KINGDOM OF CAMBODIA
NATION RELIGION KING

MINISTRY OF HEALTH

HEALTH WORKFORCE DEVELOPMENT PLAN

2025 - 2034



Building health workforce fit for the future
Safe and healthy lives and well-being for all Cambodians

November 2025

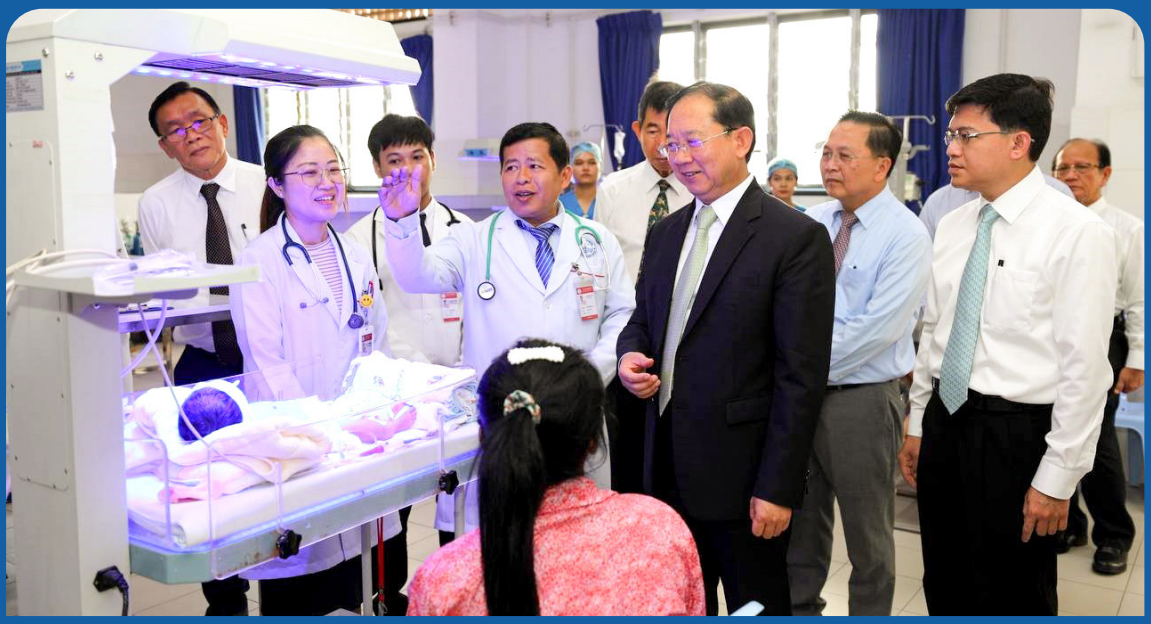




Samdech Moha Borvor Thipadei HUN Manet, Prime Minister of the Kingdom of Cambodia, at the groundbreaking ceremony of the University of Health Sciences Hospital. Phnom Penh, 10 December 2024.



His Excellency Professor Chheang Ra, Minister of Health, delivers a key note speech during his innovative and leadership lecture for MoH leadership officials and officials at all levels through video conference (Zoom)





His Excellency Professor Chheang Ra, Minister of Health, visits the healthcare service provision at the Provincial Hospital in Koh Kong Province.

Foreword

A strong, available, and competent health workforce is essential for improving population health, health system resilience and economic prosperity. Evidence from the COVID-19 pandemic, has demonstrated the urgent need for accelerating investments in health workforce education, re-skilling and competency building, employment, safeguarding and protection. Improving health workforce capacity, in synergy with broader health systems strengthening and innovative lifelong learning initiatives, will provide a progressive pathway for the country to accelerate its progress towards universal health coverage (UHC), emergency preparedness and response, and the Sustainable Development Goals (SDGs), while achieving the greatest health outcome, and social and economic benefits resulting from such investments.

The Health Workforce Development Plan (HWDP) 2025-2034 was developed to provide the strategic direction for health workforce management and development under the coordinating leadership of the Human Resource for Health Oversight Committee (HRH-OC). This plan builds on the achievements of the last 25 years. The HWDP 1996-2005 focused on adequate production and equitable distribution of health workforce according to the previously adopted Health Coverage Plan. The HWDP 2006-2015 aimed to further address the issues of improving the competency and management of the health workforce. The HWPD 2016-2020 continued these efforts and included the introduction of a secured working environment while initiating a substantial program of work for the regulation and governance of health workers.

The HWDP covers a longer period of ten years (2025-2034) with a strategic perspective for Cambodia. Substantial efforts will be required to recover from the impact of COVID-19, and to ensure success towards the implementation of the Cambodian SDG and UHC in Cambodia.

Building health workforce fit for the needs of health systems over the next ten years requires strong political will, effort, and commitment from the Royal Government of Cambodia (RGC) today to drive progress, as the health workforce is one of the major foundations of the health system. This plan is aligned with the Health Strategic Plan 2025-2034, the National Strategic Development Plan, and contributing to achieving the ambitious goals of the RGC's "Pentagonal Strategy" to become an upper-middle income country by 2030 and a high-income country by 2050. Through stewardship, investment and focused effort, the policy interventions outlined in this plan can be fully implemented.

On behalf of the Ministry of Health (MoH), I strongly urge for active engagement and support from all relevant Ministries and Agencies, MoH Departments, national centers and program, and sub-national administrative levels, Development Partners, Non-Governmental Organizations, private sectors and communities for successful implementation of the HWDP as a key foundation for building a strong and resilient health system to improve health outcomes for the people of Cambodia.

Phnom Penh, 10 , 11 ,2025

Prof. CHHEANG RA
Minister of Health

Acknowledgements

The Health Workforce Development Plan (HWDP) was developed based on an analysis of existing challenges and the future health workforce needs in Cambodia with careful consideration of past achievements and efforts to meet the aspiration and ambition of Cambodians. The development process also engaged representatives of relevant institutions at the national and sub-national levels, including Provincial Health Departments, Health Professional Councils and Associations, the private sector and Development Partners for providing constructive inputs to key aspects of the plan during consultative meetings. We believe that this plan provides leaders and implementing institutions with strategic guidance necessary to ensure that health workers are accessible and competent to support the work of the entire health sector and their multi-sectoral partners.

The Ministry of Health (MoH) highly appreciates the leadership and senior officials of the MoH, especially the chair of HRH-OC, H.E. Prof. Yit Sunnara, Secretary of State, MoH, and H.E. Prof. Mam Bunsocheat, Under Secretary of State, MoH, for their leadership and coordination throughout the development process; Prof. Touch Sokneang, Director of the Human Resources Development Department, and H.E. Dr Phom Samsong, Director of the Department of Personnel, for their technical leadership and facilitation including hosting the consultation processes both online and in person, and for guiding the technical work for this plan, as well as all HRH-OC members and the secretariat team. Appreciation is also extended to H.E. Prof. Chhea Chhorvann, Director of the National Institute of Public Health (NIPH) and H.E. Prof. Saphonn Vonthanak, Rector of the University of Health Sciences (UHS), all Excellencies, Professors, and directors of MoH Departments, National Disease Programs, Health Professional Councils, Provincial Health Departments, and healthcare facilities for their inputs and contributions.

