1. Background.....	7
2. Health Workforce in Cambodia – Developments and Progress.....	7
3. Human Resources for Health: Strategic Priorities, Objectives and Activities: Mid-Term Progress Report.....	10
<i>3a. Strategic Priority One: Supporting and Strengthening of Multisectoral policy dialogue through Increased Capacity of Governance Structures.....</i>	<i>10</i>
<i>3b. Strategic Priority Two: Improve the Technical skills and Competence of the Health Workforce through Strengthened Pre-service and In-service Training.....</i>	<i>15</i>
<i>3c. Strategic Priority Three: Strengthen health workforce management: Recruitment, performance management, deployment, retention and compensation.....</i>	<i>22</i>
4. Maternal, Newborn and Child Health	24
4.1. Reproductive and Maternal health	24
4.1.1. Update Maternal Death Audit protocol.....	24
4.1.2. Upgrading skill of MWs from Kampong Cham and Kratie	24
4.1.3. Maternal, Newborn and Child Health Day	25
4.1.4. Safe motherhood protocol for HC	26
5. Newborn and Child health	26
5.1.1. Technical support for newborn and child health	26
5.1.2. Scaling up INC coaching for health workers of provincial hospitals	26
5.1.3. Strengthening Integrated Management of Child Illness (IMCI).....	27
6. Financial Reporting.....	29

Abbreviations

AusAID	Australian Agency for International Development
ASEAN	Association of South East Asian Nations
BSN	Bachelor of Science Nursing
CEDHP	Center for Education Development of Health Professions
DFAT	Department of Foreign Affairs and Trade
HRH	Human Resources for Health
HWDP	Health Workforce Development Plan
HSP	First Health Strategic Plan
HSP2	Second Health Strategic Plan
HSP3	Third Health Strategic Plan
IMCI	Integrated Management of Childhood Illnesses
INC	Immediate Newborn Care
KOICA	Korean International Cooperation Agency
MTR	Mid-Term Review
MCQ	Multiple Choice Question
MOH	Ministry of Health
MOEYS	Ministry of Education, Youth and Sport
MW	Midwife
NMCHC	National Maternal and Child Health Center
NEC	National Examination Committee
NEE	National Exit Examination
NPO	National Professional Officer
OC	Oversight Committee
OSCE	Objective Structured Clinical Examination
RACHA	Reproductive and Child Health Alliance
RTCs	Regional Training Centers
TA	Technical Assistance
TIH	Training Institutions in Health
TSMC	Technical School of Medical Care
UHS	University of Health Science
UP	University of Philippines
USAID	United States Agency for International Development
WHO	World Health Organization

Executive Summary

Introduction

Cambodia has made impressive strides in improving health outcomes over the last decade. Between 2000 and 2014, the maternal mortality rate dropped from 437 to 170 (per 100,000 live births) and the under-five mortality rate dropped from 124 to 35 (per 1000 live births). This has been the outcome of sequential health sector reforms that has helped re-build of the health workforce. However, challenges remain especially in the delivery of equitable, quality assured health services through an adequately motivated and appropriately skilled health staff.

In 2011, a Mid-Term Review (MTR) of the Health Workforce Development Plan (HWDP) 2006-2015 was conducted to assess progress and refocus efforts. The MTR identified four strategic priority areas for further investment, and provided recommendations that were ratified by the Minister of Health (MOH). Some of the above recommendations were implemented by the MOH with technical support from the World Health Organization (WHO) and funding support from the Department of Foreign Affairs and Trade (DFAT) Australia.

Under the Partnership Framework 2009-2013 between the WHO (represented by the WHO Country Office in Cambodia) and the Commonwealth of Australia (represented by the Department of Foreign Affairs and Trade (DFAT)¹) - an award of US\$1,500,000 was provided to the WHO to implement activities over a 12 month period starting from 1 July 2012 to 30 June 2013. US\$1,200,000 was allocated for Human Resources for Health (HRH) activities and US\$300,000 for Maternal, Newborn and Child Health activities. Due to unforeseen delays in the implementation of the activities, the award period was extended until the end of December 2015.

This Closure Report summarizes the achievements made by MOH in its mandate to strengthen the HRH agenda during the period of the award (July 2012 – December 2015), while specifically highlighting the contributions made by the DFAT award to the WHO. The report builds on the Mid-Year and Annual Reports submitted by the WHO to DFAT. The exit strategy mentioned in the report is based on on-going discussions with the MOH and strategic activities outlined in the new HWDP 2016-2020.

Human Resources for Health Activities

The award was used to support the MOH to implement interventions related to strengthening of health workforce management and capacity in Cambodia. These were based on the recommendations of the Mid-Term Review. The activities can be categorized into four strategic priority areas – (i) governance, planning and management of HRH; (ii) improve the technical skills and competence of the health workforce through strengthened pre-service training; (iii) health workforce management; recruitment, performance management, deployment and retention; and (iv) staff remuneration, salaries, performance incentives.

The main achievements during the period of the award were:

¹ Formerly the Australian Agency for International Development (AusAID) until 1 November 2013.

- The establishment of high-level committees to encourage multisectoral policy dialogue and strengthen HRH governance. These include the HRH Oversight Committee established by the Minister of Health to oversee and guide the mid-term review of the Health Workforce Development Plan; the National Examination Committee, nominated by the Prime Minister and chaired by the Council of Ministers to guide the national examinations process; and development of regulation for public and private Training Institutions in Health.
- The formulation of the third Health Workforce Development Plan (HWDP 2016-2020). The third HWDP consolidates the achievements of the previous two HWDPs, and provides strategic direction for future workforce actions. It is a “strategic management document” to guide the MOH and health institutions, as well as concerned stakeholders, in efficiently utilizing their resources to develop an accessible, acceptable and productive health workforce to ensure a strong health system in Cambodia.
- The drafting of an overarching Law on Regulation of Health Practitioners. The new law will introduce registration and licensing with the health profession councils as a mandatory requirement to perform clinical practice. The draft law was developed in consultation with different stakeholders including senior MOH officials, representatives from the five health profession councils and development partners and is currently in the final stages of discussion.
- The introduction of the National Exit Examination (NEE) in 2013 as a tool to standardize the quality of education in public and private training institutions in health. The NEE tests recent graduates using a two-stage examination design consisting of multiple choice questions and objective structured clinical examination. Technical and financial support was provided to the design, implementation and conduct of the NEE.
- Establishment and initial operation of the Centre for Educational Development of Health Professionals (CEDHP) - a dedicated development center to support all aspects of health professions educational development at the University of Health Sciences (UHS) and Regional Training Centers. Faculty members from UHS and the Technical School of Medical Care were enrolled in a two-year Masters in Health Professional Education program in partnership with University of Philippines, Manila to create a cohort to provide on-going support to improve teaching and learning skills in the training institutions.
- A bridging program in nursing was conducted to upgrade the skills of the UHS Nursing and Midwifery faculties. Through this course, faculty members have grown into mature educators to lead the Bachelor programs.
- A five-year UHS strategic plan was launched by the Minister of Health.
- A consolidated HRH electronic database was developed. This database will be piloted in five provinces in early 2016, before being scaled up to achieve national coverage. The new database will combine data on staffing cadres and training to provide comprehensive information for HRH planning and management.

