Kingdom of Cambodia
Nation – Religion – King

Annual Health Workforce Report 2014

Human Resources for Health Committee

Forward

This is the third Annual Report produced by the Human Resource for Health (HRH)Oversight Committee. The report aims to describe the current public sector health workforce in Cambodia, within the context of the demands on the national health system.

The aim of the report is to provide a descriptive analysis of the current HRH situation in the country based on information collected from the public sector. The data presented in the report can be used to monitor progress against the indicators for Human Resources for Health in the Health Strategic Plan 2008-2015 and the Health Workforce Development Plan 2006-2015 (where applicable). The data presented in the report is primarily from a central database which consists of provincial data submitted every quarter. The health workforce production data is from the public, private and military schools. The Departments of Personnel and Human Resource are responsible for maintaining these databases.

The current report highlights the achievements made during the past year and compares the trends in health workforce numbers with previous years. The report also highlights recent developments with regard to the increased production of health workers, improved deployment of health staff and efforts to strengthen regulation of the health professions. The report also presents informations on the continued efforts to strengthen pre-service training through the introduction of the National Entrance and Exit Exams. There is growing consensus that more emphasis will be provided in the coming years to the quality of Human Resource for Health (HRH) including decentralized health workforce management, accreditation of training institutions and licensing of health professions.

We would like to thank the Provincial Health Departments (PHDs), National Hospitals and Central level departments for collecting information and reporting regularly on the status of the health workforce. We would also like to thank the staff of the Human Resource for Health Secretariat for their support in the production of the report. We acknowledge the technical assistance of development partners, especially the World Health Organisation (WHO) who supported the production of this report. We hope that this report provides a constructive overview of the health workforce in Cambodia and plays a role in informing HRH decisions to achieve improved health outcomes.

Phnom Penh, 15 July 2015

Secretary of State for Health

Prof. ENG HUOT

Abbreviations

ACC Accreditation Committee of Cambodia
CEDHP Center for Educational Development of Health Professionals
CPA Complementary Package of Activity
DD Dental Doctor
DN Dental Nurse
HC Health Centre
HCP Health Coverage Plan
HRDDHuman Resource Development Department
HRH Human Resources for Health
HSSP 2 Health Sector Support Programme 2
ITInformation Technology
MA Medical Assistant
MD Medical Doctor
MOHMinistry of Health
MOEF Ministry of Economy and Finance
MOEYS Ministry of Education, Youth and Sports
MCQ Multiple Choice Question
MPA Minimum Package of Activity
NCDs Non-Communicable Diseases
NEE National Exit Exam
NPAR National Programme for Administrative Reform
OD Operational District
OSCE Objective Structured Clinical Examination
PhysPhysiotherapist
PAE Public Administrative Enterprise
PHMPharmacist
PHD Provincial Health Department
PM Primary Midwife
PN Primary Nurse
RGC Royal Government of Cambodia
RHReferral Hospital
RTC Regional Training Centre
S Lab Seconday Laboratory Technician
SM Secondary Midwife
SN Secondary Nurse
SOA Special Operating Agency
Sp.D Specialist Doctor
UF User Fees
UHS University of Health Sciences
X-RayX-Ray Technician

Executive Summary

This is the third Annual Report produced by the Human Resource for Health Oversight Committee (HRH OC) established by the Minister of Health to oversee the implementation of the recommendations of the Health Workforce Development Plan 2006-2015 mid-term review. The report aims to describe the current public sector health workforce in Cambodia in the context of the demands on the national health system.

The Annual Report is designed to enable the HRH OC and relevant stakeholders to monitor progress against the strategic priorities for Human Resources for Health in the Health Strategic Plan 2008-2015 and the Health Workforce Development Plan 2006-2015. The data used in the report is primarily limited to the public sector and provides an overview of the health workforce in terms of its size, production, recruitment and deployment.

The report is based on existing data from the Departments of Personnel and Human Resource Development (HRD) information systems, which incorporate quarterly reports received from the provinces. Other relevant documents and data sources are referenced as appropriate.

The Health Workforce Strategy is based on a number of pillars, including;

- Strengthening the HRH governance and management systems;
- Improving the professional attributes and competence of the health workforce by establishing a regulatory framework;
- Improving policies and systems for recruitment, performance management and deployment of the health workforce;
- Addressing issues related to adequate salaries, remuneration and performance incentives;

The 2014 HRH Annual report provides descriptive information concerning these domains and highlights the achiements and areas that require further attention during 2015 and beyond.

1. Governance

Achievement in 2014

- High-level interdepartmental Human Resources for Health Oversight Committee, chaired by the Secretary of State, met and received reports concerning progress and required actions;
- Preliminary work towards the preparation of the next Health Workforce Development Plan 2016-2020 have commenced;
- Draft Law on Regulation of Health Professionals developed, currently under discussion for finalization and approval;
- Joint Prakas between the Ministry of Interior and Ministry of Health on Quality Control, Service and Measure for the Elimination of Illegal Health Product and

Illegal Private Health Service for Health and Social Safety, issued in January 2015;

- National Program for Public Adminstrative Reform 2015-2018 developed and approved by the Council of Ministers;
- Draft Joint Prakas between the Ministeries of Health and Educations being developed that outlines the criteria for the establishment and/or revocation of training institutions for health;
- Circular issued to prevent the establishment of new training institutions including branches of existing institutions;
- National Strategic Plan for strengthening the role of profession councils in regulation of health professions launched.

Areas for Future Progress for 2015 and beyond

- Continue to strengthen the communication and cooperation between Ministries and between the public and private health sectors to facilitate national health workforce planning, education and management;
- Continue work towards the development of the next Health Workforce Plan (2016-2020);
- Develop mechanisms to collect data on the private sector health workforce;
- Continue to strengthen the role of the health profession councils in regulation of health professionals;
- Continue to deploy technical staff to provincial and operational districts, based on the MPA/CPA guidelines;
- Develop a comprehensive HRH database to inform evidence-based policies and planning;
- Based on the decentralization and deconcentration (D&D) policy, continue to analysis and monitor health function in preparation and implementation on transfer function to sub-national administration;
- Strengthen data collection, management and use at the sub-national level to enable improved oversight of the health workforce;
- Extend the collection of information about private service usage and promote research with focus on identification of areas with greatest demand for health services.

2. Health Workforce Skills and Competence: Progress in 2014

Achievements in 2014

- Ongoing collaborative work to strengthen the quality of National Exit Exams (NEE) with expand participation of all training institutions;
- Joint Prakas between the Ministries of Health and Education to extend NEE to associate degree nurses and midwives approved;
- Strategic Plan for University of Health Sciences (UHS) 2014-2018 developed and disseminated;

- National Entrance Exam to be used as the basis for selection of students to health profession courses;
- Core Competency Framework (CCF) for midwives developed and disseminated;
- NEE implemented for pharmacy, dentistry, Bachelor of Nursing and medical doctors;
- Health Professionals Education Unit (HPEU) developed a short-course on basic pedagogical skills for the faculty at UHS and TSMC.

Areas for Further Progress for 2015 and beyond

- Strengthen National Exit Exam for graduates of all training institutions as a meaningful process for quality control;
- Establish and support an Examination Unit to manage the administration of the National Entrance and Exit examinations;
- Increase investments in pre-service education to support quality improvement, including curriculum, lesson plans, formative examinations, clinical practice and skills laboratories;
- Improve efficiency of financial investment in in-service training;
- Collect data on specialist doctors to enable workforce planning for specialist services;
- Revise national curricula to align with agreed competency frameworks, in consultation with stakeholders;
- Continue work towards registration and licensing of health workers, based on determination of adequacy of training and continuing education;
- Strengthen data on training institutions to inform capacity development initiatives, apply performance indicators.

3. Recruitment, performance management and deployment of the health workforce

Achievements 2014

- Strategic use of recruitment allocation to support staffing priorities;
- Secondary midwives in more than 80% of Health Centers, with all provinces reporting an increased percentage;
- Discussions on criteria for the identification of rural/remote health facilities have commenced;
- Introduction of regional allowance;
- Internal examinations to enable re-grading of current MOH staff conducted.

Areas for Further Progression 2015 and beyond

- Advocate for increased recruitment allocation from Council of Ministers to meet projected MOH requirements;
- Planned recruitment and deployment in order to achieve the staff requirements as per the CPA and MPA guidelines;
- Develop additional national health workforce performance indicators beyond the current single indicator of secondary midwives in health centers;

- Finalize the criteria for the identification of rural/remote health facilities;
- Monitor rural allocation achievements and implement additional incentives to improve retention;
- Support additional internal examinations to enable re-grading of current MOH staff.

4. Salaries, Performance Incentives, Remuneration

Achievements for 2014

- Based on Sub-decree No 1 dated on 02-01-2014:
  - 40,000 Riel added to Cat. A Basic Salary
  - 80,000 Riel added to Cat. B,C,D Basic Salary
- Functional Allowance for Health Staff Increased in Oct. 2014 - Minimum wage 550,000 Riel (Sub-decree 262 dated 26-09-2014)
- Salary scale and grade regularized in payroll for all Health staff in Nov.2014
- New cadre integration in Jan. 2015(Royal decree 1014/1175 dated on 02-10-2014)
- Second increase in Functional Allowance for Health Staff in April 2015 - Minimum wage 650, 000 riel (Sub-decree 36 dated18/03/15)
- Electronic transfer of salaries for all health staff introduced to encourage transparency and timely payment.

Areas for Further Progress in 2015 and beyond

- Support RGC compensation reform, including continued annual salary increases for civil servants;
- Increase equity and transparency of incentives, and strengthen linkages to performance;
- Strengthen strategies for mitigating / managing the impact of dual practice on public sector performance.

The achievements in strategic priority areas have contributed to the creation of an operational and productive workforce that will be able to respond to the health needs of all Cambodians.

1. Introduction

The Ministry of Health's Second Health Strategic Plan (2008-2015) identifies Human Resource Management as one of the core working principles of the health system. The Plan describesa comprehensive range of interventions that need to be implemented to achieve an operational and productive workforce. These include the need to ensure

sufficient staffing levels with adequate professional profilesand competencies; revision of the content of health professional; increase inthe student intake into schools and universities; and strengthening of measures to safeguard the quality of training and trainers. The Plan also identifies the special urgency associated with implementation of salary reform for health services.[1]

The Ministry of Health (MOH) has made progress in building human resources to meet the health demand of the people of Cambodia. The first Health Workforce Development Plan (1996-2005) focused on the adequate production and equitable distribution of health workforce according to the then newly adopted Health Coverage Plan. The second Health Workforce Development Plan (2006-2015) builds on the achievements of the first to further address the issues of improving the competency and management of the health workforce. It also recognizes the role of the private sector and makes strategic recommendations for both the stewardship of the private sector and the development of the civil service such as investment in registration, regulation and the improvement of quality of pre-service education.

The mid-term review of the second Health Workforce Development Plan (2006-2015)analyzed the major achievements and highlighted the remaining challenges. It also presented strategic recommendations to ensure equitable access to quality health services for all Cambodians. The report identified four strategic priority areas: Human Resource for Health Related Governance; Improve the Technical Skills and Competence of the Health Workforce; Health workforce recruitment, performance management, deployment and retention; and Health workforce remuneration, salaries and performance incentives.[2]

The report describesthe health workforce achievements in the context of the overall health system as well as the existing policy environment.

2. Policy Context

The role and responsibilities of the Ministry of Health and the practice of health professionals in Cambodia is regulated through an array of laws, decrees, sub-decrees, regulations and circulars. Key laws include the law on management of private medical, paramedical, and medical aide professions (NS/RKM/1100/10 adopted in 2000), decrees establishing the medical, dental, midwifery and nursing Councils, and on accreditation of institutions providing higher education (NS/RKT/0303/129 adopted in 2003), and sub-decrees on health professions education (ANK No. 21 adopted in 2007), physicians code of ethics, midwives code of ethics, entry and exit examinations for health professionals, administrative arrangements for University of Health Sciences (UHS), and on the appointment and promotion of professors in Universities.