Sincere appreciation and thanks to the World Health Organization at both Country and Regional Offices for providing technical and financial support throughout the development process, and all Development Partners such as GIZ, USAID, UNFPA, UNICEF, World Bank, JICA, KOICA, DFAT, CHAI, and FHI-360 EQHA project for providing technical reviews and inputs.

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Executive Summary

A competent health workforce is central to health systems and the main driver for achieving UHC. Making progress and accelerating Cambodia's journey towards UHC requires a stronger health system with health workers who are well educated, effectively managed, and empowered to provide comprehensive services that the population needs.

Health Workforce Development Plan (HWDP) 2025-2034 provides strategic guidance and operational framework for health workforce development and effective governance and leadership toward achieving the future vision of a fit-for-purpose health workforce contributing to health outcomes and long-term impacts. The HWDP is developed to align with the government's priorities and to reinforce the implementation of the national health strategic plan, Pentagonal Strategy Phase I, Cambodia Roadmap Towards Universal Health Coverage, and Cambodia Sustainable Development Goals. It emphasizes the government's efforts and commitment for the next decade to build a stronger and more resilient health systems through:

- Enhancing the quality of health professional education and continuing professional development to equip competent and diverse health workforce with the necessary knowledge, skills, and attitudes.
- Improving governance and leadership in health workforce recruitment, distribution and retention, regulation and performance assessment.
- Providing positive and safe working environment and enablers to empower the health workforce to deliver their full potential that drives best quality services.
- Training, recruiting, and deploying public health workforce to deliver essential public health functions through an integrated primary health care approach.

The HWDP highlighted key issues and challenges related to the increasing demand for higher quality health services, noting that currently there is generally a lack of trust in the quality of health services provided by both public and private sectors. This challenge is constrained by inadequate resources, mainly under-staffing, limited diagnostic capacity, and shortfalls in the supply of medicines and health commodities. This results in low utilization of public health facilities. There is also inadequate capacity and resources for delivering essential public health functions and public health services such as health promotion and prevention, and early detection, to address health problems related to CDs, NCDs, mental health, chronic diseases, and provide public health emergency response, emerging and re-emerging infectious disease pandemics, climate change, disaster preparedness and response. These interventions need to be provided through integrated PHC approach. The rapid growth of private health facilities and dual practice cause a system and political economy issue to the stewardship functions of the MoH and its ability to regulate and monitor the scope of practice of private health facilities. The health system is still significantly financed by OOP and external funded programs and activities. The government's expenditure on health will need to increase and require consideration in the expansion of risk pooling, and investment in medical technology and ICT, increasing capacity to analyze, interpret and utilize health data and information by clinical staff and policy makers.



Vision

Health workforce fit for the future to ensure safe and healthy lives and well-being for all Cambodians.



Goal

The health system will have sufficient, diversely skilled, , competent, motivated, well-regulated and equitably distributed health workforce to ethically provide quality people-centred care.



Strategic framework

The Framework identifies four interlinked strategic objective priorities: (1) Improved access to health workforce information and use for decision making and future planning; (2) The health system with competent health workforce to meet future needs and challenges; (3) Equitable distribution and well retained health workforce to fit for purpose and responsive to the needs; and (4) Strong governance and regulated health workforce for safe and quality health services with supportive working environment.

The country's contexts are linked with the proposed actions such as the response to future public health emergencies, increasing burden of Non-Communicable Diseases (NCDs), realistic elimination of communicable diseases, and social determinants of health. These strategic areas are supported by identifying sustainable financing mechanisms, shifting to integrated digital health and innovative approach, and strengthening multisectoral collaboration and partnership engagement as the key enabling factors for success.



Strategic objectives

(1) Health workforce information: *Improved access to health workforce information and use for decision making and future planning.*

Priority areas

- Improving institutional capacity in health workforce planning and implementation
- Strengthening heath workforce information for policy decision making
- Building institutional capacity in health workforce research and analyses

This strategic objective proposes actions and interventions to improve the capacity of the MoH in tracking health workforce information effectively, timely and reliably from both public and private sectors, training institutions and health professional councils to inform future policy decision making and activity planning. The MoH will introduce the implementation of the National Health Workforce Account (NHWA) framework and conduct health labour market analysis (HLMA) and workload indicators of staff needs (WISN) to guide and define appropriate CPA and MPA staffing standards, and population need-based health workforce planning and projection.

(2) Education and training: *The health system with competent health workforce to meet future needs and challenges.*

Priority areas

- Strengthening competency-based pre-service education system
- Enhancing clinical practice
- Strengthening the National Entrance and Exit Examinations
- Balancing the numbers of intake with professional and geographical shortage
- Expand pre-service education programs to a wider scope of professions.
- Improving in-service training and continuing professional development

This strategic objective ensures the quality of pre-service education for health professionals to equip the next generation of health professionals with the knowledge, skills, and attitudes through Competency-Based Education (CBE), accompanied by a system in place for continuing professional development, in-service training to enhance capacity in delivering quality and safe health care services.

Key priority activities under this area is to strengthen the roles, functions, and capacity of HRDD in governance, coordination, monitoring, inspection, and implementation of the accreditation program of health professions education including development and strengthening of regulations, standards, and guidelines for the governance of health professions education to ensure all Core Competency Frameworks (CCF) for all health professions programs are aligned.

Developing and expanding health professional education programs in response to the needs of national centres and programs and MoH technical departments on public health professions and a wider scope of professions such as health policy, health financing, public health specialist, field epidemiologist, senior laboratory personnel, clinical psychologists, health professions education, allied health professionals, biomedical engineering, health informatics, IPC specialist, PHC nurse and nurse specialists, and community health workers.

(3) Distribution: *Equitable distribution and well retained health workforce to fit for purpose and responsive to the needs.*

Priority areas

- Strengthen qualified health workforce recruitment and equity in the deployment to rural and remote regions and areas with shortage.
- Develop mechanisms for attracting and retaining health workers in rural and remote health facilities.

This strategic priority strongly emphasizes the MoH recruitment plan and distribution based on identified geographical shortage and skill-mix imbalance, particularly the public health workforce, through proposing policy, mechanism, and MoH's Prakas on the attraction and retention of health workers in remote and rural areas.

(4) Governance and regulation: *Strong governance and regulated health workforce for safe and quality health services with supportive working environment.*

Priority areas

- Exploring mechanisms to manage and regulate dual practice more effectively.
- Improving quality of health services
- Improving roles and functions of Health Profession Councils (HPC)
- Strengthening registration and licensing process and ensure a harmonized information system.
- Strengthening governance across the health systems to promote gender mainstreaming and equity

Numerous activities and interventions have been imposed to strengthen HRH regulation and governance effectively and efficiently. The MoH will establish a regulatory committee comprising multisectoral partnership and engagement and outline the clear roles and responsibilities of the committee for monitoring and regulating dual practice, strengthen each HPC's functions and responsibilities for registration, health practitioner license and re-licensing.

Quarterly reflection on the workforce organization model within each service delivery area and reviewing successful efforts and areas for improvement, and providing flexibility in the arrangement of work, shift, duty, and reducing the hours of duty. Building a team spirit of dignity, compassion and respected care for patients regardless their age, religion, social and cultural values by complying with clinical protocols, standards, guidelines, MoH policies and strategies, and addressing gender inequity in health workforce.