Maternal, Newborn and Child Health Activities

The main activities conducted in the area of maternal, newborn and child health were:

- Support to the MOH in updating the Maternal Death Audit protocol.
- Training of midwives from health centers in Kratie and Kampong Cham province led by the Training Unit of the National Maternal and Child Health Center (NMCHC).

- Support to NMCHC to organize the Maternal Newborn and Child Health Day event, to advocate for continued political commitment to improving women, newborn and child health.
- Updating of the Safe Motherhood Protocol for Health Centers, to include new global recommendations and make it consistent with Safe Motherhood Protocol for Referral Hospitals.
- Appointment of a National Professional Officer for newborn and child health to provide technical support to the MOH and NMCHC.
- Coaching of health workers in immediate newborn care (INC) to change the way health workers practice INC in their routine work.
- Technical and financial support provided for improving Integrated Management of Childhood Illnesses (IMCI) implementation. This included: (i) review and updating of existing IMCI guidelines in line with other national protocols; (ii) updating of IMCI training materials; (iii) refresher IMCI training; and (iv) training on IMCI data management.

Overall, the activities supported by the award were successful in making an important contribution to the broader MOH agenda of strengthening human resources for health and improving services for maternal, newborn and child health.

1. Background

Over the past two decades, Cambodia has made significant gains in rebuilding its health system through an extended process of health reform beginning in the 1990s. This has helped the country to make impressive strides in improving health outcomes over the last decade. Between 2000 and 2014, the maternal mortality rate dropped from 437 to 170 (per 100,000 live births) and the under-five mortality rate dropped from 124 to 35 (per 1000 live births).² Considerable gains have been achieved in controlling the HIV/AIDS and tuberculosis epidemics. The HIV/AIDS prevalence has fallen from 3 percent in 1997 to 0.8 percent in 2012.³

Yet, in spite of these achievements, several challenges persist and new ones are emerging. Notably, the progress in reducing malnutrition has been slow - stunting showed a modest decline (from 50 percent in 2000 to 32 percent in 2014), but wasting increased (from 8 percent in 2005 to 10 percent in 2014) and underweight showed no change (28 percent in 2005 and 2014).³ Cambodia's maternal mortality rate is almost four times higher than the average for the Asia Pacific region (47 per 100,000 live births).¹ The country is also witnessing an epidemiologic transition; non-communicable diseases and injuries are now amongst the leading cause of Disability-Adjusted Life Years (DALYs) lost per 1,000 population.⁴

A widely acknowledged limitation of the health system is the lack of well-trained, motivated and adequately-compensated staff, providing quality assured services. Although there has been an increase in the size of the workforce, health sector analyses in Cambodia point towards the need for improving governance and quality management of the health workforce.

2. Health Workforce in Cambodia – Developments and Progress

In Cambodia, re-building the skilled workforce, in particular in critical areas such as health, has been a national priority. It has been outlined in the National Strategic Development Plan 2006-2013 as well as sector-specific plans (the First and Second Health Strategic Plans (HSP and HSP2 respectively)). HSP2 2008-2015 outlined the importance for service delivery of having appropriately skilled health staff who are adequately motivated, proficiently trained and equitably deployed.

To prioritize the rebuilding of the health workforce, the Ministry of Health invested in the Health Workforce Development Plan (HWDP) 1 (1997-2005), which focused on adequate production and equitable distribution of health workforce according to the, then newly adopted, Health Coverage Plan. Building on the achievements from the first plan, the second HWDP (2006-2015) aimed to further address the issues of improving the competency and management of the health workforce. The specific focus granted to health workforce under these Plans has resulted in impressive gains. For instance, the size of the health workforce increased substantially. The number of doctors

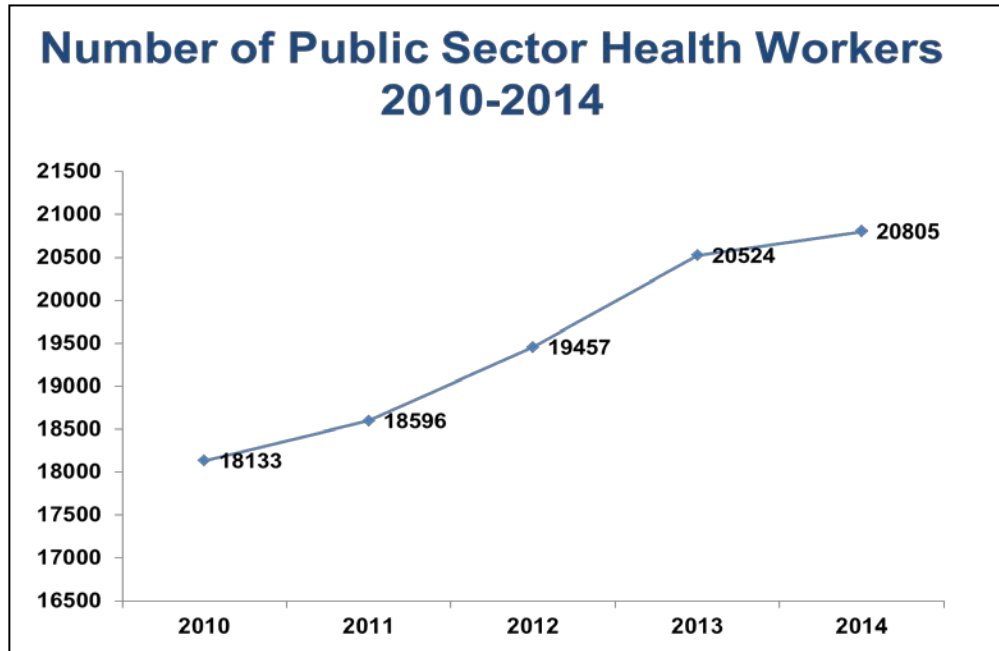
² Cambodia Demographic Health Survey, 2005 and 2014

³ Cambodia Country Profile. UNAIDS 2012

⁴ Global Burden of Disease Profile: Cambodia. IHME, 2013

increased from fewer than 50 doctors in the early 1990s to a current strength of over 2,500 working in the public sector. (Figure 1)

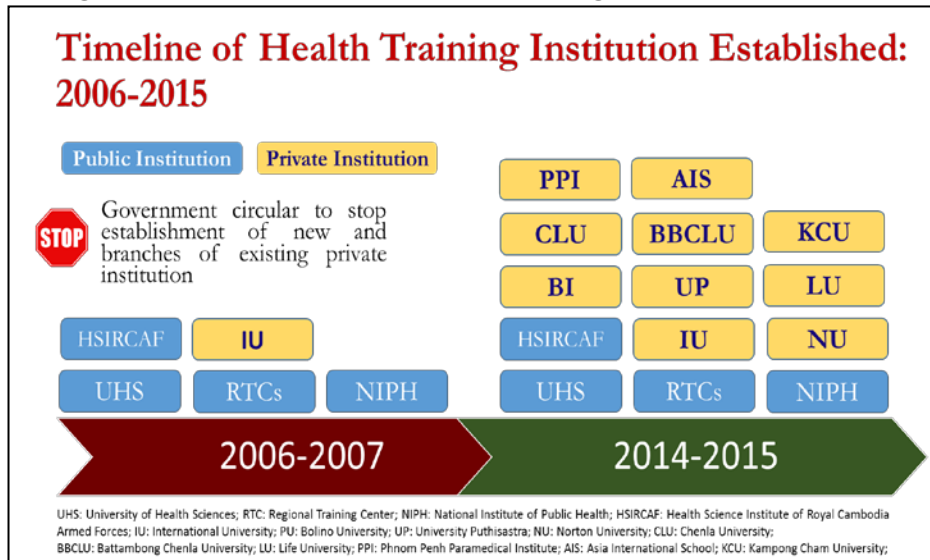
Figure 1. Growth in the Public Sector Health Workforce



Source: Department of Personal, Ministry of Health

The growth in the workforce was enabled to a large extent by the expansion of the tertiary education sector in the last decade, particularly in the private sector. (Figure 2) Total enrollment in both public and private institutions was little over 20,000 in 2014.