[1] MOH Second Health Strategic Plan 2008-2015
[2] Mid Term Review of the Health Workforce Development Plan 2006-2015

Implementation of these laws and decrees are informed by Ministry level regulations and circulars, including those on procedures and conditions to open or close a health facility, roles and responsibilities of nurses, incentives for midwives, conditions and criteria for higher education institutions, organization and function of Regional Training Centres (RTCs).

The major Royal Government of Cambodia (RGC) reforms, including Public Administrative Reform, Deconcentration and Decentralization, and Public Financial Reform all guide the MOH, and have implications for planning and managing the health workforce, and compensating and motivating health workers.

The mission of the MOH is "*to provide stewardship for the entire health sector and to ensure supportive environment for increased demand and equitable access to quality health services in order that all the people of Cambodia are able to achieve the highest level of health and well-being*"[3]. This mission reflects the values and direction of the RGC and is based on the MOH long-term vision of improving health as a means of contributing to poverty alleviation and socio-economic development.

The five working principles of the MOH as described in the second Health Strategic Plan 2008 – 2015 are:

- Social health protection, especially for the poor and vulnerable groups
- Client focused approach to health service deliver
- Integrated approach to high quality health service delivery and public health interventions
- Human resources management as the cornerstone for the health system
- Good governance and accountability

3. Overview of the Health System

The public health system includes a network of health facilities offering a range of services at each level, with referrals between levels made as needed. The Health Coverage Plan (HCP) was introduced in 1996 as a framework for health system infrastructure based on population and geography. It aims to ensure all people have access to basic health services (the Minimum Package of Activities) within 10km or a 2 hour walk from their home, and to more comprehensive health services (the Complementary Package of Activities) within 20 to 30km or 3 hours by car or boat. Each Operational District (OD) serves a population of between 100,000 and 200,000

Table 1: Public Health Facilities 2014

Public Health Facility Type	Total
Health Posts	106
Health Center	1105
Referral Hospitals	97
National Hospital	8

[3] MOH Second Health Strategic Plan 2008-2015 *Source: National Health Congress Report 2014*

people (or fewer if geography makes access more difficult) and includes a Referral Hospital (RH) and an appropriate number of Health Centers (HC).
The number of ODs in each province range from 1 to 10. If there is more than 1 OD per province, the Provincial Hospital usually offers more services than the OD level Referral Hospital/s. National Hospitals in Phnom Penh offer specialist level services for the entire country.(*Table 1*)

In addition to the public health system, a vast array of health services are provided within the private health sector, ranging from simple drug stores to sophisticated hospitals with specialist services. According to the National Health Congress report (2014), the number of licensed private health facilities is as outlined in *Table 2*.

Table 2: Types of Private Services: 2011 – 2014

Type	2011	2012	2013	2014
Cabinet	1,505	1,733	1,630	1,754
Maternity consultation	428	485	520	506
Physiontherapie	19	21	22	20
General consultation	2,473	2,640	2,768	2,732
Dental consultation	318	368	411	419
Dental Clinic	33	36	39	38
Beauty Center	6	6	8	10
Medical Laboratory	20	23	27	27
Maternity Clinic	7	7	7	8
Clinic	110	130	156	181
Poly Clinic	41	48	48	51
Private Hospital	-	4	8	11
Total	**4,960**	**5,501**	**5,644**	**5,757**

Source: National Health Congress Report 2014

4. Annual Report

This section describes the health workforce at the end of 2014, and includes identification of progress made towards the achievement of health workforce goals during the year, and outstanding issues that require ongoing action in the future. It is intended to monitor progress, and provide information to guide adjustments in the implementation of activities, if needed.

4.1 Health Workforce Governance: Progress in 2014

There has been continued progress made in health workforce governance in 2014. The high-level Human Resource for Health Oversight Committee, established in 2012 and chaired by the Secretary of State met to discuss the achievements and identified priorities.

There have been renewed efforts to regulate the provision of health services in the private and informal sectors. This is heralded by a Joint Prakas between the Ministry of Interior and Ministry of Health onQuality Control, Service and Measure for the Elimination of Illegal Health Product andIllegal Private Health Service for Health and Social Safety (issued in January 2015). The aim of the Joint Prakas is to prevent and promote public health, safety, and to reducepeople poverty in line with rectangular Strategy Phase 3 of the Royal Government on "capacitybuilding and human resource development, promotion of health and nutrition".It seeks to prohibit the practice of drug shops and all kinds of healthservices that have not received authorization from Ministry of Health.

The National Program for Public Administrative Reform 2015-2018 have been developed and approved by the Council of Ministers. The prioritized activities directly relevant to health staff include:

- Monitoring and Evaluation system for assessing the quality and effectiveness of Public Services Delivery at national hospitals, national centers, referral hospitals in the capital city and at provincial level, in SOAs, referral hospitals in the District-Khan level and in health centers;
- Database on priority skills of civil servants established and used to support performance improvement;
- Basic civil servant salaries, functional allowances revised and implemented;
- Regional allowances for the health sector;

A new Law on Regulation of Health Professionals is currently under discussion. The proposed law would form part of the overall legal framework for regulating health practitioners in Cambodia. The Law will make it mandatory for all health practitioners to be registered with the Professional Council and hold a current license to practice.

A draft Joint Prakas between the Ministeries of Health and Educations is being developed that outlines the criteria for the establishment and/or revocation of training institutions for health.
In addition, there have been ongoing efforts to strengthen the capacity of the health professional councils to deliver on their role. With support from the USAID supported ASSIST Project, a national consultation workshop was organized in October 2014 to start discussions on developing a national strategic plan for strengthening the capacity

and role of health professional councils. Following this, the National Strategic Plan for the Councils was launched by HE The Minister in June 2015.

In an effort to control the growth in private institutions offering health training courses, a circular was issued that restraints the establishment of new health training institutions including branches of existing institutions.
To further strengthen the National Exit Examinations (NEE), regular meetings of the National Examination Committee (NEC) were held to provide oversight to the design and conduct of the NEE.

The MOH is currently preparing input for the next Health Strategic Plan 2016-2020 and Health Workforce Development Plan 2016-2020, expected to be finalized by the end of the year. The MOH has identified priorities areas for action HRH that include:

- Strengthening Human Resources (HR) planning in sync with Health Sector planning
    - Addressing the entire health workforce
        - MOH
        - Other Government health workers
        - Private sector
    - Commitment to universal health coverage.
- Development and implementation of HR policy
    - Focus on deployment of HR in underserved areas (developing new policies as needed and ensuring current policies are implemented and supported)
    - Emphasis on policies to encourage retention of health workers in underserved areas
- Supportive environment for the health workforce
    - Including how to leverage quality of health services through incentives for staff
    - SOA, User Fees (UF) and other mechanisms are likely to continue, but MOH aiming for improved equity and transparency
- Strengthening legal and institutional framework for quality management
    - Strengthening of Professional councils
    - Accreditation systems for public and private training institutions
- Licensing and registration of the health professions
    - Exit exams to certify competence for registration
    - Evidence of participation in continuing education for renewal of registration.
    - Ethical professional practice and commitment to universal health coverage
- Strengthening the contribution and quality of Pre-service education
    - Curriculum reform and faculty development
    - Clinical skills of health workers
    - Public health practice (such as health promotion and action on non-communicable diseases (NCDs)
- Systematic capacity building and continuing education
    - In-service and on-the-job training addressing clinical skills and other required skills (such as budgeting, IT, management, data collection and use)

Areas for Future Progress in 2015 and beyond

- Continue to strengthen the communication and cooperation between Ministries and between the public and private health sectors to facilitate national health workforce planning, education and management.
- Continue work towards the development of the next Health Workforce Plan (2016-2020).
- Develop mechanisms to collect data on the private sector health workforce.
- Continue to strengthen the implementation of self-regulation and professionalization of all categories of health professionals.
- Continue to deploy technical staff to provincial and operational districts, based on the MPA/CPA guidelines.
- Based on the decentralization and deconcentration (D&D) policy, continue to analysis and monitor health function in preparation and implementation on transfer function to sub-national administration.
- Strengthen data collection, management and use at the sub-national level to enable improved oversight of the health workforce.
- Extend the collection of information about private service usage and promote research with focus on identification of areas with greatest demand for health services.

4.2 Health Workforce Production and Competence

4.2.1 Production

In 2014, the public training institutions produced almost 3,000 graduates (see *Table 3*).The student intakes are increasing, with close to 4,000 new students accepted in 2014, and a total of approximately 13,000 students currently enrolled in health professional education at public training institutions.

Table 3:Health Profession Education 2013 – 2014

Training Institution	Field of Study	# of Intake			# of Graduate	# of current Student
		Scholarship	Self-Paid	Total		
University of Health Sciences	Diploma degree in Medicine	30	270	300	239	3,594
	Diploma degree in Pharmacy	15	139	154	169	681
	Diploma degree in Dentistry	5	48	53	57	560
	Bachelor degree in Midwifery	0	7	7	0	160
	Bachelor degree in Nursing	1	11	12	93	480
	Bachelor degree in Public Health	0	3	3	0	83
	Associated degree in Nursing	30	270	300	179	728
	Associated degree in Nursing &Midwifery	7	63	70	70	70
	Associated degree in Midwifery	30	270	300	210	804
	Associated degree in Laboratory	20	180	200	104	466

	Associated degree in Kinesthesia	6	54	60	25	111
	Associated degree in Radiology	6	54	60	48	115
Secondary Technical Medical School in Battambang	Associated degree in Nursing	150	0	150	93	253
	Bachelor degree in Nursing & Midwifery	50	0	50	29	50
	Associated degree in Midwifery	130	0	130	97	217
	Primary Nurse to Associate degree in Nursing	17	0	17	0	17
	Primary Midwife to Associate degree in Midwife	33	0	33	0	33
	Primary Nurse	60	0	60	65	40
	Primary Midwife	80	0	80	74	60
	Primary Pharmacy	80	0	80	28	60
Secondary Technical Medical School in Kampong Cham	Associated degree in Nursing	150	0	150	94	204
	Bachelor degree in Nursing & Midwifery	60	0	60	33	60
	Associated degree in Midwifery	130	0	130	88	196
	Primary Nurse to Associate degree in Nursing	50	0	50	48	109
	Primary Midwife to Associate degree in Midwife	11	0	11	0	11
	Primary Nurse	27	0	27	0	27
	Primary Midwife	60	0	60	25	40
	Primary Pharmacy	80	0	80	35	60
Secondary Technical Medical School in Kampot	Associated degree in Nursing	150	0	150	91	202
	Bachelor degree in Nursing & Midwifery	50	0	50	45	50
	Associated degree in Midwifery	130	0	130	81	205
	Primary Nurse to Associate degree in Nursing	21	0	21	0	21
	Primary Midwife to Associate degree in Midwife	28	0	28	0	28
	Primary Nurse	60	0	60	30	40
	Primary Midwife	60	0	60	30	40
	Primary Pharmacy	80	0	80	46	60
Secondary Technical Medical School in Stung Treng	Associated degree in Nursing	120	0	120	65	193
	Bachelor degree in Nursing & Midwifery	120	0	120	77	196
	Associated degree in Midwifery	60	0	60	35	40
	Primary Nurse to Associate degree in Nursing	13	0	13	0	13
	Primary Midwife to Associate degree in Midwife	14	0	14	0	14
	Primary Nurse	80	0	80	49	60
	Primary Midwife	80	0	80	49	60
	Primary Pharmacy	120	0	120	65	193
	Diploma degree in Medicine	0	38	38	63	412
	Diploma degree in Pharmacy	0	11	11	0	75

Military Institute	Diploma degree in Dentistry	0	2	2	0	22
	Associated degree in Nursing	0	300	300	257	1081
	Associated degree in Midwifery	0	140	140	102	416
	Bachelor degree in Laboratory	0	60	60	72	241
Total		2,504	1,920	4,424	3,060	12,951

Source: National Health Congress Report 2014

Table 4 provides information available on current students and graduates from private sector training institutions. The number of current intake in private institutions is slightly higher than in the public sector institutions. The information on current students is not complete.