Enabling factors and implementation

Successful implementation of the HWDP requires government-led multisectoral partnership, and effective cooperation between education, finance, health, labour and employment and social affairs sectors, as well as collaboration with professional councils and associations, along with other stakeholders from both public and private sectors. All partners can contribute valuably to achieve the objectives of the plan by actively advocating for commitments and mobilizing catalytic and sustainable investments in the healthcare workforce, building institutional capacity for implementation of actions, supporting data collection and use, to guide policy and decision-making; and promoting action and accountability.

Emerging digital technology and innovations provide opportunities to enhance the methods of teaching and learning, improving delivery and organization of a wide range of health services, improving people's access, and adapting responsiveness of health systems to the needs of individuals and communities.

The MoH must focus on increasing investment and strengthening infrastructure of health service delivery that manages absorption of new graduates into public sector health service, equitable distribution of health workforce across the country, along with timely recruitment and retention of health workers. It has been recognized that the growth in education, skills and jobs in health is associated with financial and social benefits for the Cambodian economy and this investment is integral to Cambodia. Strengthening multisectoral collaboration and partnership engagement are the key enabling factors for success

List of acronyms

CBE	Competency Based Education
CD	Communicable Disease
COVID-19	Coronavirus Disease 2019
CPA	Complementary Package Activities
CPD	Continuing Professional Development
EPHFs	Essential Public Health Functions
DNM	Doctor, Nurse, Midwife
DoP	Department of Personnel
GDP	Gross Domestic Product
HRDD	Human Resource Development Department
HRMIS	Human Resource Management Information System
HRH	Human Resource for Health
HRH-OC	Human Resource for Health Oversight Committee
HSP	Health Strategic Plan 2025-2034
HPC	Health Professional Council
HWDP	Health Workforce Development Plan
MCH	Maternal and Child Health
MoH	Ministry of Health
MPA	Minimum Package Activities
NCD	Non-Communicable Disease
OD	Operational district
RGC	Royal Government of Cambodia
PHC	Primary Health Care
PHD	Provincial Health Department
SDG	Sustainable Development Goals
UHC	Universal Health Coverage
VHSG	Village Health Support Group
WHO	World Health Organization

SECTION

1 INTRODUCTION



SECTION

1 INTRODUCTION

Achieving Sustainable Development Goals (SDG) to ensure healthy lives and promote well-being for all at all ages, including Universal Health Coverage (UHC), requires a strong and resilient health system supported by an adequate number of multidisciplinary health workforces with an appropriate skill-mix, well trained, equitably distributed, effectively regulated, and strongly motivated to provide quality and safety in the delivery of essential health service package[1]. The World Health Organization (WHO) estimates the global shortage of 11 million health workers by 20302. The shortages of health workforce are most severe in rural and remote areas, especially in low-and lower-middle-income countries, however, every country at all levels of socioeconomic status face varying degrees of difficulties in the education, employment, deployment, retention, and performance of their workforce[2].

The health workforce, in the Western Pacific Region, are unprepared to meet the population's health needs, with various existing gaps and challenges. Most countries in the region have limited skills and competencies to deliver a wide range of interconnected services such as continuity of care and people-centredness, coordinated care, case management, care transition management and patient navigation3. Usually, training and distribution of workforce are mainly focused on a profession-by-profession basis, considering medical doctors, nurses, midwives, dentists and pharmacists separately. Integrated and people-centred care networks not only requires the aforementioned professions but also a more diverse set of occupations such as physical and occupational therapists, medical assistants, community health workers, social workers, mental health workers, long-term care workers, dieticians, counsellors, home-care workers and care coordinators. COVID-19 pandemic has served as a reminder that the public health and emergency workforce, including field epidemiologists and public health managers, is also essential, yet insufficient in numbers and capacities[3]. In terms of the density of health workers (doctor, nurse, midwife), China, Cook Islands, Fiji, Kiribati, Malaysia, the Republic of Korea, Samoa, Solomon Islands and Viet Nam have demonstrated significant improvements, while progress appears relatively slow in Cambodia, the Lao People's Democratic Republic, Papua New Guinea and Vanuatu[3].

Cambodia has made significant achievement from the last two decades in improving health outcomes through building a stronger health system and competent health workforce, increasing life expectancy to 75.5 years in 2019[4]. The new findings from Cambodia Demographic Health Survey (CDHS)[5] 2021/2022 indicated ongoing reduction in maternal, new-born, infant, and child under 5 mortality rates, improving unmet family planning needs and child nutrition. Cambodia has achieved the 90-90-90 global HIV treatment targets in 2017, three years earlier than the global goal, substantial reduction in Malaria incidence and successful COVID-19 response with significantly high coverage of vaccination (91% coverage of two doses and 64% coverage of booster doses as of September 2022).

The RGC has contributed tremendously in the investment of health workforce education and deployment into the public sector, particularly in remote and rural health facilities. Over the last decades, there has been a significant increase in the numbers of health workforce and national budget for the health sector. The Ministry of Health successfully implemented the national Health Equity and Quality Improvement Project (H-EQIP) with the aim to improve equitable access to quality and safe health care services, particularly for the poor and vulnerable population.

Cambodia responded well to the COVID-19 pandemic, swiftly and effectively implementing public health measures and securing vaccination roll out across the country. The swift and effective introduction of the COVID-19 cash transfer also mitigated multiple impacts on the poor and vulnerable households. Now, in recovery from the COVID-19 pandemic, investment in health is crucial to underpin resilient health systems for universal health coverage as an essential part of socioeconomic recovery and continued economic growth.

The current reform in pre-service education in Cambodia, shifting towards competency-based education is in progress through implementing the Strengthening Pre-Service Education System for Health Professionals Project (2020-2026). This project aims to build a future generation of health professionals with skills and competencies, first targeting six health professions such as medical doctors, pharmacists, dentists, laboratory technicians, nurses, and midwives.

Achieving universal health coverage will require an approach in service delivery, and a workforce that is competent to deliver and innovative technology to assist. The HWDP 2025-2034 is not only a continuation of the MoH's core operational plan but also serves as a strategic tool for the collective vision of the health sector priorities and beyond with a focus on health. This plan serves high-level multisectoral policy dialogues to identify health priorities and meet the aspiration for a safe and healthy Cambodia 2034 by building a resilient health system for UHC.

The HWDP support operations and implementations of four strategic shifts and strategic objectives of the Health Strategic Plan 2025-2034:

1. Shift from risk to resilience – ensuring a health system prepared for, able to respond to and resilient against all forms of public health threat and emergency.

2. Shift from cure to care – strengthening the care continuum with primary health care as the foundation for UHC.



3. Shift from targeted to universal coverage – enhancing social protection and equitable coverage.

4. Shift from volume to value – enhancing, safety, quality and efficiency ensuring outcomes from health investments.

One of the five cross-cutting enablers underpinning these strategic shifts of Health Strategic Plan 2025-2034 is building health workforce fit for the future including securing competent health professionals in public sector health services, particularly primary care, incentivising promotive and preventative health service delivery and essential public health functions through implementing strategies to ensure a more equitable health workforce distribution and promoting a safe and fulfilling work environment.