Figure 2. Public and Private Health Training Institutions in Cambodia



Source: Human Resource Development Department, Ministry of Health

A Mid-Term Review (MTR) of the HWDP 2006-2015 was conducted in 2011 to review progress and refocus efforts. The MTR identified four strategic priority areas for further investment and action.

Under the Partnership Framework 2009-2013 between the WHO (represented by the WHO Country Office in Cambodia) and the Commonwealth of Australia (represented by the Department of Foreign Affairs and Trade (DFAT)⁵), an award of US\$ 1,500,000 was provided to the WHO Cambodia Office to implement activities over a 12 month period starting from 1 July 2012 to 30 June 2013. US\$ 1,200,000 was allocated for Human Resources for Health (HRH) activities and US\$300,000 for Maternal, Newborn and Child Health activities. – Activities were designed to be in line with the MTR recommendations. The eight priority interventions outlined in the proposal submitted to DFAT were identified in agreement with the MOH. (*Refer to Box 1 below*). Due to unforeseen delays in the implementation of the activities, the award period was extended until the end of December 2015.

<p>Box 1. Overview of the proposed activities</p> <p>1. Strategic Priority One: <i>Governance, planning and management of Human Resources for Health</i></p> <ol style="list-style-type: none">1.1 Human Resource for Health Committee1.2. Capacity building for strengthening HRH governance at national and subnational levels <p>2. Strategic Priority Two: <i>Improve the Technical Skills and Competence of the Health Workforce through strengthened pre-service training</i></p> <ol style="list-style-type: none">2.1. National Licensing and Registration Exam2.2. National Health Professional Registration Board2.3. The Centre for Educational Development of Health Professionals2.4. The Nurse Bridging programme for Faculty development in Public Schools2.5. In-service training and continuing education maintains the skills of the health workforce of Cambodia <p>3. Strategic Priority Three: <i>Health Workforce Management; recruitment, performance management, deployment and retention</i></p> <ol style="list-style-type: none">3.1. Health Workforce Recruitment, Deployment and Management3.2. Scholarships <p>4. Strategic Priority Four: <i>Staff Remuneration, salaries, performance incentives</i></p> <ol style="list-style-type: none">4.1. Health labour market Analysis
--

Source: HRH Proposal submitted to DFAT

This Closure Report summarizes the achievements made by MOH in its mandate to strengthen the HRH agenda during the period of the award (July 2012 – December 2015), specifically highlighting the contributions made by the DFAT award to WHO (thereafter referred to as the ‘award’). The report builds on the Mid-Year and Annual Reports submitted by the WHO to DFAT. The exit strategy mentioned in the report is based on on-going discussions with the MOH and strategic activities outlined in the new HWDP 2016-2020.

⁵ Formerly the Australian Agency for International Development (AusAID) until 1 November 2013.

3. Human Resources for Health: Strategic Priorities, Objectives and Activities

3a. Strategic Priority One: Supporting and Strengthening of Multisectoral policy dialogue through Increased Capacity of Governance Structures

Supporting multisectoral policy dialogue by strengthening through the Human Resource for Health (HRH) governance

Key Achievements:

HRH governance requires senior management leadership and coordinated decision-making across service delivery, personnel, training, planning and finance departments in the MOH. In MOH, the current governance structures for HRH are the inter-departmental HRH Oversight Committee (OC), the inter-Ministerial National Examinations Committee (NEC) and the Health Professional Councils. Technical support was provided to these governance structures using the award funds.

The HRH OC was established by the Minister of Health to oversee and guide the MTR of the HWDP 2006-2015. The Minister of Health retained this Committee to oversee the implementation of the MTR recommendations. The Committee has a mixed department membership with senior managers from the health and admin/finance directorates. It is chaired by the Secretary of State for Health and has a secretariat consisting of staff from the Department of Personnel and Human Resource Development.

The HRH OC meets every six months and provides a forum to discuss the HRH agenda. It receives administrative support from the HRH secretariat. The secretariat is also responsible for the preparation of the Annual HRH Reports.

The NEC, nominated by the Prime Minister, is chaired by the Council of Ministers and has a membership of the Ministries of Health and Education. It is an established governance structure to guide the national examinations process and development of regulation for public and private Training Institutions in Health (TIH).

Activities directly supported by the award:

- Technical support provided to the HRH OC for the biannual meetings.
- Technical and financial support provided to HRH Secretariat for improving the HRH database and preparation of the Annual HRH Reports.
- Technical and financial support provided to the MOH secretariat of the NEC.
- Technical and financial support to the Medical Council to strengthen governance and registration functions.
- Financial support provided to MOH for the printing and dissemination of the Mid-Term Review (of HWDP 2006-2015) report.
- Site visit by delegation from midwifery, nursing and medical council to the Bangkok, to observe their quarterly meetings and structure of the Health Profession Councils in Thailand.

The Health Professional Councils meet quarterly to share their experience and strengthen their professional representation functions. The Medical Council chairs the meetings. This award was used to provide technical and financial support to strengthen the role of the selected health profession councils (medicine, midwifery and nursing).

Exit Strategy:

The proposal submitted to DFAT had envisioned that the HRH OC will be institutionalised and will assist in mainstreaming the HRH agenda into the national planning process. This has been effectively achieved. The HRH OC will continue to provide an effective platform for dialogue on HRH issues. It will continue to monitor and guide developments in HRH policy, planning and management.

The HRH Oversight Committee TOR is being revisited and there are on-going discussions on broaden the membership of the Committee to ensure adequate representation of key stakeholders and development partners.

The HRH Secretariat will continue to provide the required administrative support, including the production of the Annual HRH Report.

The NEC will continue to meet on an as per need basis to oversee the implementation of the National Entrance and Exit Examinations.

Following the initial support provided to the Health Profession Councils through this award, continuity of activities has been ascertained with technical and funding support from the United States Agency for International Development (USAID) Assist Project. The project is currently assisting the Health Profession Councils to implement their National Strategic Plan 2015-2020.

Formulation of Health Workforce Development Plan 2016-2020

The MOH has prepared its third Health Workforce Development Plan (HWDP 2016-2020), which consolidate the achievements of the previous two Plans, while providing strategic direction to the future workforce actions. The HWDP is a “strategic management document” to guide the MOH and health institutions, as well as concerned stakeholders in efficiently utilizing their resources to develop an accessible, acceptable and productive health workforce that will assist in achieving the overarching goals of the health system in Cambodia.