Table 4: Private Health Profession Education 2013 – 2014

Training Institution	Field of Study	# of Intake			# of Graduate	# of current Student
		Scholarship	Self-Paid	Total		
International University	Diploma degree in Medicine	0	59	59	678	NA
	Diploma degree in Pharmacy	0	65	65	27	
	Diploma degree in Dentistry	0	4	4	20	
	Bachelor degree in Nursing	0	11	11	28	
	Bachelor degree in Midwifery	0	21	21	NA	
	Bachelor degree in Nursing-Midwifery	0	350	350		
	Associated degree in Nursing	0	60	60		
	Associated degree in Midwifery	0	120	120		
	Associated degree in Laboratory	0	120	120		
	Associated degree in Kinesthesia	0	60	60		
	Associated degree in Radiology	0	60	60		
	Associated degree in Dental Nursing	0	90	90		
Polino Institute	Associated degree in Nursing	0	150	150	0	150
	Associated degree in Dental Nursing	0	50	50	0	50
	Associated degree in Midwifery	0	60	60	0	60
	Associated degree in Laboratory	0	60	60	0	60
	Associated degree in Radiology	0	40	40	0	40
Puthisastra University	Diploma degree in Medicine	0	64	64	0	304
	Diploma degree in Pharmacy	0	76	76	0	289
	Diploma degree in Dentistry	0	0	0	0	166
	Bachelor degree in Nursing	0	0	0	0	149
	Bachelor degree in Midwifery	0	0	0	0	0
	Associated degree in Nursing	0	180	180	113	169
	Associated degree in Midwifery	0	140	140	118	180
	Associated degree in Laboratory	0	180	180	76	159

Norton University	Diploma degree in Medicine	0	6	6	0	28
	Diploma degree in Pharmacy	0	10	10	0	35
	Diploma degree in Dentistry	0	0	0	0	5
	Bachelor degree in Nursing	0	0	0	0	1
	Bachelor degree in Midwifery	0	0	0	0	0
	Associated degree in Nursing	0	200	200	0	68
	Associated degree in Midwifery	0	150	150	0	46
	Associated degree in Laboratory	0	80	80	0	49
Phnom Penh Chenla University	Bachelor degree in Nursing	1	11	11	36	105
	Bachelor degree in Midwifery	1	1	1	0	66
	Associated degree in Nursing	0	260	260	250	511
	Associated degree in Midwifery	0	250	250	281	436
	Associated degree in Laboratory	0	140	140	260	238
Battambang Chenla University	Associated degree in Nursing	0	210	210	0	50
	Associated degree in Midwifery	0	200	200	0	50
Life University	Bachelor degree in Nursing	0	5	5	22	58
	Bachelor degree in Midwifery	0	0	0	25	71
	Associated degree in Nursing	0	40	40	0	40
	Associated degree in Midwifery	0	40	40	0	40
Phnom Penh University for Nursing and Paramedical	Associated degree in Nursing	0	31	31	0	85
	Associated degree in Midwifery	0	0	0	0	79
	Associated degree in Laboratory	0	0	0	0	52
Asia Science Institute	Associated degree in Nursing	0	200	200	0	442
	Associated degree in Midwifery	0	150	150	0	304
	Associated degree in Laboratory	0	100	100	0	164
Kampong Cham University	Bachelor degree in Nursing	0	16	16	0	16
	Bachelor degree in Midwifery	0	17	17	0	17
	Associated degree in Nursing	0	240	240	0	240
	Associated degree in Midwifery	0	160	160	0	160
	Associated degree in Laboratory	0	80	80	0	80
	Associated degree in Dental Nursing	0	80	80	0	80
Meanchey University	Associated degree in Nursing	0	0	0	33	0
	Associated degree in Midwifery	0	0	0	50	0
	Primary Nurse	0	0	0	27	0
	Primary Midwife	0	0	0	28	0
Total		0	4,697	4,697	2,072*	5,392*

*NA: Not Available; * information not complete*
Source: National Health Congress Report 2014

In 2014, the Ministry of Education Youth & Sports introduced reforms to reduce copying in high school examinations. This resulted in less than a quarter of students passing the high school examinations with grades that make them eligible to appear for the National

Entrance Examinations for health profession courses. This had an impact of the number of new enrolments in health training institutions.

In general, while there has been a consistent increase in the production of health graduates from the public and private sector training institutions, it is apparent that the absorb all the MOH does not have the fiscal space to absorb all the new graduates. In the absence of a labour market survey, it is unclear what proportion of these graduates are absorbed into the private or other sectors. Moreover, the lack of complete information on private health sector employment makes it difficult to effectively balance workforce production with the labor market demands.This is an issue that will need to be addressed in the coming years to order to effectively plan the future workforce.

4.2.2 Competence

The quality of health training is a key priority for the MOH, and is reflected in efforts to identify and mandate quality standards for all institutions and their graduates. During 2014, work continued on development and strengthening of the National Exit Exam (NEE) for health professionals. Technical Working Groups were established that reviewed and revised the existing MCQ question bank. In addition, to assist the students to prepare for the NEE, student guides have been developed for each discipline. Following approval by the NEC, these guides will be made available to the students.

In 2014, students from both public and private institutions registered for the NEE. (see *Table 5*)

Table 5: 2014-15 National Exit Exam Participation

Disciplines	UHS		IU		LU	CLU	Total	
	New	Repeat	New	Repeat	New	New	New	Repeat
Medicine	225	15	675	0	0	0	900	15
Dentistry	116	1	20	0	0	0	136	1
Pharmacy	174	0	26	1	0	0	200	1
BSN	93	2	27	1	22	30	172	3
Total	**608**	**18**	**748**	**2**	**22**	**30**	**1,408**	**20**

Achievements in 2014

- Ongoing collaborative work to strengthen the quality of National Exit Exams (NEE) with expand participation of all training institutions.
- Joint Prakas between the Ministries of Health and Education to extend NEE associate degree nurses and midwives approved.
- Strategic Plan for University of Health Sciences (UHS) 2014-2018 developed and disseminated.
- National Entrance Exam used as the basis for selection of students to health profession courses.
- Core Competency Framework (CCF) for midwives developed and disseminated.

- NEE implemented for pharmacy, dentistry, Bachelor of Nursing and medical doctors.
- Health Professionals Education Unit (HPEU) developed a short-course on basic pedagogical skills for the faculty at UHS and TSMC.

Areas for Further Progress in 2015 and beyond

- Strengthen National Exit Exam for all cadres of health workers as well as to graduates of all training institutions, as a meaningful process for quality control.
- Establish and support an Examination Unit to manage the administration of the National Entrance and Exit examinations.
- Increase investments in pre-service education to support quality improvement, including curriculum, lesson plans, formative examinations, clinical practice and skills laboratories.
- Improve efficiency of financial investment in in-service training.
- Collect data on specialist doctors to enable workforce planning for specialist services
- Revise national curricula to align with agreed competency frameworks, in consultation with stakeholders.
- Continue work towards registration and licensing of health workers, based on determination of adequacy of training and continuing education.
- Strengthen data on training institutions to inform capacity development initiatives, apply performance indicators.

4.3 Health Workforce Management

4.3.1 Current MOH Workforce

The current MOH staff is presented in *Table 6* below, including geographical distribution between Phnom Penh city (central) and provinces.

Table 6: MOH Staffing by profession and location 2012 – 2014

Cadres	2012		2013		2014	
	Central	Provincial	Central	Provincial	Central	Provincial
Specialist Doctor	169 (65%)	90 (35%)	237(76%)	85(24%)	290 (77%)	86 (23%)
Medical Doctor	879 (41%)	1278 (59%)	825(38%)	1357(62%)	761 (35%)	1431 (65%)
Medical Assist	201 (26%)	577 (74%)	235(31%)	528(69%)	216 (31%)	487(69%)
Dental Doctor	89 (40%)	134 (60%)	90(38%)	149(62%)	90 (46%)	162 (64%)
Dental Assist	9 (14%)	56 (86%)	10(14%)	63(86%)	10 (19%)	43 (81%)
Dental Nurse**	-	-	-	-	0	72 (100%)
Pharmacist	204 (42%)	283 (58%)	222(42%)	303(58%)	211 (40%)	315 (60%)

Pharmacy Assist	34 (43%)	45 (57%)	41(48%)	45(52%)	43 (48%)	46(52%)
Bachelor Nurse**	-	-	-	-	18 (10%)	172 (90%)
Secondary Nurse	1175 (21%)	4523 (79%)	1113(19%)	4757(81%)	1103 (19%)	4647 (81%)
Primary Nurse	86 (3%)	3195 (97%)	84(3%)	3228(97%)	77 (2%)	3079 (98%)
Bachelor Midwife**	-	-	-	-	19 (16%)	96 (84%)
Secondary Midwife	271 (11%)	2204 (89%)	271(9%)	2599(91%)	257 (9%)	2763 (91%)
Primary Midwife	5 (0.2%)	2183 (99.8%)	6(0.3%)	2361(99.7%)	6 (0.3%)	2342 (99.7%)
Secondary Lab	212 (46%)	250 (54%)	215(45%)	260(55%)	210 (44%)	273 (56%)
Primary Lab	10 (14%)	59 (86%)	10(14%)	64(86%)	10 (14%)	61 (86%)
Physiotherapist	47 (32%)	100 (68%)	53(32%)	114(68%)	55 (31%)	121 (69%)
X-ray Tech	3 (14%)	19 (86%)	6(21%)	22(79%)	7 (17%)	34 (83%)
Admin Officer	16 (28%)	42 (72%)	0(0%)	43(100%)	0	70 (100%)
Accountant	50 (36%)	87 (64%)	50(27%)	132(73%)	55 (25%)	167 (75%)
IT	38 (56%)	30 (44%)	47(55%)	39(45%)	55 (53%)	49 (47%)
Facility Maintenance	9 (11%)	73 (89%)	0(0%)	67(100%)	0	62 (100%)
Drivers	18 (32%)	38 (68%)	0(0%)	32(100%)	0 (0%)	33 (100%)
Others	240 (36%)	426 (64%)	328(45%)	397(55%)	294 (42%)	407 (58%)
Total	**3765 (19%)**	**15692 (81%)**	**3879 (19%)**	**16645 (81%)**	**4613 (22%)**	**16192 (78%)**

*** Information for 2012-2013 not available*
Source: Department of Personal, MOH. Updated as of April 2015

Overall the female representation in the health workforce has increased from year to year. However, within different cadres there are significant disparities. A higher proportion of doctors, dentists, nurses, secondary laboratory technicians, physiotherapists and those in managerial positions are male, whilemajority of midwives are female. The following table demonstrates the current gender composition of the MOH staff.