The HWDP also aligns with the directions of Health Strategic Plan 2025-2034, the Royal Government's Roadmap towards UHC in Cambodia and the PHC Booster Implementation Framework. This builds a health workforce ready to address future health needs by ensuring the health system is fully equipped with adequate number of competent, well-motivated, equitably distributed and regulated health workforce with an appropriate skill-mix for providing timely, safe, quality, and effective people-centred care.

SECTION

2

OVERVIEW OF THE PLAN



SECTION

2

OVERVIEW OF THE PLAN

Purpose of the plan

The HWDP 2025-2034 will provide health leaders and providers at all levels with strategic guidance and practical interventions within this decade. The HWDP is the MoH's strategic and operational tool to guide the MoH and all health institutions in effectively and efficiently managing and governing the health workforce.

It renews a long-term vision of the health workforce development and re-affirms the MoH's commitment to fulfill the stated health vision for safe and healthy lives and well-being for all Cambodians. It outlines the strategic framework for further strengthening operations of health workforce interventions in the entire health sector (both public and private) to address priorities and to ensure consistent application of strategies across health programs. The plan also clearly outlines benefits of investing in the health workforce, contributing to the country's economic growth.

By 2034, the health workforce of Cambodia will be functioning in a health system that delivers primary health care, is proactive and resilient to health threats to support a safehealthy lives and well-being for all Cambodians.

Vision

Health workforce fit for the future to ensure safe and healthy lives and well-being for all Cambodians.

Goal

The health system will have appropriately sized and skill mixed, competent, motivated, well- regulated and equitably distributed health workforce to ethically provide quality people- centred care for all Cambodians.

Strategic objectives

(1) ***Health workforce information:*** *Improved access to health workforce information and use for decision making and future planning.*

(2) ***Education and training:*** *The health system with competent health workforce to meet future needs and challenges.*

(3) ***Distribution:*** *Equitable distribution and well retained health workforce to fit for purpose and responsive to the needs.*

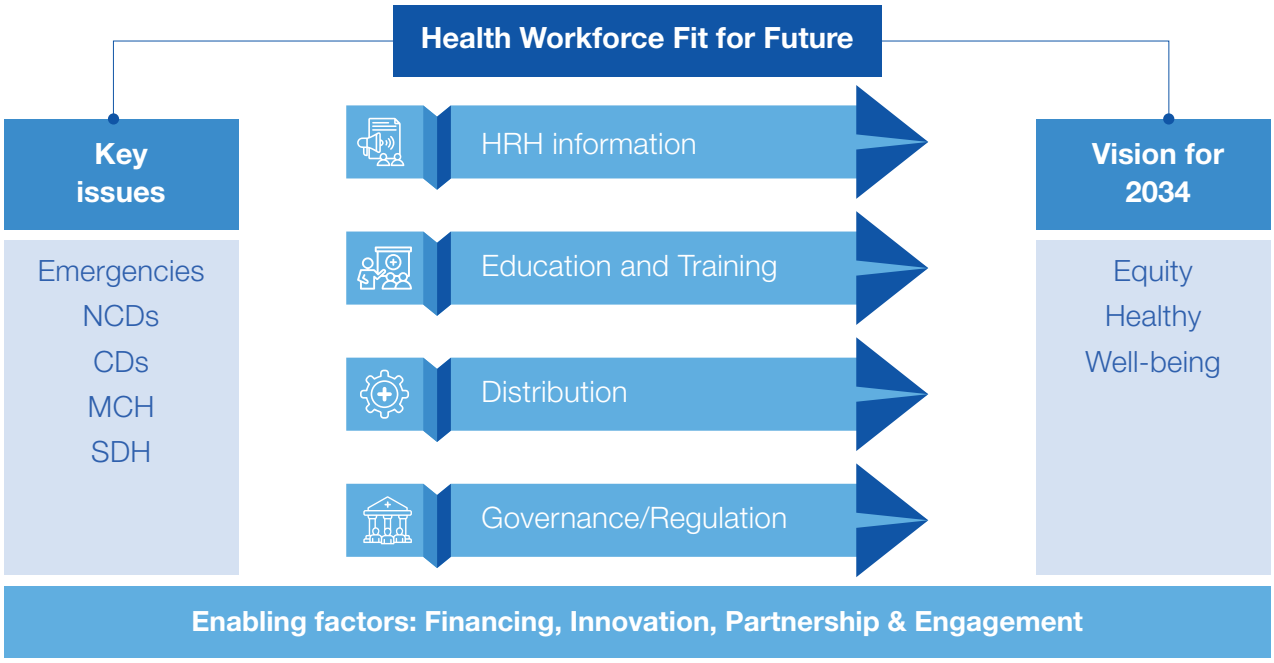
(4) ***Governance and regulation:*** *Strong governance and regulated health workforce for safe and quality health services with supportive working environment.*

Strategic framework of the HWDP

The Strategic Framework was designed based on the analysis of the current and future key health issues the country is facing —COVID-19 still exists, and it is not the last pandemic; NCD is increasing and will overwhelm the health system if there are no actions taken in the present; some communicable disease eliminations will need to be realistic; high expectation to maintain all health achievements/ accomplishments without reverse, and social determinants need to be addressed. Refocusing on investment in PHC must be realistic and widely visible as a practical solution for Cambodia to reach UHC in the context of decentralization and deconcentration.

The Framework identifies four interlinked strategic objective priorities—health workforce information, education and training, distribution, governance and regulation. Re-emphasizing roles and functions of the health workforce for PHC, takes into account the specific country context to address the health system and population needs. These strategic areas are prioritized to achieve the goals and vision, along with identifying sustainable financing mechanisms, shifting to integrated digital health and innovative approach, and strengthening multisectoral collaboration and partnership engagement as the key enabling factors for success.

Figure 1: Strategic framework



Note: NCDs: Non-Communicable Diseases; CDs: Communicable Diseases; MCH: Maternal and Child Health; SDH: Social Determination of Health; and PHC: Primary Health Care



Process of development

The HWDP 2025 – 2034 has been developed under the strategic guidance and leadership of the Human Resources for Health Oversight Committee (HRH-OC) and technical coordination by the Departments of Personnel and Human Resources Development of the Ministry of Health. The development has taken place through a series of consultative processes including reviewing progress made in the last five years, gathering additional insights and future scoping exercises using the available evidence.

Key policy questions included:

- What will be the key health needs over the next ten years and beyond?
- What are the implications of aging, NCDs (including mental health), public health emergencies, climate change and environmental risks?
- What principles are currently in place to support universal health coverage and reach the unreached?
- What will be the preferences of better-informed citizens, of policymakers, and payers?
- What type of health workforce will be required, and with what skills and competencies? How many will be needed?
- What are the key labour market dynamics in Cambodia (e.g., production and absorption capacity, unemployment rate, dual practice) and how are they evolving?
- How will technology change service delivery and what are its implications for health workforce development?