The formulation of the HWDP 2016-2020 was under the guidance of the HRH OC. The implementation of the process is led, managed, coordinated and facilitated by the Departments of Personal and Human Resource Development. The administrative support for the preparation of the Plan was provided by the HRH Secretariat.

The MOH adopted a participatory and consultative approach for the formulation of the HWDP (2016-2020). The process involves a number of activities, including three national consultative workshops.

Figure 3. National Technical Consultation Workshops for HWDP 2016-2020



The first workshop focused on HRH planning, recruitment, deployment, retention and work environment. The second focussed on HRH production, trainings, accreditation and regulation.

Based on the outputs of the two workshops the vision, mission, goal, strategic objectives and priorities for the next HWDP 2016-2020 were developed. These were presented, discussed and approved during the HRH OC meeting in June 2015.

The third workshop was organized to discuss and develop the implementation plan for each strategic intervention under the agreed objectives.

Activities directly supported by the award

- Technical support provided to MOH for the identification of the strategic priorities and development of a roadmap for the formulation of the HWDP 2016-2020.
- Technical and financial support provided to MOH for the organization of two national consultative workshops for the HWDP 2016-2020.
- Technical support provided to MOH for the costing of the implementation plan of the HWDP 2016-2020.

Key achievements:

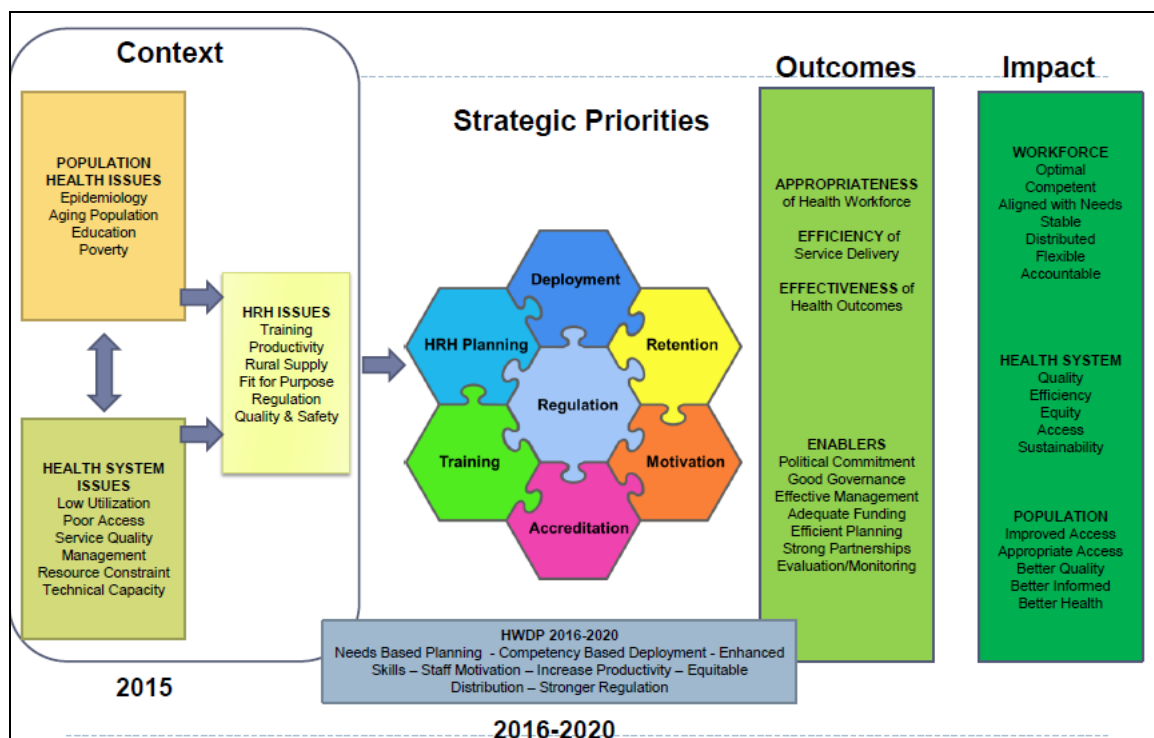
The HWDP 2016-2020 has been finalized and endorsed by the HRH OC.

It is being considered as a sub-plan under the Third Health Strategic Plan (HSP3) for the overall health sector.

For the first time, a costed implementation plan has been included in the HWDP 2016-2020.

The HWDP 2016-2020 will be officially launched and disseminated during the National Health Congress in March 2016.

Figure 4. HWDP 2016-2020 – Strategic Priorities, Outcomes & Impact



Regulatory Framework for Health Profession Regulation

The Royal Decrees issued by the Royal Government of Cambodia established the five health professional councils (Medical Council of Cambodia 2000; Dental Council of Cambodia 2005; Cambodian Midwives Council 2006; Cambodia Council of Nurses 2008; and Pharmacy Council of Cambodia 2010). This legislation along with other related legislative instruments currently provide the framework for the establishment and delivery of health profession regulation.

The current focus on ensuring both the quality and safety of the public and private health care systems in Cambodia has led to consideration of mechanisms to strengthen the system of regulating all health professionals in ways that meet the needs, cultural context and resources of Cambodia.

Another important driver is the upcoming Association of South East Asian Nations (ASEAN) economic integration and the Royal Government of Cambodia's membership in the ASEAN community. Within the context of the ASEAN integration, three Mutual Recognition Agreements covering doctors, nurses and dentists are being progressed with the objectives being to facilitate mobility within the ASEAN region; exchange information and enhance cooperation; promote adoption of best practices on standards and qualifications; provide opportunities for capacity building and education of doctors, dentists and nurses.

Considering these developments, the critical need to strengthen the legislative framework for the regulation of health professionals and strengthen the role of the health profession councils has been recognized by the MOH.

Activities directly supported by the award

- Engagement of a law firm to provide legal support in the drafting of the new law on regulation of health practitioners.
- Technical and financial support provided to MOH to organize multi-stakeholder meetings to discuss and finalize the draft of the new law on regulation of health practitioners.
- Financial support to the Cambodian Nursing Council for the development and dissemination of the Cambodian Standards of Nursing Care.
- Financial support to the Cambodian Midwifery Council to conduct training of provincial branches on how to register midwives through the electronic database.
- Financial support to the Medical Council of Cambodia for ongoing national medical registration and continuing medical education.

Key Achievements:

To strengthen the regulatory framework for health professionals in Cambodia, an overarching Law on Regulation of Health Practitioners has been drafted. This law was developed in consultation with different stakeholders including senior MOH officials, representatives from the five health profession councils and development partners.

The new law has been discussed with the jurists from the Council of Ministers and is currently in its final stages of consultations before submission to the National Assembly.

Exit Strategy

The proposal submitted to DFAT had envisioned that a National Board approved by the Minister of Health will be established and eventually funded through MOH and registration fees.

The draft of the new law (currently under discussion), not only outlines the establishment of the National Board (referred to in the new Law as 'Joint Coordination Committee') but also introduces the mandatory requirement for registration and licensing. This will have a significant impact on the regulation of health practitioners in Cambodia.