Table 7: MOH staff by Profession and Gender 2012 – 2014

Cadres	2012		2013		2014	
	Female	Male	Female	Male	Female	Male
Specialist Doctor	38 (15%)	221 (85%)	52(15%)	306(85%)	61 (16%)	315 (84%)
Medical Doctor	371 (17%)	1786 (83%)	378(17%)	1804(83%)	384 (17%)	1808 (83%)
Medical Assist	242 (31%)	536 (69%)	248(33%)	515(67%)	233 (33%)	470 (67%)
Dental Doctor	63 (28%)	160 (72%)	70(29%)	169(71%)	72 (29%)	180 (71%)

Dental Assist	21 (32%)	44 (68%)	23(32%)	50(68%)	15 (28%)	38 (72%)
Dental Nurse**	-	-	-	-	29 (40%)	43 (60%)
Pharmacist	224 (46%)	263 (54%)	253(48%)	272(52%)	264 (50%)	262 (50%)
Pharmacy Assist	42 (53%)	37 (47%)	47(55%)	39(45%)	45 (50%)	44 (50%)
Bachelor Nurse**	-	-	-	-	63 (33%)	127 (67%)
Secondary Nurse	1832 (32%)	3866 (68%)	1895(32%)	3975(68%)	1919 (33%)	3831 (67%)
Primary Nurse	1139 (35%)	2142 (65%)	1160(35%)	2152(65%)	1129 (36%)	2027 (64%)
Bachelor Midwive**	-	-	-	-	115 (100%)	0 (0%)
Secondary Midwife	2475 (100%)	0 (0%)	2870(100%)	0(0%)	3020 (100%)	0 (0%)
Primary Midwife	2188 (100%)	0 (0%)	2367(100%)	0(0%)	2348 (100%)	0 (0%)
Secondary Lab	142 (31%)	320 (69%)	156(33%)	319(67%)	155 (32%)	328 (68%)
Primary Lab	37 (54%)	32 (46%)	35(47%)	39(53%)	37 (52%)	34 (48%)
Physiotherapist	52 (35%)	95 (65%)	62(37%)	105(63%)	63 (36%)	113 (64%)
X-ray Tech	3 (14%)	19 (86%)	3(11%)	25(89%)	9 (22%)	32 (78%)
Admin Officer	17 (29%)	41 (71%)	13(30%)	30(70%)	20 (29%)	50 (71%)
Accountant	61 (45%)	76 (55%)	93(51%)	89(49%)	116 (52%)	106 (48%)
IT	7 (10%)	61 (90%)	5(6%)	81(94%)	7 (7%)	97 (93%)
Facility Maintenance	44 (54%)	38 (46%)	32(48%)	35(52%)	28 (45%)	34 (55%)
Drivers	0 (0%)	56 (100%)	0(0%)	32(100%)	33 (100%)	0
Others	333 (50%)	333 (50%)	348(48%)	377(52%)	323 (46%)	378 (54%)
Total	**9331 (48%)**	**10126 (52%)**	**10100 (49%)**	**10424 (51%)**	**10459 (51%)**	**10346 (49%)**

*** Information for 2011-2013 not available; Source: Department of Personal, MOH. Updated as of April 2015*

The distribution and composition of the MOH workforce is based on the staffing structure identified in the Complimentary Package of Activities (CPA) and Minimum Package of Activities (MPA) Guidelines. These Guidelinesidentify the services to be provided at each level of facility and the typical staffing required to provide these services. The CPAis delivered in Hospitals and includes 3 levels. The MPA is delivered in Health Centers. (The CPA guidelines were revised and approved in 2014. MPA guidelines are expected to be revised in 2015).

The tables below show the major categories of the current MOH workforce by level of facility for the past 3 years. *Table 8* shows that the number of Medical Assistants is gradually falling as the cadre retires, while the number of Medical Doctors is slowly increasing.

In the current database, the types of specialist doctors are not defined. The staffing standards of CPA hospitals state the number of paediatricians, ear nose and throat specialists, anaesthetists, obstetrics &gynaecologist, ophthalmologist, medical imaging specialist and psychiatrist. The MOH is currently updating their database to include disaggregated information of types of medical specialists.

Table 8: Doctors and Medical Assistants in Hospitals and Health Centers

	2011			2012			2013			2014		
	Sp.D	MD	MA	Sp.D	MD	MA	Sp.D	MD	MA	Sp.D	MD	MA
National hospital	219	383	73	208	420	71	221	381	104	239	356	97
HC	0	118	159	0	107	151	1	124	136	3	139	128
CPA1	6	135	96	5	134	93	5	146	82	2	164	69
CPA2	10	167	69	9	167	67	9	190	59	9	204	59
CPA3	65	393	98	65	409	94	63	449	85	61	460	78
Total in country	**351**	**2144**	**796**	**259**	**2157**	**778**	**358**	**2182**	**763**	**376**	**2192**	**703**

Sp.D: Specialist Doctor; MD: Medical Doctor; MA: Medical Assistant
Source: Personnel Department, MOH. Updated as of April 2015

Table 9: Dentists and Pharmacists in Hospitals and Health Centers

	2011				2012				2013				2014			
	DD	DA	Phm	PhmA	DD	DA	Phm	PhmA	DD	DA	Phm	PhmA	DD	DA	Phm	PhmA
N. Hospital	38	6	37	16	37	6	34	8	38	6	40	4	39	6	37	9
CPA3	49	21	58	11	47	19	57	11	53	18	59	11	56	13	60	12
CPA2	22	9	17	5	24	11	21	5	27	16	27	5	33	9	31	5
CPA1	23	5	21	1	18	6	21	0	20	7	22	0	28	10	24	0
HC	10	14	7	4	11	14	7	3	11	18	10	3	10	7	12	4
Total in country	**230**	**62**	**489**	**92**	**223**	**61**	**487**	**79**	**239**	**59**	**525**	**78**	**252**	**53**	**526**	**78**

D D: Dental Doctor ; D A: Dental Assistant, Phm: Pharmacist. PhmA: Pharmacist Assistant
Source: Personnel Department, MOH. Updated as of April 2015

Table 10: Nurses and Midwives in Hospitals and Health Centers

	2011				2012				2013				2014			
	SN	PN	SM	PM	SN	PN	SM	PM	SN	PN	SMW	PMW	SN	PN	SMW	PMW
National hospital	908	50	133	88	916	54	149	95	854	54	141	4	845	49	133	4
HC	1927	2175	887	1708	2085	2201	1174	1895	2187	2242	1470	2052	2163	2139	1618	2019
CPA1	281	116	115	60	337	122	167	69	362	122	195	76	362	116	217	73
CPA2	339	149	121	71	372	149	159	74	415	157	193	83	423	151	219	82
CPA3	831	362	385	89	874	351	410	86	920	342	438	85	917	332	424	91
Total in country	**5389**	**3260**	**2053**	**1997**	**5698**	**3281**	**2475**	**2188**	**5870**	**3312**	**2870**	**2366**	**5750**	**3156**	**3020**	**2348**

SN: Secondary nurse, PN: Primary nurse, SM: Secondary Midwife, PM: Primary Midwife
Source: Personnel Department, MOH. Updated as of April 2015

Table 11: Laboratory Techs, Physiotherapists,X-ray Technicians in Hospitals & HCs

	2011				2012				2013				2014			
	S. Lab	P. lab	PT	XRay	S. Lab	P. lab	PT	XRay	S. Lab	P. lab	PT	XRay	S. Lab	P. lab	PT	XRay
National hospital	88	4	36	1	95	3	40	1	99	4	35	5	98	4	36	5
HC	38	22	2	0	38	22	2	0	42	23	2	0	35	20	4	0
CPA1	44	10	11	3	50	10	13	4	51	12	17	5	61	13	16	10
CPA2	45	5	21	3	50	5	21	4	52	7	26	4	61	5	27	7
CPA3	74	16	52	10	78	16	54	11	87	16	58	13	85	17	65	16
Total	**439**	**70**	**137**	**17**	**462**	**69**	**147**	**22**	**475**	**74**	**167**	**28**	**483**	**71**	**176**	**41**

S. Lab: Seconday Laboratory Technician, P.Lab: Primary Laboratory Technician, PT: Physiotherapist, Xray: X-ray technician

Source: Personnel Department, MOH. Updated as of April 2015

Midwives are a key category of staff within the MOH as they represent a national level indicator of health service provision and are fundamental to reducing maternal and child mortality. The number of secondary midwives has increased substantially from year to year. In 2009, the MOH achieved its goal of having at least a primary midwife in every health center. The MOH also made progress towards its goal of having a secondary midwife in every health center by 2015. In 2011, 53% of the health centers had a secondary midwife, which increased to 75% in 2013. In 2014, 81% of the health centers had a secondary midwives. This is below the MOH target of achieving 100% coverage by 2015 and has been the result of increases in the numbers of health centers. There are some provinces such as Kandal, Prey Vieng. SvayRieng, Kampong Chhang, Oddar Mean Chey and ThbongKhmum that are still far below the target.

Table 12: Health Centers with Secondary Midwives (SM) – 2011-2014

Provinces	2011		2012		2013		2014	
	No. of HC	HC with SM	No. of HC	HC with SM	No. of HC	HC with SM	No. of HC	HC with SM
Phnom Penh	27	20 (74%)	29	26 (90%)	29	27(93%)	33	31 (94%)
Kep	4	3 (75%)	4	4 (100%)	4	4(100%)	4	4 (100%)
Pailin	6	3 (50%)	6	5 (83%)	6	5(83%)	6	6 (100%)
Sihanouk Ville	12	10 (83%)	12	10 (83%)	13	13(100%)	13	13 (100%)
Kandal	94	54 (57%)	95	59 (62%)	96	63(66%)	97	67 (69%)
Kampot	51	39 (76%)	51	49 (96%)	60	58(97%)	59	57 (97%)
Kampong Speu	50	28 (56%)	50	38 (76%)	52	43(83%)	53	47 (89%)
Koh Kong	11	6 (55%)	13	7 (54%)	12	10(83%)	12	11 (92%)

Kampong Chhnang	38	17 (45%)	39	22 (56%)	40	26(65%)	40	30 (75%)
Kampong Cham	140	61 (44%)	142	98 (69%)	149	101(68%)	86	65 (76%)
Kampong Thom	50	18 (36%)	51	34 (67%)	52	43(83%)	52	51 (98%)
Kratie	24	23 (96%)	29	28 (97%)	29	29(100%)	29	29 (100%)
Takeo	72	44 (61%)	73	62 (85%)	76	67(88%)	76	68 (89%)
Battambang	76	54 (71%)	78	61 (78%)	79	66(84%)	79	67 (85%)
Banteay Mean Chey	70	32 (46%)	70	40 (57%)	69	52(75%)	69	62 (90%)
Pursat	32	28 (88%)	36	32 (89%)	39	36(92%)	39	38 (97%)
Prey Veng	91	19 (21%)	91	31 (34%)	91	48(53%)	97	58 (60%)
PreahVihear	20	7 (35%)	20	15 (75%)	20	16(80%)	21	19 (90%)
Mondul Kiri	9	3 (33%)	10	8 (80%)	10	9(90%)	11	11 (100%)
Rattanak Kiri	11	8 (73%)	11	8 (73%)	12	11(92%)	14	13 (93%)
SvayRieng	38	9 (24%)	38	10 (26%)	42	20(48%)	43	26 (60%)
Siem Reap	71	49 (69%)	88	60 (68%)	91	68(75%)	89	72 (81%)
Stung Treng	13	5 (38%)	13	5 (38%)	13	10(77%)	14	12 (86%)
Oddar Mean Chey	19	8 (42%)	19	8 (42%)	25	11(44%)	24	15 (63%)
ThbongKhmum**	-	-	-	-	-	-	61	40 (66%)
Total	**1029**	**548 (53%)**	**1068**	**720 (67%)**	**1109**	**836 (75%)**	**1121**	**912 (81%)**

***New province; Source: Personnel Department, MOH. Updated as of April 2015*

Table 13: Health Centers with Secondary Nurses (SN) – 2011-2014

Provinces	2011		2012		2013		2014	
	No. of HC	HC with SN	No. of HC	HC with SN	No. of HC	HC with SN	No. of HC	HC with SN
Phnom Penh	27	25 (93%)	29	27 (93%)	29	29(100%)	33	29 (88%)
Kep	4	2 (50%)	4	4 (100%)	4	4(100%)	4	4 (100%)
Pailin	6	5 (83%)	6	5 (83%)	6	5(83%)	6	4 (67%)
Sihanouk Ville	12	12 (100%)	12	12 (100%)	13	13(100%)	13	13 (100%)
Kandal	94	72 (77%)	95	80 (84%)	96	82(85%)	97	80 (82%)
Kampot	51	50 (98%)	51	50 (98%)	60	57(95%)	59	54 (92%)
Kampong Speu	50	46 (92%)	50	44 (88%)	52	45(87%)	53	48 (91%)