The processes used include:

- Holding various consultative meetings as part of cross-sectoral activities, including a review of the progress made under the previous HWDP.
- Regularly collecting inputs and feedback to ensure alignment with the Health Strategic Plan, involving the Ministry of Health and broader stakeholders through an online consultation process.
- Analyzing the current health workforce's availability, distribution, skill mix, and labour market dynamics.
- Determining the workforce outlook and identifying gaps to move toward the future, and designing actionable recommendations to accomplish the goals.

What is new in the HWDP is the 2034 context informing the strategic interventions including:

- A detailed analysis of the impact of COVID-19 and the lessons learned to support health workforce development, alongside efforts to explore new approaches for education and recruitment to regain progress following the disruptions.

- Working within the new health system context that shifts responsibilities for services and interventions to subnational governments (based on decentralization and deconcentration) and supporting new initiatives emerging from the subnational level.
- Working with a broader and more diverse health workforce, including newly emerging health professional groups in epidemiology, public health, laboratory, and environmental health.
- Introducing key challenges and priority areas that were not visible in previous years, but are now recognized as critical moving forward such as primary health care, digital health, and the response to noncommunicable diseases through a health system-wide and multi-sectoral approach.



The Success of HWDP implementation

With successful implementation of HWDP, Cambodia will have diverse types of competent health workers (equipped with the necessary knowledge, skills, and attitudes) to provide the best quality of health services and meet the aspirations of communities. These health workers will be available where and when they are needed, supporting not only the treatment of diseases but also the ongoing physical and emotional health and wellness. Over the ten-year implementation plan, the MoH and communities aim to achieve the following successes and changes:

- All health facilities will have adequate health workforce and skill mix, to fully deliver the essential health service package and essential public health functions with quality and safety
- People and communities will have their expectations met, given that health workers will be present at health centers at all times, and actively engaged in communities providing health services, promoting health, and protecting health.
- All health professional education programs will be accredited to provide CBE for all types of health professions.
- Health workers will be well trained and are able to provide integrated, people-centered care through a PHC approach. They will coordinate care with other providers through a functional referral system, linking health centers and hospitals with social services, rehabilitation and other care workers to meet comprehensive health needs.
- A robust regulatory mechanism will be in place for registration and licensing, effective dual practice regulation, and staff performance appraisal.
- The health system will foster a supportive working environment with enablers that empower the health workforce to work to reach their full potential, driving best quality and motivation.
- The health systems with recognition of public health workforce, allied health professionals, community and social health workers to deliver essential public health functions. These include the prevention and promotion of health, health emergencies preparedness and mitigation and the delivery of effective health education, counselling and support to individuals, families and caregivers reaching people not only at health facilities but also at their homes.

SECTION

3

HEALTH AND THE HEALTH SYSTEM CONTEXT



SECTION

3

HEALTH AND THE HEALTH SYSTEM CONTEXT



Cambodia's population and social economic status

According to the population census in 2019, Cambodia's population increased from 11.4 million in 1998 to 15.6 million in 2019 (49% and 51% for males and females respectively). Within an average annual growth rate of 1.4% over this period, the total population is projected to increase to 18.1 million in 2030. Phnom Penh had the highest population, with 2.3 million which accounts for 14.7 % of the total population4. A large proportion of the population (60.6%) lives in rural areas, where agricultural products are the main source of income. The aging population is growing, people aged over 60 made up 7.6% of the country's total population in 2019 representing a 40% increase since the last census in 2008. This figure is expected to rise to 16.4% of the total population by 2050[6].

Prior to 2020, Cambodia has experienced impressive economic growth at 7% annually, and reduced poverty rate to below 10%[7]. This enabled the government to increase the national health budget by nearly 2.5 times over the last ten years. The national budget system has been improved through better and more effective management at both allocation and operational levels. During the COVID-19 pandemic, the economic growth rate contracted by 3.1% in 2020 but rebounded to 3% in 2021[8], and the poverty rate rose to 17.8% in 2022, based on a new poverty line estimate.

The Royal Government of Cambodia has identified 4 Strategic Goals and 4 Priority Areas to reinforce its commitment to further implement the Pentagonal Strategy. Cambodia has set an ambitious goal of becoming an upper middle-income country by 2030 and a high-income country by 2050[7].



Structure of the health systems

At the national level, the MoH consists of general departments, departments, training institutions, national hospitals, national centres and programs responsible for the development of health policy, strategic planning, and regulations to maximize the quality of health services in both the public and private sectors. There are 12 National Hospitals to provide complex and specialized cares.

At the subnational level: Provincial Health Departments (PHD) play key roles in connecting with the central MoH, and managing Provincial Hospitals, Operational Districts, and Regional Training Centres. Operational District (OD) manages and operates health services at Health Centres/Health Posts and District Referral Hospitals. In 2024, there are 103 ODs across the country.

As of December 2024, there are 136 public hospitals, including 12 National Hospitals, 25 Municipal and Provincial Hospitals, and 99 district-based Referral Hospitals defined under the Complementary Package of Activities (CPA), and 1,309 health centres to deliver the defined Minimum Package of Activities (MPA)[9].

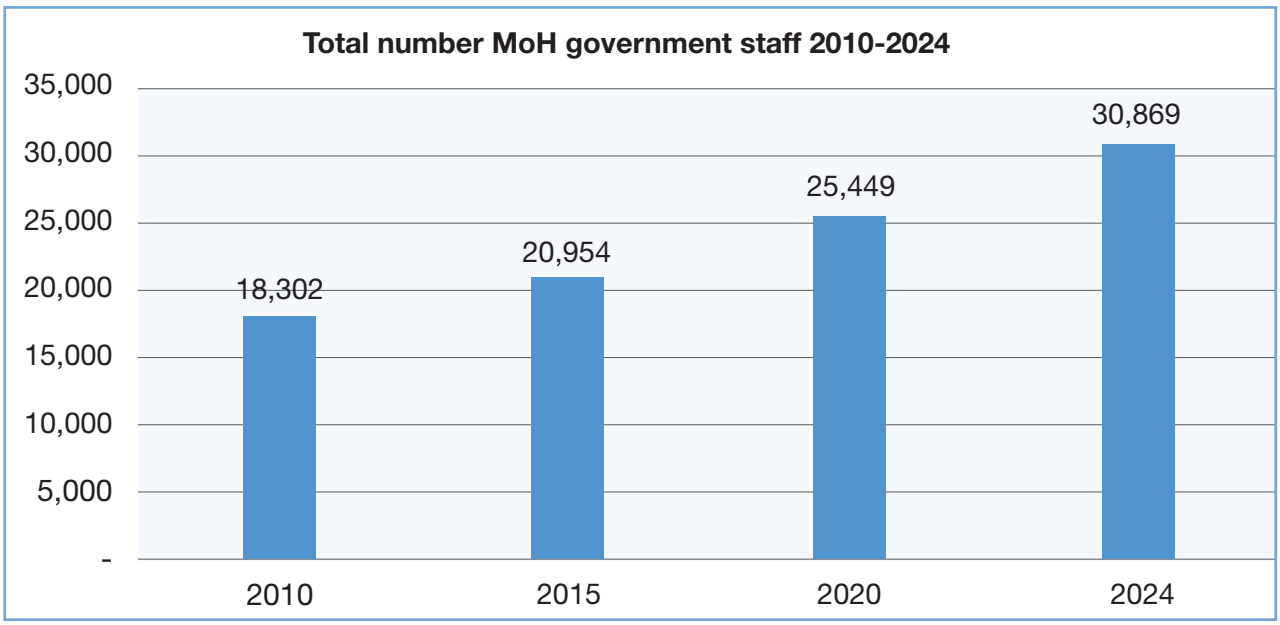
Cambodia has a mixed health system consisting of both public and private sectors. The Royal Government of Cambodia has mandated the Ministry of Health to lead and manage the health sector both in the public and private sector. Private health facilities are highly dominant and complex, with rapid growth ranging from small-sized (sole providers, medical cabinets, nursing and midwifery rooms) to big-sized (polyclinics and hospitals). In 2024 there were 19,684 private healthcare facilities9. According to the findings from the Cambodia Socio-economic Survey 2021[10], 84.5% of the population sought care from private providers. This trend has remained unchanged over the last 15 years.