3b. Strategic Priority Two: Improve the Technical skills and Competence of the Health Workforce through Strengthened Pre-service and In-service Training

Improving the technical skills of the health workforce requires the realization of a strong regulatory framework. In Cambodia, Sub-Decree 21 outlines the quality standards for each health professional program, underpinning the need for Entrance and Exit Exam for all public and private TIH. It brings together the Council of Ministers, Ministry of Education Youth and Sport and the Ministry of Health to deliver on accountability structures for all pre-service TIH.

This award supported the legal commitments for the regulation outlined in Sub-Decree 21, specifically the establishment of national examinations for all health professionals.

Strengthening the implementation and quality of the National Exit Examination

The National Exit Examination (NEE) allows the Ministry of Health to play a formal role in achieving standardized education quality for public and private TIH.

The NEE is for all graduates and is used to test their competence for all the curricula offered for the health professions. It has the potential to drive institutional performance, as institutions will provide subjects aligned with national exam content and education standards in line with producing graduates able to pass the exam.

With support from the award, a national WHO consultant was engaged to assist the MOH and the NEC to develop a Road Map for the implementation of the NEE. The roadmap outlined the formation of national Working Groups, nominated by the NEC, for each discipline, with representatives from all private and public TIH. The Working Groups were tasked with identification of competencies for their respective health profession, designing an exam blue print and selection of multiple choice questions (MCQ) for the NEE.

The Core Competency Frameworks for each health disciplines were developed, including the development of approved the exam blue prints. Based on these documents, the Working Groups selected over 2,500 MCQs for each discipline area which were translated into Khmer for use in the NEE.

Figure 5. Training of OSCE Examiners



Figure 6. Training of OSCE Standardized Patients



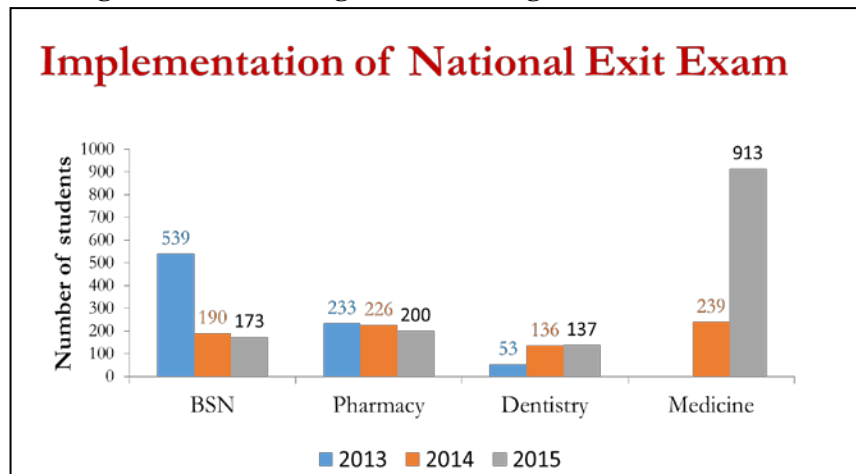
The OSCE Working Group nominated by the NEC were responsible for the design and implementation of the clinical part of the NEE, the Objective Structured Clinical Examination (OSCE).

Figure 7. BSN OSCE National Exit Examination 2013



The first NEE was held on 12-13 January 2013 for recent graduates in pharmacy, dentistry and Bachelor of Nursing. In 2014, the NEE was extended to the medical graduates. Since then, the NEE has been conducted twice annually under the guidance and oversight of the NEC.

Figure 8. Number of graduates taking the NEE – 2013-2015



From 2016 onwards, it is expected the NEE will be offered to recent graduates of Bachelors of Medical Laboratory Technology and Midwifery.

Activities directly supported by the award:

- Technical support to the MOH and NEC for the planning, design and implementation of the NEE.
- Technical and financial support for the development of core competency framework and examination blue prints for medicine, dentistry, pharmacy, nursing, midwifery and medical laboratory technology.
- Funded University of Sydney to provide technical support for the development of the MCQ databank and OSCE scenarios and training of trainers.
- Training of examiners and standardized patients for the OSCE scenarios.
- Financial support to technical working groups for the development and review of MCQs and OSCE items.
- Logistic support to the MOH for the implementation of the NEE – examination scanner, photocopier, computer and OSCE equipment (manikins).
- Financial support for refresher course for examiners.
- Technical and financial support for the development of NEE Guidebooks.

Key Achievements:

The NEE has been recognised as an important instrument to test the competencies of recent health graduates, to ensure that they have adequate knowledge and skills for practice.

There has been continued high-level political commitment for the implementation of the NEE.

Regular review, editing and adaptation of the MCQ Bank and OSCE scenarios for each health profession discipline has been undertaken to further improve the quality of the NEE.

Increasing number of students and institutions are now participating in the NEE.

Students' guide for the NEE has been developed that takes into consideration the existing exam blueprints and exam rules and regulations stipulated by the NEC, as well as comments from the NEC and Working Group leaders and participants.

Joint Prakas issued by the MOH and the Ministry of Education, Youth and Sport (MOEYS) to extend the NEE to associate degree programs of nursing and midwifery.

Exit Strategy:

The proposal submitted to DFAT had envisioned that following the initial set up costs, the revenue generated from student fees will be sufficient to manage the conduct of the NEE. However, a recent political decision to drastically reduce the student fees has challenged this assumption.

Nonetheless, it is expected that the NEE will provide the platform to establish and regulate standards and licensure of the health professions.

It will also continue to enable the MOH to engage more formally with MOEYS and the Accreditation Committee of Cambodia.

The NEE will assist in driving competency based curriculum development for all health professionals and shape educational behaviour.

The NEE will provide a standard setting process, which will be the basis of registration and licensing of health professionals.

Initial discussions have been held with the Ministry of Health regarding the establishment of a National Examination Unit to provide administrative support to the implementation of the NEE. This has also been included as one of the strategic intervention in the HWDP 2016-2020.

Supporting the Health Profession Education Unit

International best practice dictates that education institutions should be responsible for their implementation of the education system and that the regulators should manage the quality standards of that implementation. As the education institutions currently do not design their own curriculums, lesson plans, exams, they have faculty who have never seen the curriculum, do not know how to teach, write lesson plans, set exams or produce health workers who are competent. It is now recognized by the regulators and the health education institutions that there is a need to separate duties so that the education institutions implement their education systems, within quality standards set by the regulators and within the standards outlined by the National Examination and Sub Decree 21.

The award supported the Centre for Educational Development of Health Professionals (CEDHP) with the aim to build faculty capacity so that they have the knowledge, skills and experience to implement their competency based education systems. These capacity development initiatives were offered through a twinning relationship between the University of Health Sciences (UHS) in Cambodia and the University of the Philippines (UP), Manila.

The CEDHP serves as a dedicated development center to support all aspects of health professions educational development at UHS and the Regional Training Centers (RTCs) (including affiliated clinical settings). Its aim is to:

- meet the urgent need to upscale and improve quality of health professions education, and
- develop educational capacity for producing health professionals who can deliver quality health services.

It will mobilize, coordinate and cultivate the capacity of resource persons to support educational development.