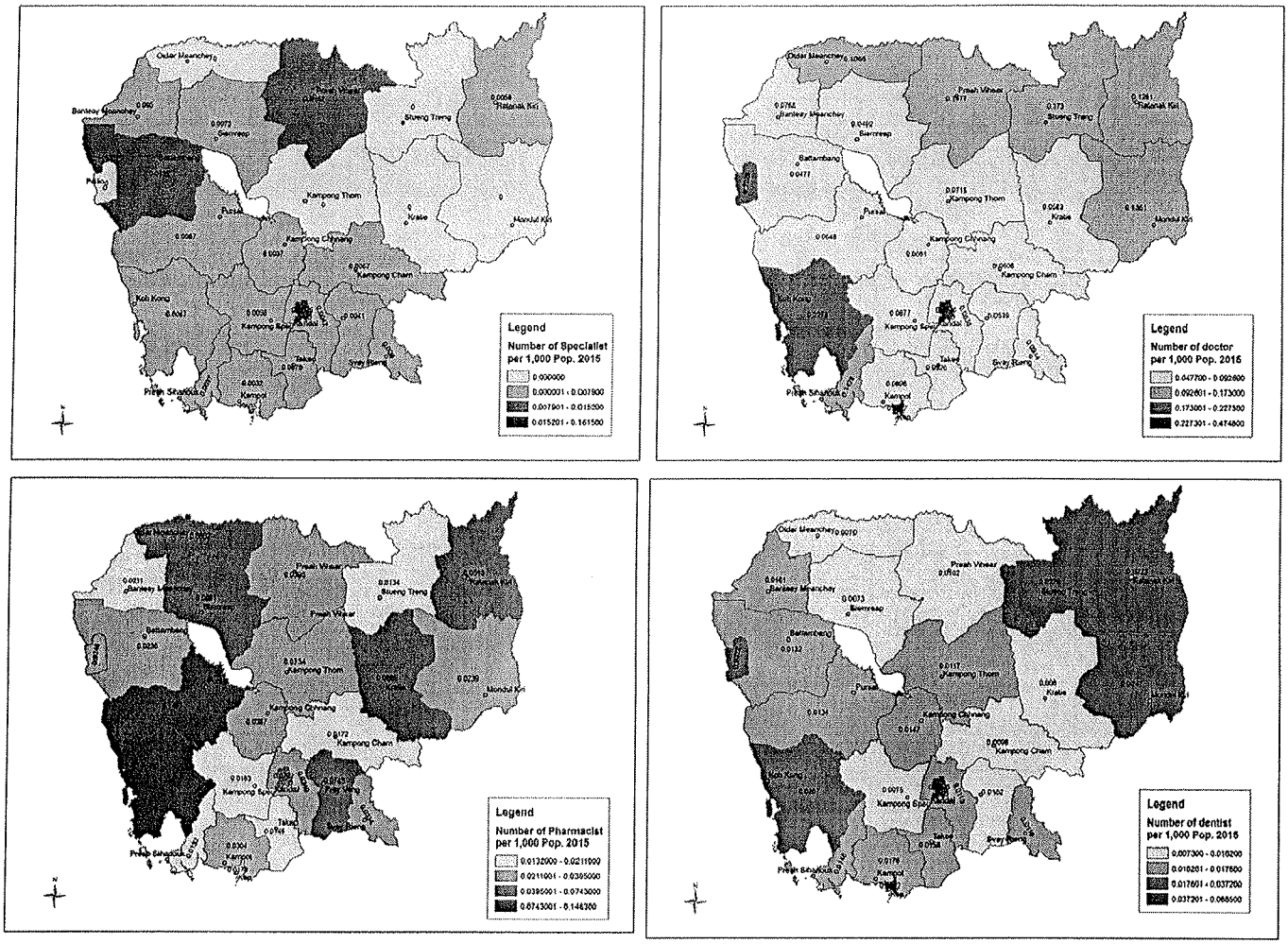
Koh Kong	11	10 (91%)	13	10 (77%)	12	11(92%)	12	12 (100%)
Kampong Chhnang	38	33 (87%)	39	35 (90%)	40	37(93%)	40	35 (88%)
Kampong Cham	140	117 (84%)	142	127 (89%)	149	126(85%)	86	78 (91%)
Kampong Thom	50	37 (74%)	51	46 (90%)	52	48(92%)	52	46 (88%)
Kratie	24	23 (96%)	29	28 (97%)	29	27(93%)	29	29 (100%)
Takeo	72	66 (92%)	73	70 (96%)	76	72(95%)	76	71 (93%)
Battambang	76	67 (88%)	78	67 (86%)	79	68(86%)	79	70 (89%)
Banteay Mean Chey	70	48 (69%)	70	49 (70%)	69	56(81%)	69	58 (84%)
Pursat	32	32 (100%)	36	34 (94%)	39	38(97%)	39	39 (100%)
Prey Veng	91	76 (84%)	91	79 (87%)	91	81(89%)	97	78 (80%)
PreahVihear	20	20 (100%)	20	20 (100%)	20	19(95%)	21	21 (100%)
Mondul Kiri	9	9 (100%)	10	10 (100%)	10	10(100%)	11	11 (100%)
Rattanak Kiri	11	11 (100%)	11	11 (100%)	12	12(100%)	14	14 (100%)
SvayRieng	38	31 (82%)	38	33 (87%)	42	35(83%)	43	34 (79%)
Siem Reap	71	58 (82%)	88	70 (80%)	91	76(84%)	89	79 (89%)
Stung Treng	13	13 (100%)	13	13 (100%)	13	13(100%)	14	14 (100%)
Oddar Mean Chey	19	16 (84%)	19	16 (84%)	25	19(76%)	24	21 (88%)
ThbongKhmum**	-	-	-	-	-	-	61	50 (82%)
Total	**1029**	**879 (85%)**	**1068**	**940 (88%)**	**1109**	**983(89%)**	**1121**	**992 (88%)**

***New province; Source: Personnel Department, MOH. Updated as of April 2015*

The MPA also requires a secondary nurse in every health center. In 2011, 85% of health centers has a secondary nurse. By 2014, this had increased only slightly to 89% of health centers. In some provinces such as Pailin, SvayRieng, Prey Vieng, Kampong Chhnang, Phnom Penh and Kampong Thom the numbers of health centers with secondary nurses has actually declined from the previous years.

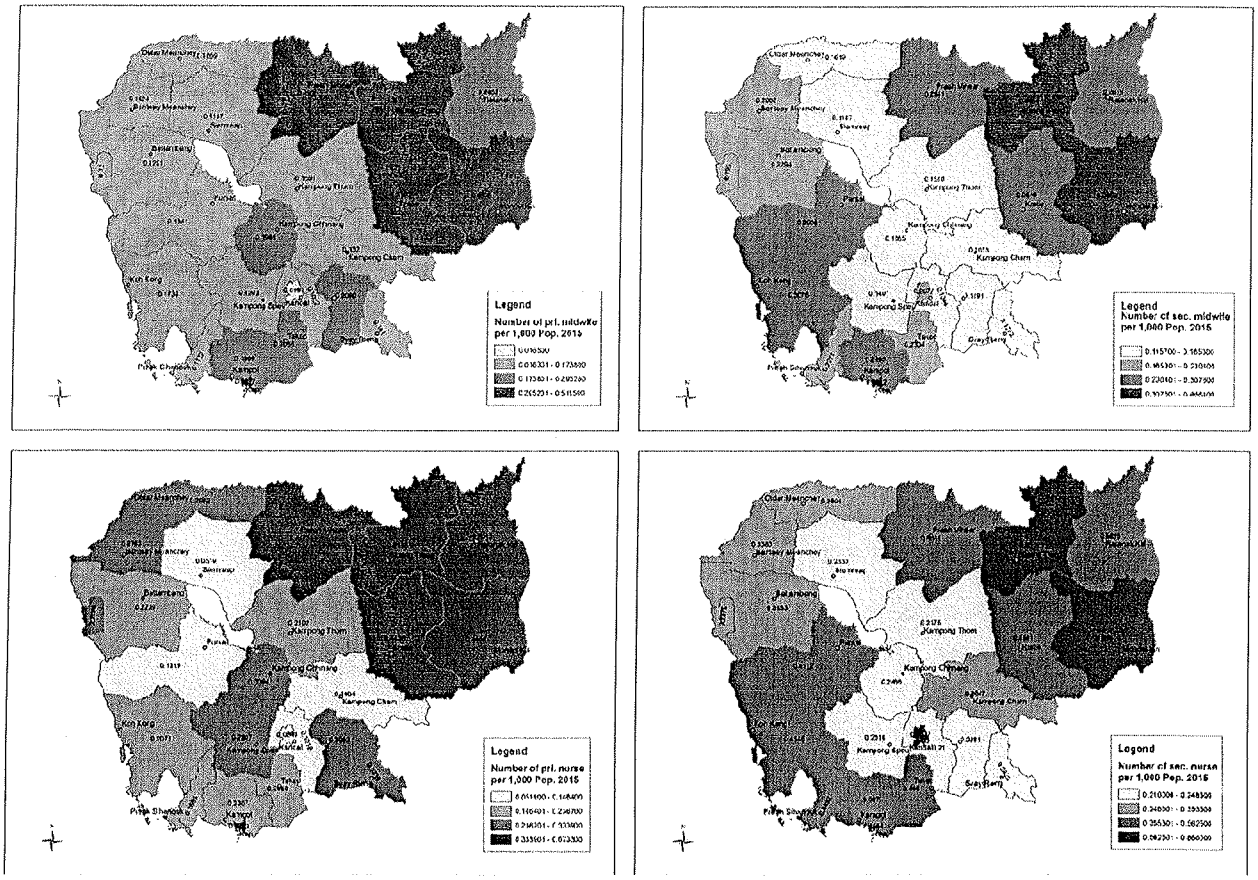
Despite increases in the number of health staff for each professional cadre, there are notable differences in their geographical distributions. The maps below show the distribution of health workers per 1,000 population.

Figure 1. Geographical distribution of health workers –medical specialists, medical doctors, pharmacists and dentists per 1,000 population



Source: Personnel Department, MOH. Updated as of April 2015

Figure 2.Geographical distribution of health workers – pharmacists, secondary nurses, secondary midwives and primary midwives per 1,000 population



Source: Personnel Department, MOH. Updated as of April 2015

4.3.2 Recruitment by the MOH

The Health Workforce Projection tool allows the MOH to identify recruitment needs, based on desired health worker to population ratios and anticipated staff attrition.