Cambodia's health workforce profile

The number of health workforce in the public sector, including non-health professionals such as accountants, IT personnel, drivers and cleaners show significant increase from 2010 to 2024. In 2010, there were total of 18,302 permanent employees within the Ministry of Health, which increased to 30,869 in 2024.

The growth of the public sector health workforce was due to the upgrading of Kantha Bopha Hospital to a national hospital, staff officially recognised as government employees in 2016. In response to the COVID-19 pandemic, there were 4,130 and 3,316 health workers recruited in 2021 and 2022, respectively.

Figure 2: Total numbers of health workforce (government civil servants)



Source: MoH National Health Congress report 2010-2024

MoH government civil servants by professions

Table 1 below shows the categories and numbers of MoH government staff between 2010 and 2024. The nursing cadre makes up the largest proportion of total public sector health workforce, accounting for 41%, followed by midwives at 28% in 2024 Medical doctors including specialists and medical assistants comprised 16%. The number of medical doctors slightly decreased between 2010 and 2015 due to the discontinuation of the education program for medical assistants. Non-health professionals include IT officers, drivers, receptionist, cleaners, others.

Other important health professionals that the MoH will need to formally recognize and include in the government positions and recruitment plan are public health professionals or specialists, field epidemiologists, biomedical engineers, allied health professionals (not only physiotherapists but also dieticians, speech therapists, prosthetists/orthotists for rehabilitation services), senior laboratory professionals (virologists, bacteriologists, microbiologists), IPC specialists, social health workers and community health workers (village health support group, VHSG).

Table 1: MoH government staff by professions: 2010-2024

MoH government staff, by type of professions	2010		2015		2020		2024	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Medical doctor	3,226	18%	3,209	15%	4,103	16%	4,869	16%
Pharmacist	464	3%	525	3%	762	3%	893	3%
Dentist	189	1%	250	1%	500	2%	589	2%
Nurse	8,514	47%	8,918	43%	10,809	42%	12,783	41%
Midwife	3,678	20%	5,412	26%	6,988	27%	8,505	28%
Lab-technician	424	2%	506	2%	868	3%	1,256	4%
Physiotherapist	-	0%	-	0%	216	1%	232	1%
X-ray technician	-	0%	-	0%	115	0%	142	0%
Non-health professionals	1,807	10%	2,134	10%	1,088	4%	1,600	5%
Total	**18,302**	100%	**20,954**	100%	**25,449**	100%	**30,869**	100%

Source: Data from National Health Congress report 2010-2024

Government staff distribution by public health facilities and institutions

In 2024, 76% of government staff were distributed to the sub-national level, with the majority stationed at health centers. The numbers of nurses (5,184) and midwives (5,115) deployed to health centers were nearly equal, while medical and specialist doctors were more concentrated more at national hospitals. The medical doctor to nurse ratios at national, provincial, and district hospitals were 1:1.8, 1:1.7, and 1:1.8, respectively. However, at the MoH policy and planning level, the number of medical and specialist doctors were 4.2 times higher than that of nurse professionals.

Table 2: MoH government staff by profession and health facility, 2024

MoH Government staff 2024	Total	Medical doctor	Pharmacist	Dentist	Nurse	Midwife	Lab-technician	Physio	X-ray tech	Others
Central level and regional levels (24%)	**7,311**	**1,957**	**311**	**114**	**3,044**	**581**	**387**	**78**	**70**	**769**
MoH office	**563**	188	100	21	50	15	7	1	-	181
National Hospitals	**5,366**	1,451	92	62	2,738	380	236	68	66	273
Training institutions	**172**	18	5	7	31	13	4	1	1	92
National centers / programs	**1,045**	286	109	4	166	124	137	8	3	208
Regional Training Centers	**165**	14	5	20	59	49	3	-	-	15
Provincial level (76%)	**23,558**	**2,912**	**582**	**475**	**9,739**	**7,924**	**869**	**154**	**72**	**831**
Provincial Health Department	**1,591**	324	143	36	512	256	38	5	1	276
Provincial Hospitals	**4,360**	972	127	129	1,673	931	288	71	31	138
Operational Districts	**1,793**	322	159	37	705	338	33	14	1	184
District hospitals	**4,781**	933	121	194	1,665	1,284	389	55	38	102
Health centers	**11,033**	361	32	79	5,184	5,115	121	9	1	131
Total	**30,869**	**4,869**	**893**	**589**	**12,783**	**8,505**	**1,256**	**232**	**142**	**1,600**

Source: Department of Personnel, MoH, 2024



Production of health professionals

Leadership and governance in health profession education fall under the MoH. The Ministry is involved in the decision-making process regarding the establishment of new health sciences training institutions. The Human Resource Development Department (HRDD) is responsible for monitoring and coordinating both pre-service and in-service training. Private health sciences training institutions, which are growing in number, are technically advised and supervised by MoH.

By 2024, there were seven public training institutions, three in Phnom Penh ((University of Health Science, National Institute of Public Health, and the Institute of Health Sciences of the Royal Cambodian Armed Forces), and four Regional Training Centers in Battambang, Kampong Cham, Kampot, and Steung Treng provinces. In recent years, there has been tremendous growth in the number of private institutions (currently 12 institutions) offering a variety of pre-service training and education.

Table 3 presents information on the number of students who need to be selected and trained, number of successful student intakes, and the number of graduates from 2010 to 2024. Annual quotas for medical doctor professions are proposed at around 950, while quotas for nursing and midwifery professions were 3,980 and 2,815 respectively, based on the capacity of training institutions. Since 2016, successful student intake for Associate and Bachelor's degree in Nursing and Midwifery education has dropped dramatically due to inadequate number of applicants. This does not reflect a lack of training institution's capacity to absorb more students or a need to build additional training institutions. There is an emerging concern and an urgent need to identify the causes of this trend and take corrective action, otherwise, the country will face a more critical shortage of nurses and midwives now and in the future.