The CEDHP Management Structure was nominated by the Minister of Health in January 2011.

The CEDHP office has been established in the Technical School of Medical Care (TSMC).

Activities directly supported by the award:

- Scholarships to 8 faculties (2 females (midwives) and 6 males (doctors, nurses, dentists, pharmacists)) of the UHS and RTCs for the first batch and 8 faculties (2 females (nurse midwives) and 6 males (doctors, nurses, dentists and pharmacists)) for the second batch, to join UP Manila's modular Masters in Health Professional Education program.
- Financial support to engage UP Manila faculty in delivering its Master degree course in Health Profession Education.
- Financial support to engage UP Manila faculty in developing the Cambodian curriculum for a ladder Master's program in Health Professional Education.
- Financial support to engage UP Manila faculty in providing technical support to students of the Masters in Health Professional Education program, to enhance their thesis writing and research skills.
- Technical and financial support to the University of Health Sciences to develop a short-course on basic pedagogy skills in collaboration with UP Manila.

Key Achievements:

All the enrolled students have completed and met the credit requirements for the theoretical component of the modular Masters in Health Professional Education program. Most of the enrolled students have achieved a post graduate diploma in health professional education, and there has been on-going graduation of students with a Master's degree following the submission of their dissertation.

The CEDHP core team has been regularly conducting workshops for faculty members from different departments of UHS and TSMC. Most of the workshops have been on lesson plans and have focused on how the lesson plans fit within the curriculum and how the lessons can be delivered.

The CEDHP core team has developed a short-course on basic pedagogy skills and knowledge. In line with the UHS Strategic Plan 2014-2018, the team has been conducting training for all UHS/TSMC faculties in the short-course.

The CEDHP core team has gained experience and confidence through running these workshops and started to build relations with faculty.

Exit Strategy:

The proposal submitted to DFAT has envisioned that CEDHP will develop a Cambodian Masters in Health Professional Education curriculum and will offer fee paying short courses. This income will be the sustainability strategy for the Centre. Unfortunately, the Centre has not been able to meet this objective. The Master degree curriculum has not been as yet been approved by the MOH.

However, it is clear that the CEDHP will continue to draw on the two cohorts of faculty members trained under the UP Manila Masters in Health Professional Education program, as resource persons

to conduct faculty development programs at the UHS and TSMC. This will address an important and unmet need in these institutions.

Moreover, strengthening the role and capacity of the CEDHP has been identified as a strategic intervention for both HSP3 and the HWDP 2016-2020.

The Nurse Bridging Programme from Associate Degree to Bachelor Nurse for Faculty in the Public Sector

The need for formal qualification for the faculty of the Associate Degree Nurse and Bachelor of Science Nurse programs was recognized as an unaddressed gap. It was identified that a bridging program was needed to improve the quality of clinical teaching.

In this regard, the award was used to establish a nurse bridging programme in Cambodia. The College of Nursing, UP was engaged to deliver the bridging programme. The programme was designed to emphasize the importance of structured clinical practice for students.

The MOESY and MOH approved the Cambodian curriculum and the Nurse Bridging programme, without an entrance exam requirement. The program started in February 2013 with 29 faculties enrolled. UHS and the RTCs nominated co-teachers to teach with the UP Manila faculty and terms of reference for each teacher were developed. Simultaneous translation is also provided.

Activities directly supported by the award:

- Supported UP Manila to provide in-country Nurse Bridging Programme from Associate Degree to Bachelor Nurse.

Key Achievements

All 29 participants in the program (15 from UHS/TSMC, two from Battambang's RTC, four from Kampong RTC, four from Kampong Cham RTC and four from Stung Treng RTC) successfully completed their courses on 29 January 2015.

Nursing and Midwifery faculty and preceptors of the public sector TIH upgraded their skills to Bachelors. The quality and consistency of clinical teaching is expected to improve for all students (as public sector teachers also teach in the private schools).

The Nursing and Midwifery faculty and preceptors will play a more active role in education planning and organizing clinical placements. Nurses will develop their skills further in maternal and child health.

The faculty received coaching and mentoring to deliver the bridging program and through this process have grown into mature educators to lead the Bachelors program.

Figure 9. Recognition Ceremony – Nursing Bridging Programme 2015



Exit Strategy:

Another Nurse Bridging program is currently being offered with support from the Korean International Cooperation Agency (KOICA). The faculties trained in the bridging program under the DFAT award are being fully utilized to deliver the KOICA program.

The faculty will continue to contribute towards improvement in the quality of training and be recognized as the potential cohort for proposed training in a Master’s degree in nursing.

Formulation of a 5-year strategic plan for the University of Health Sciences

The formulation of a five year strategic plan for the UHS has been mandated by the Royal Government of Cambodia and was viewed as a high priority by the University. The UHS Rector led the process with a strong commitment to engaging faculty members in the planning process. Support was provided to UHS to determine the strategic priorities for the next five years through a consultative process. This helped the institution to identify the significant changes required to ensure a more conducive learning environment and a healthy and harmonious setting for teaching, research and service to the community.

- | |
|--|
| <p>Activities directly supported by the award</p> <ul style="list-style-type: none">• Technical support to UHS to identify the strategic priorities for the five-year plan.• Financial support to organize activities to finalize the UHS Strategic Plan with participation of UHS executive and key staff. |
|--|

Key Achievements:

The five-year strategic plan for the University of Health Sciences was launched by the Minister of Health and is currently the guiding document for UHS activities.

Development of Pre-Service Khmer Education Materials

In collaboration with the WHO Maternal and Child Health team, the midwifery training modules and the WHO Management of Childhood conditions have been translated into Khmer and were disseminated to all public institutions. This activity was directly funded by the award.

In-service training and continuing education maintains the skills of the health workforce of Cambodia

The HRH mid-term review recommended strengthening the MOH National Plan for training with a goal of operationalizing two to three national training areas over the next five years. To achieve this, it was important to strengthen the database on in-service training.

Data on trainings can potentially be used to identify training needs, coordinate and harmonize trainings and develop training plans.

Support was provided under the award to create a comprehensive HRH database to collect reliable information on the in-service trainings conducted at the national and sub-national level under the different programs.

Key Achievement:

A comprehensive, consolidated HRH electronic database has been developed. This database will be piloted in five provinces in early 2016, before being scaled up to achieve national coverage.

Activities directly supported by the award:

- Engagement of an IT firm to develop a consolidated online database on continued professional development.

Exit Strategy:

Work with HRD department and Provincial Health Departments to strengthen reporting on in-service trainings.

Work with HRD department and national programs to strengthen government training plan and its systematic implementation.

Work with Health Profession Councils to strengthen links between ongoing continuing education and registration and licensing.