Table 14: Summary of Recruitment by MOH 2010 – 2014

	2010	2011	2012	2013	2014
Number allocated byCouncil of Ministers	850	1012	1474	1314	1014
Number advertised	850	1012	1474	1314	1014
Number of applicants	810	1277	2187	3367	5103
Number of successful recruits	850*	**1011	1474	1314	1014

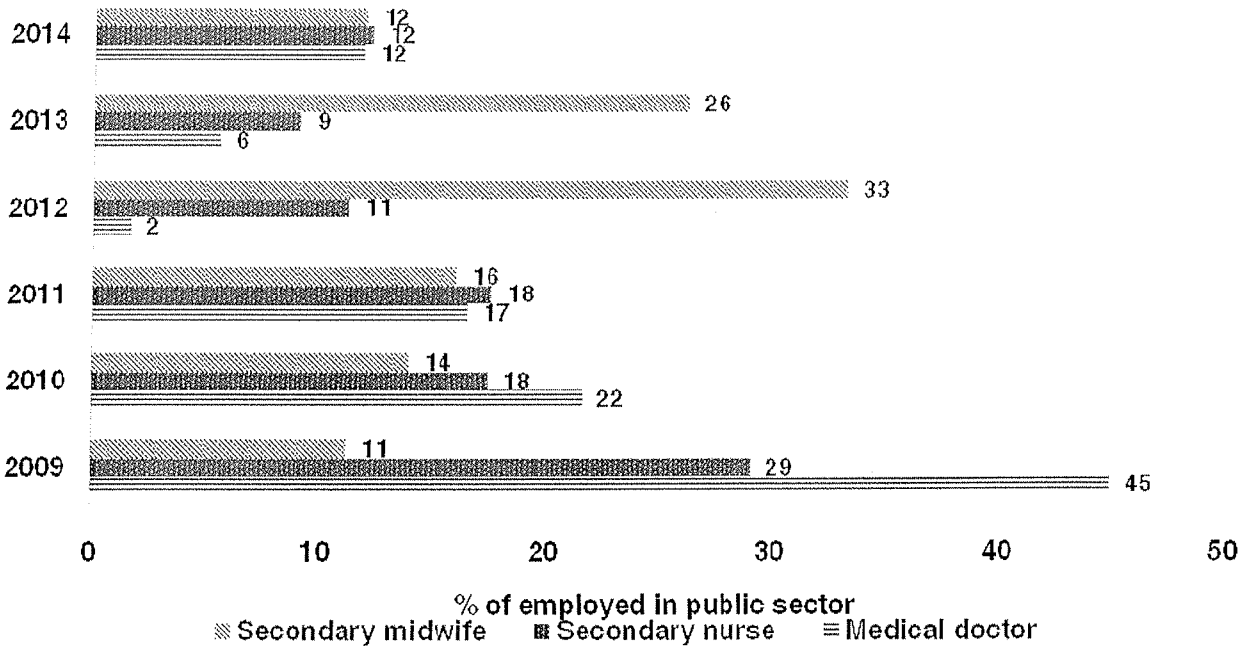
* Note: Recruited 810 in step 1, then additional 40 in step 2

**Note: 1 candidate requested to leave from the number of successful recruits:1012.

Recruitment of staff to the MOH increased every year between 2010 and 2012. In 2014 however, 1014 positions were approved, a reduction of 23% from the previous year. The recruitment details are presented in the *Table 14.*

In fact, the recruitment into the public sector has not kept pace with the rate of health worker production. It is estimated that only a small proportion of the health workers produced annually find regular employment in the public sector health system.

Figure 3. Percentage of Graduates Employed in MoH: 2009-2014



Note: The number of employed is based on the the annual recruitment

It is important to note that priority for recruitment is given to staffing provinces, rather than Phnom Penh facilities and central-level departments. Midwives and staff in health centers are given priority as the MOH strives to achieve its national goal of having a midwife and expansion of Health Equity Funds in every health centerby 2015.

When the current staffs in position is compared to the staff requirements as outlined in the CPA and MPA Guidelines, it is noticed that there are substantial staffing gaps. There are shortages in different categories and cadres relative to the staffing standards in the CPA and MPA Guidelines, also taking into consideration staff attrition due to various reasons.

Table 15. Staffing Gaps relative to the CPA and MPA Staffing Standards

Facilities	Spl MD	MD	MA	DD	DA	DN	Phm	PA	BSN	SN	PN	BMW	SM	PM	SL	PL	PT	X-ray	Others**	Total
Total	-287	-1298	308	-75	38	-327	98	-1024	-254	-769	-293	-142	-396	-337	-218	54	-131	-189	-4630	-9872
Central level	-3	-20	-6	-3	0	0	-9	-2	0	-13	-1	0	-6	0	-6	0	-1	0	-15	-85
Ministry of Health HQ	0	-6	-2	-1	0	0	-4	0	0	-2	0	0	0	0	0	0	0	0	-7	-23
UHS+TSMC	-1	-1	0	-2	0	0	-1	0	0	-2	0	0	-1	0	-1	0	-1	0	-2	-11
National Centres	-2	-11	-4	0	0	0	-4	-1	0	-9	-1	0	-5	0	-3	0	0	0	-6	-46
National Institutions	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	-2	0	0	0	-1	-5
National hospitals	-12	-18	-5	-2	0	0	-2	0	0	-42	-2	-1	-7	0	-5	0	-2	0	-5	-104
Calmette Hospital	-5	-3	-1	0	0	0	0	0	0	-10	0	0	-2	0	-1	0	0	0	-1	-25
Khmer-Soviet Friendship Hospital	-3	-4	-2	-1	0	0	-1	0	0	-9	-1	0	-3	0	-1	0	0	0	-1	-26
KunthaBopha Hospital	0	-1	0	0	0	0	0	0	0	-5	0	0	0	0	0	0	0	0	0	-8
National Paediatric Hospital	-1	-3	-1	0	0	0	0	0	0	-9	0	0	0	0	-1	0	0	0	-1	-17
PreahAng Duong hospital	-2	-5	-2	0	0	0	-1	0	0	-6	-1	0	-1	0	-1	0	-1	0	-1	-20
PreahKossomak hospital	-1	-2	0	-1	0	0	0	0	0	-3	0	0	-1	0	0	0	0	0	0	-9
Total at Province level	-272	-1260	319	-71	39	-327	108	-1021	-253	-713	-289	-141	-383	-337	-207	54	-129	-189	-4610	-9682
Provincial health Department	-1	-25	-9	-2	0	-1	-11	-1	-2	-38	-17	0	-13	-4	-3	-1	-1	0	-23	-150
Nurse/midwife school	0	-2	0	0	0	-1	-1	0	-4	-15	0	-4	-5	0	0	0	0	0	-2	-35
OD office	0	-20	-6	-1	0	0	-8	-2	0	-31	-16	0	-13	-4	0	0	0	0	-12	-113
HC	3	-982	128	10	7	18	12	4	60	-79	-103	33	-624	-223	35	20	4	0	-1992	-3669
CPA 1	2	-130	69	-56	10	-114	24	-252	-80	-58	-52	-81	49	-95	-65	13	-68	-74	-1228	-2186
CPA 2	-103	-76	59	-23	9	-95	31	-387	-108	31	-73	-53	51	-30	-79	5	-57	-77	-939	-1914

CPA 3	-173	-26	78	2	13	-134	60	-384	-119	-523	-28	-36	172	19	-95	17	-7	-38	-414	-1616
PHD office	-1	-25	-9	-2	0	-1	-11	-1	-2	-38	-17	0	-13	-4	-3	-1	-1	0	-23	-150
Phnom Penh	0	-2	-1	0	0	0	-1	0	0	-1	-1	0	0	0	0	0	0	0	-2	-9
Banteay Mean Chey	0	-1	-1	0	0	0	0	0	0	-2	0	0	-1	0	0	0	0	0	-1	-6
Battambang	0	-1	0	0	0	0	-1	0	0	-5	-1	0	-1	0	0	0	0	0	-1	-12
Kampong Cham	0	-2	0	0	0	0	-1	0	0	-1	-1	0	-1	0	0	0	0	0	-1	-7
Kampong Chhnang	0	0	0	0	0	0	0	0	0	-2	-1	0	0	0	0	0	0	0	0	-6
Kampong Speu	0	-1	0	0	0	0	0	0	0	-2	-2	0	0	0	0	0	0	0	-1	-7
Kampong Thom	0	-1	0	0	0	0	0	0	0	-1	0	0	-1	0	0	0	0	0	-2	-5
Kampot	0	-1	0	0	0	0	-1	0	0	-2	-1	0	-1	0	0	0	0	0	-2	-8
Kandal	0	-2	-1	0	0	0	-1	0	0	-2	-1	0	0	0	0	0	0	0	-2	-8
Kep	0	-1	0	0	0	0	-1	0	0	-1	-1	0	0	0	0	0	0	0	-1	-5
Koh Kong	0	-1	0	0	0	0	0	0	0	-1	0	0	0	0	0	0	0	0	-1	-4
Kratie	0	-1	0	0	0	0	0	0	0	-1	-1	0	-1	0	0	0	0	0	-1	-5
Mondul Kiri	0	0	-1	0	0	0	0	0	0	-1	-1	0	0	0	0	0	0	0	-1	-5
Oddar Mean Chey	0	-1	0	0	0	0	-1	0	0	-1	0	0	0	0	0	0	0	0	0	-3
Pailin	0	-1	0	0	0	0	0	0	0	-1	-1	0	0	0	0	0	0	0	-1	-4
PreahVihear	0	-1	0	0	0	0	0	0	0	-2	0	0	0	0	0	0	0	0	-1	-5
Prey Veng	0	-1	0	0	0	0	0	0	0	-1	-1	0	0	-1	0	0	0	0	-2	-8
Pursat	0	-1	0	0	0	0	0	0	0	-1	-1	0	-1	0	0	0	0	0	-1	-5
Rattanak Kiri	0	-1	0	0	0	0	0	0	0	-2	-1	0	0	-1	0	0	0	0	-1	-5
Siem Reap	0	-1	-1	0	0	0	-1	0	0	-2	0	0	-1	0	0	0	0	0	-1	-5
Sihanouk Ville	0	-1	-1	0	0	-1	0	0	-2	-1	0	0	0	0	0	0	0	0	0	-5
SvayRieng	0	-1	0	0	0	0	0	0	0	-1	-1	0	0	0	0	0	0	0	-1	-6
Stung Treng	0	-1	0	0	0	0	0	0	0	-1	-1	0	-1	0	0	0	0	0	-1	-5
Takeo	0	-2	0	0	0	0	0	0	0	-3	-1	0	-1	0	0	0	0	0	-2	-11
ThboungKhmom	0	-1	0	0	0	0	0	0	0	-1	0	0	0	0	0	0	0	0	-1	-3
RTC	0	-2	0	0	0	-1	-1	0	-4	-15	0	-4	-5	0	0	0	0	0	-2	-35

Kampot	0	-1	0	0	0	0	0	0	-1	-5	0	-1	-1	0	0	0	0	0	0	-9
Kampong Cham	0	0	0	0	0	-1	0	0	-1	-2	0	-1	-1	0	0	0	0	0	-1	-8
Battambang	0	0	0	0	0	0	0	0	-1	-5	0	-1	-2	0	0	0	0	0	-1	-11
Stung Treng	0	0	0	0	0	0	0	0	-1	-3	0	0	-1	0	0	0	0	0	0	-7
OD office	0	-20	-6	-1	0	0	-8	-2	0	-31	-16	0	-13	-4	0	0	0	0	-12	-113
Phnom Penh	0	-2	-1	0	0	0	-1	0	0	-2	-1	0	0	0	0	0	0	0	-1	-7
Banteay Mean Chey	0	-1	0	0	0	0	0	0	0	-3	-1	0	-1	0	0	0	0	0	0	-7
Battambang	0	-1	-1	0	0	0	-1	0	0	-4	-1	0	-2	0	0	0	0	0	0	-9
Kampong Cham	0	-2	0	0	0	0	-1	0	0	-2	-1	0	-1	0	0	0	0	0	-2	-9
Kampong Chhnang	0	-1	-1	0	0	0	-1	0	0	-1	-1	0	-1	0	0	0	0	0	0	-6
Kampong Speu	0	-1	0	0	0	0	0	0	0	-2	-1	0	-1	0	0	0	0	0	-1	-5
Kampong Thom	0	-1	0	0	0	0	0	0	0	-1	-1	0	0	-1	0	0	0	0	-2	-5
Kampot	0	-2	0	0	0	0	-1	0	0	-3	-2	0	-1	0	0	0	0	0	-1	-9
Kandal	0	-4	0	0	0	0	-1	0	0	-2	-1	0	-1	0	0	0	0	0	-1	-12
Kep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Koh Kong	0	-1	0	0	0	0	0	0	0	-1	0	0	0	0	0	0	0	0	0	-2
Kratie	0	0	0	0	0	0	0	0	0	-1	-1	0	0	0	0	0	0	0	0	-4
Mondul Kiri	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1
Oddar Mean Chey	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	0	0	0	0	-1
Pailin	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PreahVihear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	-2
Prey Veng	0	-2	-1	0	0	0	0	0	0	-2	-2	0	-1	0	0	0	0	0	-1	-9
Pursat	0	-1	0	0	0	0	0	0	0	-1	0	0	-1	0	0	0	0	0	-1	-4
Rattanak Kiri	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1
Siem Reap	0	-1	0	0	0	0	-1	0	0	-3	-1	0	-1	0	0	0	0	0	-1	-7
Sihanouk Ville	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SvayRieng	0	-1	0	0	0	0	0	0	0	0	-1	0	-1	0	0	0	0	0	-1	-4
Stung Treng	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	-2
Takeo	0	-2	0	0	0	0	-1	0	0	-3	-1	0	-1	0	0	0	0	0	-1	-9