Table 3: Total health workforce production from 2010-2024

Year*	Doctor			Nurse			Midwife		
	Quota	Intake	Graduate	Quota	Intake	Graduate	Quota	Intake	Graduate
2010	600	582	92	-	680	499	-	1,039	367
2011	770	692	134	-	990	751	-	1,080	801
2012	770	735	239	-	1,242	1,164	-	1,380	821
2013	810	811	239	-	3,349	1,366	-	2,688	1,127
2014	758	467	980	-	3,562	1,585	-	2,900	1,533
2015	760	613	577	-	3,602	2,508	-	2,818	2,087
2016	760	735	905	3,580	2,367	3,444	2,685	1,389	2,286
2017	790	790	908	3,480	1,262	3,331	2,635	654	1,947
2018	790	795	629	3,630	1,311	2,894	2,825	566	1,604
2019	860	731	765	3,630	1,822	1,390	2,865	400	830
2020	900	916	714	3,530	1,199	1,152	2,765	375	880
2021	900	914	690	3,580	1,263	1,027	2,815	570	370
2022	950	915	871	3,920	1,563	1,664	2,915	957	494
2023	950	982	455	3,920	1,687	1,099	2,915	1,039	320
2024	950	995	420	3,980	2,892	1,569	2,815	1,125	719
Total	**12,318**	**11,673**	**8,618**	**33,250**	**28,791**	**25,443**	**25,235**	**18,980**	**16,186**

*Data 2010-2012 excluded students from private training institutions. Source: HRDD and MoH National Health Congress report 2010-2024

Numbers of graduates, recruitment, and attrition rate

From 2008 to 2024, the country produced an average of 4,061 health professionals per year, but only 42% of them were recruited as MoH government civil servants. In general, MoH requests the government to recruit around 3,000 new staff annually to meet the MPA and CPA staffing requirements for delivering the defined essential service packages. Due to limited capacity to absorb as needed each year, the government provided around 700 to 1,300 new quotas, enough to replace those who retired or left their posts. However, the number of medical volunteers, floating and contracted staff at all levels of health facilities designated as MoH official civil servants were 4,896 in 2016 and 4,130 in 2021.

Around 316 MoH government staff retire annually, and 152 resign or are terminated from their posts, resulting in an average attrition rate of 2.1%. Currently, the MoH does not have a comprehensive retention policy or strategy to retain health workers in rural and remote areas.

Table 4: Numbers of MoH total staff, graduation, recruitment and attrition (2008-2024)

Year*	MOH staff	Graduation	MoH recruitment	MoH absorption rate	Retirement	Leaving	Total lost	Attrition rate
2008	18,096	1,822	703	39%	364	245	609	3.4%
2009	18,113	933	800	86%	314	235	549	3.0%
2010	18,302	1,181	865	73%	424	267	691	3.8%
2011	18,814	1,981	1,016	51%	350	184	534	2.8%
2012	19,721	2,521	1,474	58%	391	188	579	2.9%
2013	20,668	3,736	1,325	35%	271	118	389	1.9%
2014	20,974	5,115	1,014	20%	454	219	673	3.2%
2015	20,954	6,206	433	7%	470	128	598	2.9%
2016	25,382	7,703	4,896	64%	406	168	574	2.3%
2017	25,459	7,448	710	10%	424	148	572	2.2%
2018	25,438	6,620	680	10%	424	131	555	2.2%
2019	26,087	3,848	1,300	34%	400	162	562	2.2%
2020	25,449	3,638	-	0%	339	85	424	1.7%
2021	29,130	2,844	4,130	145%	83	63	146	0.5%
2022	32,240	4,455	3,316	74%	81	87	168	0.5%
2023	31,452	3,996	206	5%	83	72	155	0.5%
2024	30,869	4,989	16	0%	91	79	170	0.6%
Average		**4,061**	**1,346**	**42%**	**316**	**152**	**468**	**2.1%**

Source: MoH National Health Congress report 2008-2024, DoP, HRDD



Numbers of registration and licensing

The Royal Government of Cambodia introduced Royal Decrees to establish five Health Professional Councils (HPC): Medical Council of Cambodia, Dental Council of Cambodia, Cambodian Midwives Council, Cambodia Council of Nurses, and Pharmacy Council of Cambodia. Each HPC is responsible for registration, issuing licenses, regulating health professional practice, and developing scopes and standards of practice. According to the Law on Regulation of Health Practitioners, registration refers to the process of registering a person as a qualified health professional. Licensing is the authorization granted by the HPC to practice the profession after registration and fulfillment of legal requirements.

Table 5 shows numbers of medical doctors, pharmacists, dentists, nurses, and midwives who have registered and been licensed at their respective councils. These registration numbers are considered the current stock and the availabilities of the health workforce. However, they may not fully represent the actual numbers, as registration and licensing processes are ongoing to achieve 100% by each HPC, particularly, for health workers employed in public health facilities. Notably, the number of registrations and licenses for nursing and midwifery professionals is the same, and there is a need to establish additional HPCs for other health professionals beyond the five existing HPCs.

Table 5: Numbers of HWF registration and licensing at HPC 2024 by provinces

# of HWF registered and licensed by provinces	Registered					Licensed				
	Doctor	Pharmacist	Dentist	Nurse	Midwife	Doctor	Pharmacist	Dentist	Nurse	Midwife
1. Banteay Menchey	315	218	41	1,012	633	272	218	36	1,012	633
2. Battambang	472	271	71	785	916	414	271	64	785	916
3. Kampong Cham	446	204	40	1,107	797	391	204	32	1,107	797
4. Kampong Chhnang	183	95	19	544	330	181	95	18	544	330
5. Kampong Speu	479	117	37	729	568	422	117	33	729	568
6. Kampong Thom	240	110	35	592	413	217	110	31	592	413
7. Kampot	315	84	31	795	683	291	84	21	795	683
8. Kandal	848	316	94	1,239	729	664	316	85	1,239	729
9. Koh Kong	76	21	8	201	125	65	21	8	201	125
10. Kratie	124	64	9	617	365	110	64	9	617	365
11. Mondul Kiri	43	18	4	121	132	37	18	4	121	132
12. Phnom Penh	6,252	2,968	938	12,633	2,359	5,011	2,968	840	12,633	2,359
13. Preah Vihear	92	33	4	446	280	73	33	4	446	280
14. Prey Veng	500	102	19	745	510	427	102	17	745	510
15. Pursat	120	81	22	365	369	108	81	21	365	369
16. Ratanak Kiri	96	41	8	305	201	71	41	6	305	201
17. Siem Reap	657	390	124	1,277	717	622	390	129	1,277	717
18. Preah Sihanouk	222	78	32	451	248	170	78	29	451	248
19. Stung Treng	77	28	6	280	201	57	28	6	280	201
20. Svay Rieng	252	73	21	769	400	229	73	19	769	400
21. Takeo	449	123	37	841	816	400	123	36	841	816
22. Otdar Meanchey	81	34	3	308	187	85	34	3	308	187
23. Kep	20	10	2	71	66	20	10	2	71	66
24. Pailin	64	24	3	97	62	55	24	1	97	62
25. Tboung Khmum	312	99	14	888	514	293	99	15	888	514
Total	**12,735**	**5,602**	**1,622**	**27,218**	**12,621**	**10,685**	**5,602**	**1,469**	**27,218**	**12,621**