3c. Strategic Priority Three: Strengthen health workforce management: Recruitment, performance management, deployment, retention and compensation

Creating a comprehensive HRH Observatory

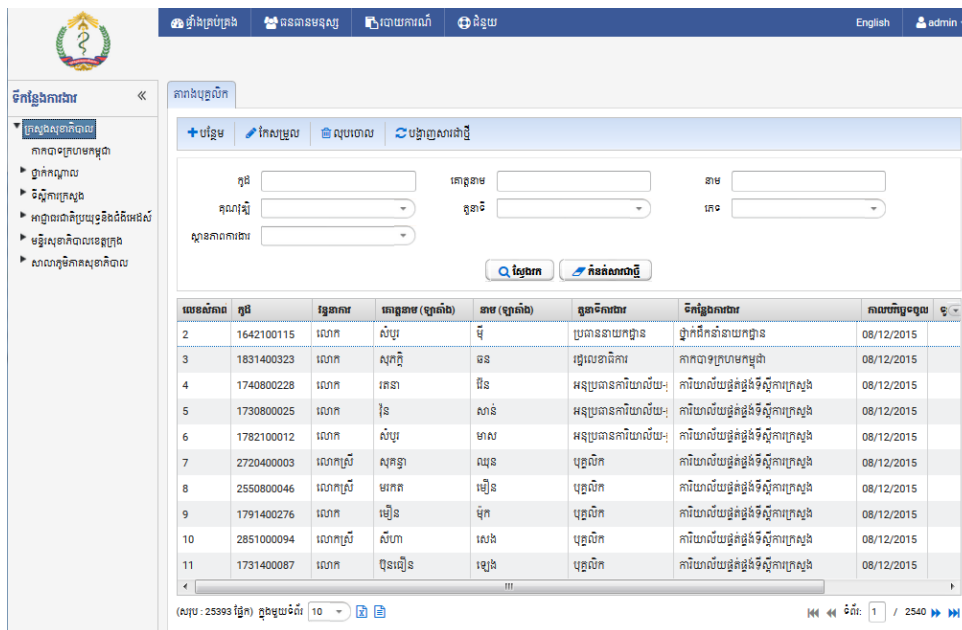
The MOH Departments of Personnel and Human Resource Development maintain two separate HRH databases - Data Management Tool and Human Resource Development Health Information System. While the first database collects information on staff positions at the central level and in the 25 provinces in Cambodia, the second database is specifically for in-service training and up-skilling staff members.

Although these databases have been helpful to collect, collate and analyze HRH information, there was an immediate need to update the database to align it with the recent changes in the MOH staffing guidelines and staff cadres. There is also an expressed need to include additional features to the database to enhance its utility for workforce planning, especially at the sub-national level.

Governance capacities at provincial level also need to be strengthened, including devolved and integrated HRH information systems for workforce planning. With the expected advent of decentralisation and deconcentration reforms, there is an accelerated need to focus on this area. The new database will ensure better monitoring and planning of the HRH needs at the sub-national level.

- Activities directly supported by the award
- Engagement of an IT firm to develop a consolidated HRH database.
 - Financial support to train staff from five provinces and central level institutions on the new database.

Figure 10: Screen layout of the HRH MIS



Key Achievements:

A local IT firm was contracted to create a comprehensive online database (with offline features) to incorporate the new data needs and to develop a collated HRH observatory for health workforce planning.

The new database has additional features and dashboard to assist in easy assimilation and use of HRH data for planning purposes at the sub-national level.

In addition, the database will complement the Projection Tool (WHO/DFAT funded HRH tool for health facility workforce projections) that continues to offer a useful means for the MOH to present their staffing requirements to the Council of Ministers.

Exit Strategy

Support the capacity building of national and sub-national level on the use of the new database for HRH planning.

Annually update of the Projection Tool for monitoring the strategy to address the shortage of health workers in the public sector.

Production of the Annual HRH Report as a stock taking of the HRH situation, focusing primarily on the public sector but expanding to the private sector as more reliable data becomes available.

4. Maternal, Newborn and Child Health

This section of the report outlines the activities that were implemented in line with the proposal on “Collaborative Efforts between MOH, WHO and DFAT⁶ in Maternal, Newborn and Child Health”. The total amount of the award was US\$ 300,000 and the activities were conducted in the period July 2012 and December 2014.

4.1. Reproductive and Maternal health**4.1.1. Update Maternal Death Audit protocol**

The award supported activities related to the updating of the Maternal Death Audit protocol. The updated protocol was piloted in five provinces and adjusted based on the observations and feedback. The final protocol was disseminated in 2014.

4.1.2. Upgrading skill of MWs from Kampong Cham and Kratie

To strengthen the skill of midwives (MWs), especially new recruited MWs, the award supported the Training Unit of the NMCHC to organize a four-week training course for Health Center MWs from Kratie and Kampong Cham province. Twenty MWs were trained in antenatal care, care during normal delivery, newborn care and post-natal care for mother & newborn.

⁶ Formerly the Australian Agency for International Development (AusAID) until 1 November 2013.

Figure 11: Participating midwives from Kampong Cham and Kratie province



4.1.3. Maternal, Newborn and Child Health Day

To advocate for continued support and commitment for women, newborn and children's health, in 2013 the award supported the NMCHC to organize the Maternal Newborn and Child Health Day. The event was presided over by H.E Dr Mam Bunheng, Minister of Health.

Figure 12: Maternal, Newborn and Child Health Day event



H.E Dr Mam Bunheng, Minister of Health presiding over the event.

4.1.4. Safe motherhood protocol for HC

The award supported the National Reproductive Health Program to update the Safe Motherhood Protocol for health centers. The protocol was finalized in 2015.

5. Newborn and Child health

5.1.1. Technical support for newborn and child health

To provide technical support to NMCHC to strengthen services related to new-born and child health, the award funded the position of a WHO National Professional Officer (NPO) from October 2012.

Besides other tasks, the NPO provided technical support to the newborn care and Integrated Management of Childhood Illnesses (IMCI) technical working group and the Reproductive, Maternal, Neonatal and Child Health Care Task Force.

Following the end of the award, the NPO position has been retained and is currently funded using WHO internal resources.

5.1.2. Scaling up Immediate Newborn Care (INC) coaching for health workers of provincial hospitals

To improve adherence to evidence-based newborn care practices, technical and financial support was provided to NMCHC to conduct coaching sessions on Immediate Newborn Care (INC) in 24 provincial hospitals.

The main purpose of the INC coaching was to change the way health workers practice INC in their routine work, especially hand washing, immediate drying of babies, immediate direct skin-to-skin contact, properly-timed cord clamping and cutting, full breastfeeding, and immediate bag and mask ventilation for babies with respiratory distress.

At the end of December 2012, 912 health workers (161 medical doctors and medical assistants, 720 secondary and primary midwives and 31 secondary and primary nurses) were coached on INC using the funding support from this award.

The award funds were also used to contract an expatriate technical adviser to provide support to the NMCHC and its sub-national implementing entities.

In January - December 2013, the INC coaching was scaled up to include more health facilities:

- A total of 8 INC coaching sessions with 83 participants (70 female and 13 male), mostly midwives (41 secondary midwives, 9 primary midwives, 15 secondary nurses, 7 medical assistants and 11 medical doctors) from 5 provincial referral hospitals, 3 district referral hospitals of 5 Operational Districts in 5 provinces (Kratie, Steng Treng, Rattanakiri, Mondulkiri and Preah Vihear provinces) was completed at NMCHC.

Among them, 12 participants were selected to attend 2 more sessions to become facilitators of INC coaching.