ThboungKhmom	0	-1	0	0	0	0	0	0	0	-2	-1	0	-1	0	0	0	0	0	-1	-6
HC	3	-982	128	10	7	18	12	4	60	-79	-103	33	-624	-223	35	20	4	0	-1992	-3669
Phnom Penh	1	4	26	1	0	0	3	1	0	25	-18	0	-1	-46	2	1	0	0	-63	-64
Banteay Mean Chey	0	-66	10	1	0	0	0	0	0	10	8	0	-36	-26	1	3	0	0	-107	-202
Battambang	1	-70	16	2	2	0	0	0	0	63	3	2	22	-4	6	6	0	0	-136	-87
Kampong Cham	0	-84	3	0	0	3	0	0	0	-29	-78	2	-73	-58	1	0	0	0	-166	-479
Kampong Chhnang	0	-37	3	0	0	0	0	0	0	-29	35	0	-35	13	1	0	0	0	-79	-128
Kampong Speu	0	-47	8	0	0	1	0	1	2	-13	22	0	-16	-1	4	0	0	0	-104	-143
Kampong Thom	0	-46	2	0	0	0	0	0	0	-24	3	0	-39	-10	3	0	0	0	-46	-157
Kampot	0	-56	9	0	0	0	0	0	0	9	-6	0	-3	-1	1	0	0	0	-91	-138
Kandal	0	-71	6	2	2	0	3	1	0	-25	-92	0	-69	-63	5	1	1	0	-164	-463
Kep	0	-4	0	0	0	0	0	0	1	-2	7	0	-2	5	0	0	0	0	-4	1
Koh Kong	0	-10	1	0	0	0	0	0	0	-2	-6	0	-2	-1	1	0	0	0	-24	-43
Kratie	0	-27	2	0	0	0	0	0	0	19	57	0	8	70	0	0	0	0	-57	72
Mondul Kiri	0	-11	2	0	1	3	0	0	1	10	8	0	2	12	0	0	0	0	-18	10
Oddar Mean Chey	0	-21	8	0	0	0	0	0	0	0	-8	0	-27	-10	0	0	0	0	-43	-101
Pailin	0	-5	2	0	0	0	0	0	0	-5	9	0	-1	0	0	0	0	0	-12	-12
PreahVihear	0	-17	1	0	0	2	4	0	2	14	39	0	-7	55	1	0	0	0	-35	59
Prey Veng	1	-87	14	0	1	6	0	0	0	-49	-1	2	-126	-24	3	0	1	0	-177	-436
Pursat	0	-39	1	0	0	0	0	0	0	16	-31	0	0	-30	0	4	0	0	-78	-157
Rattanak Kiri	0	-14	1	0	0	0	0	0	0	18	44	0	-4	6	0	0	0	0	-21	30
Siem Reap	0	-84	2	0	0	0	1	0	1	-44	-54	0	-76	-61	2	3	2	0	-177	-485
Sihanouk Ville	0	-6	0	0	0	0	0	1	51	6	-25	26	2	-26	0	0	0	0	-26	3
SvayRieng	0	-14	2	0	0	0	0	0	1	28	80	1	7	38	0	0	0	0	-21	122
Stung Treng	0	-43	0	0	0	0	0	0	1	-44	-31	0	-63	-34	0	0	0	0	-76	-290
Takeo	0	-67	9	4	1	0	1	0	0	4	-24	0	-15	11	4	2	0	0	-149	-219
ThboungKhmom	0	-60	0	0	0	3	0	0	0	-35	-44	0	-70	-38	0	0	0	0	-118	-362
CPA 1	2	-130	69	-56	10	-114	24	-252	-80	-58	-52	-81	49	-95	-65	13	-68	-74	-1228	-2186

Phnom Penh	1	-8	11	-9	1	-18	3	-36	-12	-24	-14	-12	10	-17	-11	1	-10	-11	-178	-333
Banteay Mean Chey	0	-5	4	0	0	-6	3	-12	-4	3	5	-4	11	-2	0	2	-4	-1	-56	-66
Battambang	0	-7	7	-2	0	-2	0	-6	0	4	-2	-2	3	-4	-2	2	-2	-2	-30	-45
Kampong Cham	0	-19	6	-5	0	-16	3	-36	-11	-6	-15	-9	2	-16	-14	0	-10	-12	-176	-334
Kampong Chhnang	0	-6	1	-1	0	-6	2	-12	-4	7	-1	-4	7	-4	0	0	-3	-4	-60	-88
Kampong Speu	0	5	2	-2	0	-3	1	-6	-2	5	0	-2	1	0	0	0	-1	-2	-30	-34
Kampong Thom	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kampot	0	-7	0	-2	0	-3	0	-6	-2	-6	-1	-2	-3	-3	-3	0	-2	-2	-30	-72
Kandal	1	-13	3	-6	1	-12	1	-24	-8	-22	-6	-8	6	-7	-6	0	-3	-8	-113	-224
Kep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Koh Kong	0	3	0	-1	1	-3	2	-6	-2	4	-2	-2	1	-1	-2	0	-2	-2	-29	-41
Kratie	0	-5	2	-2	0	-3	0	-6	-2	-1	5	-2	1	0	-2	0	-2	-2	-30	-49
Mondul Kiri	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oddar Mean Chey	0	-1	10	-1	1	-3	2	-6	-2	5	2	-2	1	-2	-3	0	-2	-2	-28	-31
Pailin	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PreahVihear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Prey Veng	0	-20	9	-8	0	-4	0	-24	-7	-19	-1	-8	-6	-11	-5	0	-6	-7	-117	-234
Pursat	0	-15	6	-5	2	-9	1	-18	-6	-2	-6	-6	4	-7	-5	5	-6	-4	-84	-155
Rattanak Kiri	0	3	0	1	2	0	1	0	0	6	2	0	7	2	2	0	0	0	1	27
Siem Reap	0	-8	2	-2	0	-5	0	-12	-4	-2	-1	-4	-2	-7	-3	1	-4	-3	-60	-114
Sihanouk Ville	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SvayRieng	0	0	3	0	1	-3	1	-6	-2	-1	-2	-2	-1	-2	-1	0	-1	-1	-30	-47
Stung Treng	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Takeo	0	-6	3	-5	1	-9	4	-18	-6	21	-3	-6	19	-2	-1	2	-4	-5	-88	-103
ThboungKhmom	0	-21	0	-6	0	-9	0	-18	-6	-30	-12	-6	-12	-12	-9	0	-6	-6	-90	-243
CPA 2	-103	-76	59	-23	9	-95	31	-387	-108	31	-73	-53	51	-30	-79	5	-57	-77	-939	-1914
Phnom Penh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Banteay Mean Chey	-8	-4	5	-1	0	-8	5	-28	-8	1	-4	-4	2	5	-6	0	-5	-5	-66	-129

Battambang	-8	-10	15	-4	1	-7	3	-28	-8	2	10	-4	8	-8	-6	2	-6	-5	-66	-119
Kampong Cham	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kampong Chhnang	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kampong Speu	-3	-4	1	-1	0	-3	1	-12	-4	-6	-2	-1	-1	-4	-3	1	-1	-3	-35	-80
Kampong Thom	-8	-3	2	0	0	-8	2	-28	-8	-6	-11	-4	3	-2	-4	0	-3	-6	-64	-148
Kampot	-10	-10	5	-1	2	-12	3	-42	-12	7	-9	-6	6	-5	-7	0	-5	-8	-100	-204
Kandal	-8	-12	4	-3	1	-8	0	-27	-8	-10	-10	-4	4	-3	-3	1	-4	-6	-69	-165
Kep	-4	0	0	2	0	-3	0	-14	-4	-7	-4	-2	2	-2	-4	0	-1	-2	-34	-77
Koh Kong	-3	1	1	-1	0	-4	3	-14	-3	5	-3	-1	6	-1	-2	0	-2	-2	-31	-51
Kratie	-4	-6	4	-2	1	-4	1	-14	-4	14	-6	-2	0	-3	-3	0	-3	-3	-35	-69
Mondul Kiri	-4	-3	1	0	1	-3	2	-14	-2	5	-3	-2	0	-1	-3	0	-3	-3	-33	-65
Oddar Mean Chey	-4	2	1	-1	1	-4	2	-14	-4	6	1	-2	5	-2	-3	0	-3	-3	-33	-55
Pailin	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PreahVihear	-6	-2	1	-2	0	-5	5	-28	-8	-9	-7	-4	2	0	-6	1	-5	-5	-66	-144
Prey Veng	-11	-6	8	-2	0	-5	0	-41	-12	-3	-1	-6	0	0	-11	0	-4	-9	-104	-207
Pursat	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rattanak Kiri	-3	1	2	0	2	-4	1	-14	-3	24	-5	-1	8	4	-3	0	-3	-2	-32	-28
Siem Reap	-4	-5	3	-1	0	-4	1	-14	-4	-2	-3	-2	-1	-1	-3	0	-1	-3	-33	-77
Sihanouk Ville	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SvayRieng	-4	-5	3	-2	0	-3	0	-14	-4	-3	-2	-2	-2	-1	-2	0	-2	-3	-35	-81
Stung Treng	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Takeo	-4	-3	1	-1	0	-4	0	-13	-4	11	-6	-2	4	-3	-2	0	-2	-3	-34	-65
ThboungKhmom	-7	-7	2	-3	0	-6	2	-28	-8	2	-8	-4	5	-3	-8	0	-4	-6	-69	-150
CPA 3	-173	-26	78	2	13	-134	60	-384	-119	-523	-28	-36	172	19	-95	17	-7	-38	-414	-1616
Phnom Penh	-6	39	8	6	1	-8	3	-21	-10	-34	2	-4	17	0	-2	1	-2	-1	-48	-59
Banteay Mean Chey	-10	-4	7	-1	2	-8	2	-21	-10	-46	0	-4	12	-1	-5	3	1	0	-23	-106
Battambang	-1	10	11	5	0	-8	7	-21	-10	44	-1	-4	56	-1	-2	6	2	-3	-24	66
Kampong Cham	-3	10	2	-1	1	-6	4	-22	-10	12	4	-3	33	-3	-2	0	6	-2	-19	1

Kampong Chhnang	-11	-10	3	-2	1	-8	3	-21	-10	-34	6	-4	6	5	-5	0	-1	-1	-24	-107
Kampong Speu	-10	-1	4	1	0	-8	4	-22	-10	-49	18	-4	2	-2	-3	0	1	-1	-23	-103
Kampong Thom	-12	-11	2	-1	1	-8	5	-21	-10	-37	-8	-4	2	1	-4	0	-2	-2	-19	-128
Kampot	-12	-17	5	-1	1	-8	2	-21	-10	-3	-13	-4	8	-1	-5	0	-1	-2	-20	-102
Kandal	-8	11	6	3	1	-8	4	-21	-10	-19	-3	-4	17	-3	-6	0	1	-2	-9	-50
Kep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Koh Kong	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kratie	-13	-15	5	-1	0	-8	1	-21	-10	-36	3	-4	-4	-1	-9	0	-2	-3	-23	-141
Mondul Kiri	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oddar Mean Chey	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pailin	-13	-14	9	0	0	-7	6	-22	-8	-58	-8	-4	-6	-1	-7	0	-4	-3	-25	-165
PreahVihear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Prey Veng	-12	-14	1	-2	0	-8	2	-22	-10	-69	10	-4	0	13	-6	0	-2	-3	-21	-147
Pursat	-11	-10	2	-1	1	-8	2	-22	-10	-39	-17	-3	12	-1	-8	2	-1	-1	-21	-134
Rattanak Kiri	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Siem Reap	-4	10	2	-1	0	-8	7	-19	-8	-25	-6	-3	14	7	-7	4	4	-3	-21	-57
Sihanouk Ville	-12	5	4	1	1	-4	0	-21	43	-72	-20	29	-11	2	-10	1	-1	-3	-24	-92
SvayRieng	-12	-9	3	-2	2	-7	1	-22	-9	-42	9	-4	1	3	-6	0	-2	-3	-23	-122
Stung Treng	-13	-11	0	0	0	-6	3	-22	-7	-36	-11	-4	0	3	-7	0	-4	-3	-25	-143
Takeo	-10	5	4	-1	1	-8	4	-22	-10	20	7	-4	13	-1	-1	0	0	-2	-22	-27
ThboungKhmom	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Source: Department of Personal – based on (revised) CPA and MPA guidelines on staffing requirements. As of April 2015

4.3.3 Contract Workers and Staff Transitions

Contract staff and floating staff are often used to fill vacancies. Contract staff are qualified health professionals, some of whom are retired professionals while others are new graduates who did not qualify the civil service entry exam or who were not selected for recruitment as permanent staff. In 2012, there were 4,020 contract and floating staff working for the MOH. In 2014, there were 4,214, an increase of 194workers compared to 2012. In 2014, close to 7.5% of MOH workers were contracted rather than recruited as permanent civil service employees.

Table 16: Number of Contracting and Floating Staff in 2009-2014

		2009	2010	2011	2012	2013	2014
Contract Staff	Central level	203	198	164	189	202	202
	Provincial level	1,114	948	1,132	1,168	1,191	1,241
	Total	1,347	1,146	1,296	1,357	1,393	1,443
Floating Staff	Central level	412	424	478	485	499	465
	Provincial level	1,928	2050	2,019	2,178	2,211	2,306
	Total	2,336	2,462	2,497	2,663	2,710	2,771

A small proportion of MOH staff transition from or within the workforce each year. The table below shows staff movement in the MOH for the past 3 years.

Table 17: Staff transitions 2009 – 2014

Description	2009	2010	2011	2012	2013	2014
Total Health Staff	18,113	18,302	18,814	19,721	20,668	20,974
Newly Recruited Staff	800	865	1,016	1,474	1,442	1,014
Titulairized	304	697	833	641	498	1,296
Retirees	314	424	350	391	271	454
Remove from payroll	235	267	184	188	118	219
Leave without salary	310	409	432	488	452	612
Promotion	205	53	120	118	115	68
Reward/medals	1,994	1,782	1,780	1,723	100	401

Source: National Health Congress Report, 2014

Starting in 2012, MOH staffs with upgraded qualifications were able to take an internal exam to be re-graded within the civil service pay bands. This is seen as a mechanism to support career progression, and 461 staff passed the exam and were re-graded in 2012. The internal exam in 2014 was taken by 1,076 candidates of which 490 staffswere regraded.

4.3.4 Private Sector Workforce

It is widely recognized that the private health care sector employs a large number of health professionals, but that many of these are also working in the public sector. In a World Bank funded study of Cambodian health professionals working in the public sector, 56% reported also working in the private sector[4]. Current mechanisms do not allow the MOH to enumerate health workers with dual practice or those working only in the private sector. Licensing of private health facilities by the MOH provides information on types of facilities but not specifically on their staffs. Regulations for the licensing of private medical, paramedical and medical aid facilities specify certain health staff qualifications for ownership or operation, but do not require a complete staff list be submitted with the license application. There is currently no record maintained on the informal private sector workforce – those who are not working in licensed facilities.

Achievements 2014

- Strategic use of recruitment allocation to support staffing priorities
- Secondary midwives in more than 80% of Health Centers, with all provinces reporting an increase or stable percentage.
- Discussions on criteria for the identification of rural/remote health facilities have commenced.
- Introduction of regional allowance.
- Internal examinations to enable re-grading of current MOH staff conducted.

Areas for Further Progression 2015 and beyond

- Advocate for increased recruitment allocation from Council of Ministers to meet projected MOH requirements.
- Planned recruitment and deployment in order to achieve the staff requirements as per the CPA and MPA guidelines.
- Develop additional national health workforce performance indicators beyond the current single indicator of secondary midwives in health centers
- Finalize the criteria for the identification of rural/remote health facilities.
- Monitor rural allocation achievements and implement additional incentives to improve retention.
- Support additional internal examinations to enable re-grading of current MOH staff.

4.4 Financing the Health Workforce

MOH health workers are civil servants, governed by the Civil Service Law, and paid through civil service payroll. Civil service salaries are recognized as being lower than the cost of living, and the RGC has committed to increasing salaries to address this issue. Over the past few years, salaries for all civil servants have been increased by 20% annually.

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[4]HR Inc. Cambodia. 2012. *Cambodia Public Health Compensation and HR Review*, for the World Bank and the Ministry of Health, Phnom Penh, Cambodia

In addition to base salaries, MOH health workers may be eligible for allowances and incentives, based on their post and duties. The World Bank funded study on health workers compensation found that the average total monthly income (salary plus duty allowance and incentives) for government health workers ranged by size of facility and skill level of staff from $190 for HC staff to $277 for National Hospital staff, and from $320 for specialist MD to $169 for primary midwife. Men earned on average $20 per month more than women, and staff in SOA districts earned on average $50 per month more than staff in non-SOA. Incentives for project work, from user fees or health equity funds, for midwives, and service delivery grants for those in SOA districts, account for between 37% and 60% of total government income. Dual practice increased the median monthly income of participating health workers to $376, and varied widely by qualification and experience of staff and by rural or urban location. An experienced specialist doctor working in both the public and the private sector can earn close to $1,500 per month, and an experienced secondary nurse or midwife in dual practice can earn around $400 per month[5]. The study found that 60% of those working dual practice would be willing to give up their private practice to earn more in the public sector.

Achievements for 2014

- Based on Sub-decree No 1 dated on 02-01-2014:
  - 40,000 Riel added to Cat. A Basic Salary
  - 80,000 Riel added to Cat. B,C,D Basic Salary
- Functional Allowance for Health Staff Increased in Oct. 2014 - Minimum wage 550,000 Riel (Sub-decree 262 dated 26-09-2014)
- Salary scale and grade regularized in payroll for all Health staff in Nov.2014
- New cadre integration in Jan. 2015(Royal decree 1014/1175 dated on 02-10-2014)
- Second increase in Functional Allowance for Health Staff in April 2015 - Minimum wage 650, 000 riel (Sub-decree 36 dated18/03/15)
- Electronic transfer of salaries for all health staff introduced to encourage transparency and timely payment.

Areas for Further Progress in 2015 and beyond

- Support RGC compensation reform, including continued annual salary increases for civil servants.
- Increase equity and transparency of incentives, and strengthen linkages to performance.
- Strengthen strategies for mitigating / managing the impact of dual practice on public sector performance.

[5]HR Inc. Cambodia. 2012. *Cambodia Public Health Compensation and HR Review*, for the World Bank and the Ministry of Health, Phnom Penh, Cambodia

5. Preparing the Health Workforce Development Plan 2016-2020

A significant task for 2015 is beginning the formal preparation of the Health Workforce Development Plan 2016-2020. This plan is intended to guide the production, recruitment and deployment of health workers in Cambodia over the next 5 years, with a focus on ensuring there are the right people with the right skills and motivation, in the right place to provide high quality health services to all people in Cambodia. The key issues that need to be addressed include synchronizing the Plan with the RGC and MOH strategic plans, adopting a whole health sector focus in planning, production and deployment of the health workforce, and strengthening the quality of education and health worker performance. These issues are complex, and will require inter-departmental, inter-ministerial, and inter-agency collaboration. A major task will be developing formal and informal mechanisms for achieving this collaboration. A workplan for the preparation of the HWDP 2016-2020 has been developed with outlined activities and timelines.

WorkPlan for the Formulation of HWDP 2016-2020			
Activities	**Outputs**	**Completion Date**	**Accountable Persons**
SCHEDULE A. PREPARATION			
Develop Road Map for HWDP 2016-2020 formulation process	Drafted	Sep-14	HRH Secretariat/WHO
Discuss draft roadmap and proposed outlines for HWDP to MoH Senior Management	Draft Road Map presented and discussed in HRH OC Meeting	Oct-14	HRH Secretariat/WHO
Invent/collect background materials (law/regulations, policy, strategy, strategic plans, reports etc.)	Inventory of documents Document repository	Jan-15	HRH Secretariat
Outline format for HWDP 2016-2020	Drafted	Nov-14	HRH Secretariat
Prepare materials and working papers for series of strategy development workshops	Notes and working papers produced	Jan-15 onwards	HRH Secretariat
SCHEDULE B. STRATEGY DEVELOPMENT			
1st 2-day Regional Consultative Workshop for HWDP (participation of ODs, PHDs, RHs, HCs, NGOs, relevant sector, local administration)	Discussion on HRH issues related to recruitment, deployment, retention, renumeration, incentives. Private sector involvement.	Mar-15	HRH Secretariat/DOP
2nd Regional Consultative Workshop for HWDP (participation of ODs, PHDs, RHs, HCs, NGOs, relevant sector, local administration)	Discussion on HRH issues related to pre- & in-service education, registration, accreditation.	Apr-15	HRH Secretariat/HRDD
Prepare first draft of HWDP 2016-2020	First draft (without implementation and budget plan) available for comment	Jun-15	HRH Secretariat
Update progress to HRH OC	Draft outline, priorities, activities presented to HRH OC	Jun-15	HRH Secretariat

SCHEDULE C. IMPLEMENTATION & BUDGET PLAN DEVELOPMENT			
Develop format for developing Implementation & Budget Plan	Draft formats available for comment	Aug-15	HRH Secretariat/TA
A 3-day workshop to develop program strategy and identify strategic interventions for budgeting	Program strategies developed, with indicators and targets set, supported by program supported interventions	Aug-15	DPHI/HRH Secretariat
Draft the Implementation & Budget Plan	1st draft of the plan available for comment then finalized	Sep-15	HRH TA
SCHEDULE D. CONSULTATION			
3rd 2-day Regional consultative workshop on draft of HWDP 2016-2020 with participation of ODs, PHDs, RHs, HCs, NGOs, relevant sector, local administration.	Inputs received	Sep-15	HRH Secretariat/DOP/HRDD
Write final draft of HWDP 2016-2020		Oct-15	HRH TA
SCHEDULE E. ENDORSEMENT			
Submission of final draft of the HWDP 2016-2020 to HRH OC for approval	HWDP 2016-2020 approved by HRH OC Chair	Nov-15	HRH Secretariat
SCHEDULE F. DISSEMINATION			
Printing of the HWDP 2016-2020	Plan documents available in both Khmer and English	Feb-16	HRH Secretariat
Launching of HWDP 2016-2020 at the National Health Congress to be held in 2016	HWDP 2016-2020 available on MOH's Website	Mar-16	MOH

DPHI: Department of Planning & Health Information; DOP: Department of Personal; DP: Development Partner; HRDD: Human Resource Development Department; HRH: Human Resources for Health; HSP: Health Strategic Plan; MOH: Ministry of Health; NA: Not Applicable; TA: Technical Assistant; WHO: World Health Organization

6. Conclusion

There has been significant progress in the human resources for health management in 2014,with identified areas for further development in 2015 and beyond. The achievements outlined in the report are in line with the four strategic priority areasidentified by the mid-term review of the Health Workforce Development Plan (2006-2015). The Ministry of Health willstrive to consolidate and scale up the successes achieved thusfar, and they will form the foundation for the strategies to be pursued over the course of the next Health Workforce Plan.