Sessions	# persons	Written test (correct answers)		Demonstration test (correct sequence steps)			
		Pre-test (N=83)	Post-test (N=83)	Baseline routine care (N=8)*	Baseline HBB (N=8)*	Post-test Routine care (N=83)	Post-test HBB (N=83)
Session 1	10	53%	98%	31%	70%	95%	92%
Session 2	9	51%	98%	35%	75%	98%	98%
Session 3	10	52%	94%	33%	57%	96%	95%
Session 4	11	50%	92%	29%	80%	97%	96%
Session 5	11	53%	93%	33%	41%	97%	94%
Session 6	11	60%	95%	38%	55%	98%	99%
Session 7	10	66%	96%	38%	75%	98%	96%
Session 8	11	51%	89%	69%	63%	99%	99%
TOTAL	83	54%	94%	38%	65%	97%	96%

Two additional INC coaching sessions were conducted for 23 participants (18 female and 5 male), mostly medical doctors and midwives (10 medical doctors, 10 midwives, 2 medical assistants and 1 nurse) from Phnom Penh municipal hospital.

Sessions	# persons	Written test (correct answers)		Demonstration test (correct sequence steps)			
		Pre-test (N=23)	Post-test (N=23)	Baseline routine care (N=2)*	Baseline HBB (N=2)*	Post-test Routine care (N=23)	Post-test HBB (N=23)
Session 1	12	59%	98%	29%	71%	98%	96%
Session 2	11	47%	84%	23%	70%	94%	92%
TOTAL	23	53%	91%	26%	71%	96%	94%

The coaching sessions were supported by the award funds and facilitated by the NMCHC INC facilitator team with technical support from WHO/Cambodia and the Reproductive and Child Health Alliance (RACHA).

5.1.3. Strengthening Integrated Management of Child Illness

Between January - June 2013, the award was used to provide technical and financial support to improve IMCI implementation. The activities included:

- Part financial support to MOH to organize activities for the review and updating of existing IMCI guidelines. The objective was to align the guidelines with existing national protocols

such as malaria, immunization, and emerging infectious diseases. The medical recording forms and mother cards were also revised and updated.

- A consultative workshop was supported at the National Pediatric Hospital to update the IMCI training materials.
- A five-day refresher IMCI training was supported at the National Pediatric Hospital for 10 lecturers of Regional Training Centers and Technical School of Medical Care. The IMCI training video was translated from English to Khmer and used to improve the quality of IMCI refresher training.
- Two training sessions on IMCI data management were conducted for 25 participants from selected provinces and operational districts. The training focused on data analysis and its interpretation to develop action plan.

6. Financial Reporting

Financial Report for the Human Resource for Health and Maternal, Newborn and Child Health

HRH activities	\$1,028,661
MNCH activities	\$298,773
Total	\$1,327,434
13% Project Support Cost	\$172,566
Grand Total	\$1,500,000

HRH Activities					
Activity	Budget	Expenditure	Contracted	Funds remaining	Comment
1. HRH Committee	10,000	680 (x2), 8600,	0	40	Printing HWDP MTR. Costs of secretariat covered by Aid award. 8,600 for Medical Council governance.
2. National Licensing and Registration exam	143,356	5289, 3575, 4780, 1038, 8300, 3472, 9757, 1387, 2131, 399, 3708, 18000, 4700, 2675, 1875, 585, 25290, 880, 4870, 17500, 19562, 28000, 25956, 2092, 2560		-55025	National Professional Officer facilitation, scanner, photocopier for exam papers, computer for exam bank, Technical Assistance (TA) from University of Sydney, Trainer of Trainers at OSCE workshops, consumables, nurse competencies launch, TA for NEE, OSCE Preparation for NEE, Revise and Compose NEE MCQ and OSCE Items, Review of the NEE Tools, Refresher course for NEE, OSCE, Medical Doctors and Dental Doctors.
Activity	Budget	Expenditure	Contracted	Funds remaining	Comment
3. National Health Professional Registration Board	23,000	19000, 4000, 2243	0	-2243	Medical Council registration and continuing medical education; Meeting on Finalization of the new law on Health Professional Regulation
4. CEDHP	472,457	850 (x3), 79921, 342, 20832, 1500,	0	248,937	Simultaneous translation, UP Manila second batch

		836, 1350, 9450, 2805, 1305, 5430, 9605, 20540, 4735, 6823, 18070, 4462, 18241, 6600, 2325, 5798			masters, fellowship air fare, drafting Cambodian pedagogy curriculum draft. Advertising masters. Nurse /midwife faculty development, UHS- Master of Health Professions In Education, UP Manila- Enhancement Program on Thesis Writing 2014, UP Manila- Basic course on Health Profession Education, Direct Financial Contribution with UHS on basic courses on health profession education.
5. Nurse Bridging	91,648	3825, 59865, 1000, 1800, 7060, 18530, 17459, 2224, 13614, 3530, 62347, 3530, 14019, 3530, 3530,20226,14038	0	-158,479	Nurse conference, UP Manila Nurse bridging programme, Simultaneous translation, Nurse Bridging Programme from July to September 2014 , October December 2014
6. Health Workforce Recruitment, deployment and management	70,000	357, 935, 1755, 8100, 10045, 21248, 3628, 233, 4598, 1593,4591 17530,10750, 34168, 4976	0	-54,507	Translation of D&D guideline, regional Asia Pacific Action Alliance on Human Resources for Health Conference Bangkok, UHS Strategic Plan Finalization, TA for the implementation of the Health Workforce Development Plan (2006-2015) TA for the progress in the HRH implementation Midwives Congress in Czech Republic, Printing health pocket books, two technical consultation workshop on health workshop development plan 2016-2020, Fund Nokor E-Solution group to provide technical

					support to upgrade the data management tool, Training of Central and Provincial staff in the new database as well as meetings to finalize the data elements
7.Scholarships	194,200	49489, 18549, 14522, 65635, 3900, 19250, 1850, 4228	0	16777	OSCE equipment, translation of OSCE scenario, Training of Standardized Patients and Examiners for NEE, OSCE and Medical Doctors, Cambodia Council of Nurses – Scope of Practice of Standard of Care
8. Labour Market Survey	4,500	0	0	4,500	
WHO Secretarial support	19,500	19,500	0	0	
Sub Total	1,028,661	1,028,661	0	0	
MNCH Activities					
Activity	Budget	Expenditure	Contracted	Funds Remaining	Comment
9. TA for RMNCH Taskforce	37,080	15082, 10900	0	11,098	TA for RMNCH Task Force is included in additional task of NPO for newborn & child health since Oct. 2012.
10. Strengthening Maternal death audit	30,000	11042, 5000, 5530, 3974	0	4,454	Midwife day, midwife competency strengthening, Maternal Death Audit protocol
11. Evaluating and Strengthening Neonatal and intrapartum hospital care	122,820	36394, 10282, 39843, 666 13305, 23006, 11382	0	-12,058	Most of activities are to support scaling up INC
12. Support staff for project implementation	108,873	14692, 11124, 1500, 274, 8211, 24997, 36,876		-3,494	The budget for newborn & child health NPO and expatriate technical adviser (contract with RACHA) is included.
Sub total	298,773	298,773	0	0	

Total	1,327,434	1,327,434	0	0	
Project support costs 13%	172,566	172,566			
Grand Total	1,500,000	1,500,000	0	0	