Source: Data from all five health professional councils, 2024



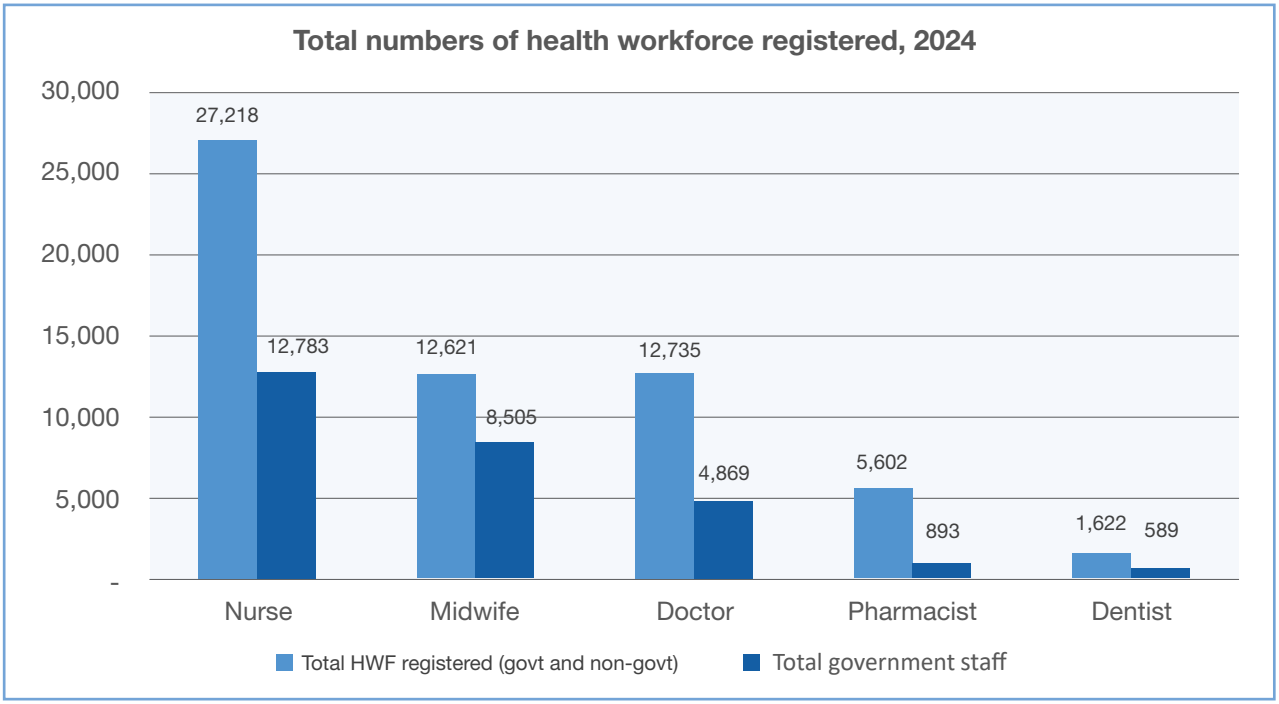
Government and non-government HWF

HWF management is a complicated task. In Cambodia, there is no mechanism to distinguish between public and private sectors or between clinical and non-clinical practice, as many other countries do, due to dual practice. Some MoH government staff working at management and operational levels such as MoH department, PHD, and OD levels also deliver health care services to patients at private health facilities. Some medical doctors and specialists who deliver health services at national and provincial hospitals, also serve as professors at either public or private medical training institutions. Therefore, identifying the numbers of HWF depends on how they are counted.

Figure 3 illustrates the total health workforce registered in 2024 across all health professional councils (both public and private sectors), compared to MoH government staff. Among government staff, there are 4,869 (38%) doctors, 589 (36%) dentists, and 893 (16%) pharmacists out of a total

of 1,2735 doctors, 1,622 dentists, and 5,602 pharmacists, respectively. The number of nurses is 12,783 (47%)and midwives 8,505 (67%) among government staff, out of total 27,218 nurses and 12,621 midwives, respectively. These figures highlight a significant gap between production and absorption capacity in the public sector, especially pharmacists.

Figure 3: Total numbers of health workforce registered, 2024



Source: Department of Personnel, MoH, and health professional councils, 2024

Density of Medical Doctor, Nurse, and Midwife (DNM)

Table 6 shows the total ratio of HWF per 10,000 population, disaggregated by province, including both government and non-government staff in 2024. The density of doctors, nurses, midwives, dentists and pharmacists accounted for 34.5 per 10,000 population. The density of DNM accounted for 30.3 per 10,000 population. This density was very high in Phnom Penh, as this included those working at the MoH central office, national institutions and centers, and national hospitals, although they actually serve the population across the country. Pursat and Oddar Meanchey provinces had very low densities of medical doctors, at only 2.6 and 2.7, respectively. Nurse density was the lowest in Prey Veng, followed by Kampong Thom province.

Table 6: Density of Medical Doctors, Nurses, and Midwives by provinces

HWF density by provinces, 2024	Ratio of HWF to 10000 population					Total DNM only
	Doctor	Nurse	Midwife	Dentist	Pharmacist	
1. Banteay Menchey	3.3	10.7	6.7	0.4	2.3	20.7
2. Battambang	4.3	7.2	8.4	0.6	2.5	19.8
3. Kampong Cham	4.5	11.2	8.1	0.4	2.1	23.8
4. Kampong Chhnang	3.2	9.4	5.7	0.3	1.6	18.2
5. Kampong Speu	5.0	7.6	5.9	0.4	1.2	18.4
6. Kampong Thom	3.2	7.9	5.5	0.5	1.5	16.6
7. Kampot	4.8	12.2	10.5	0.5	1.3	27.5
8. Kandal	6.4	9.4	5.5	0.7	2.4	21.3
9. Koh Kong	5.5	14.5	9.0	0.6	1.5	29.1
10. Kratie	3.0	15.0	8.9	0.2	1.6	26.9
11. Mondul Kiri	4.2	11.9	13.0	0.4	1.8	29.2
12. Phnom Penh	24.9	50.4	9.4	3.7	11.8	84.7
13. Preah Vihear	3.3	15.9	10.0	0.1	1.2	29.2
14. Prey Veng	4.3	6.4	4.4	0.2	0.9	15.1
15. Pursat	2.6	7.9	8.0	0.5	1.8	18.5
16. Ratanak Kiri	4.0	12.8	8.4	0.3	1.7	25.2
17. Siem Reap	5.9	11.5	6.4	1.1	3.5	23.8
18. Preah Sihanouk	6.5	13.2	7.3	0.9	2.3	27.0
19. Stung Treng	4.2	15.4	11.0	0.3	1.5	30.6
20. Svay Rieng	4.4	13.3	6.9	0.4	1.3	24.6
21. Takeo	4.5	8.5	8.2	0.4	1.2	21.3
22. Otdar Meanchey	2.7	10.2	6.2	0.1	1.1	19.0
23. Kep	4.3	15.1	14.1	0.4	2.1	33.5
24. Pailin	7.8	11.8	7.5	0.4	2.9	27.0
25. Tboung Khmum	3.7	10.4	6.0	0.2	1.2	20.1
Total	**7.3**	**15.7**	**7.3**	**0.9**	**3.2**	**30.3**

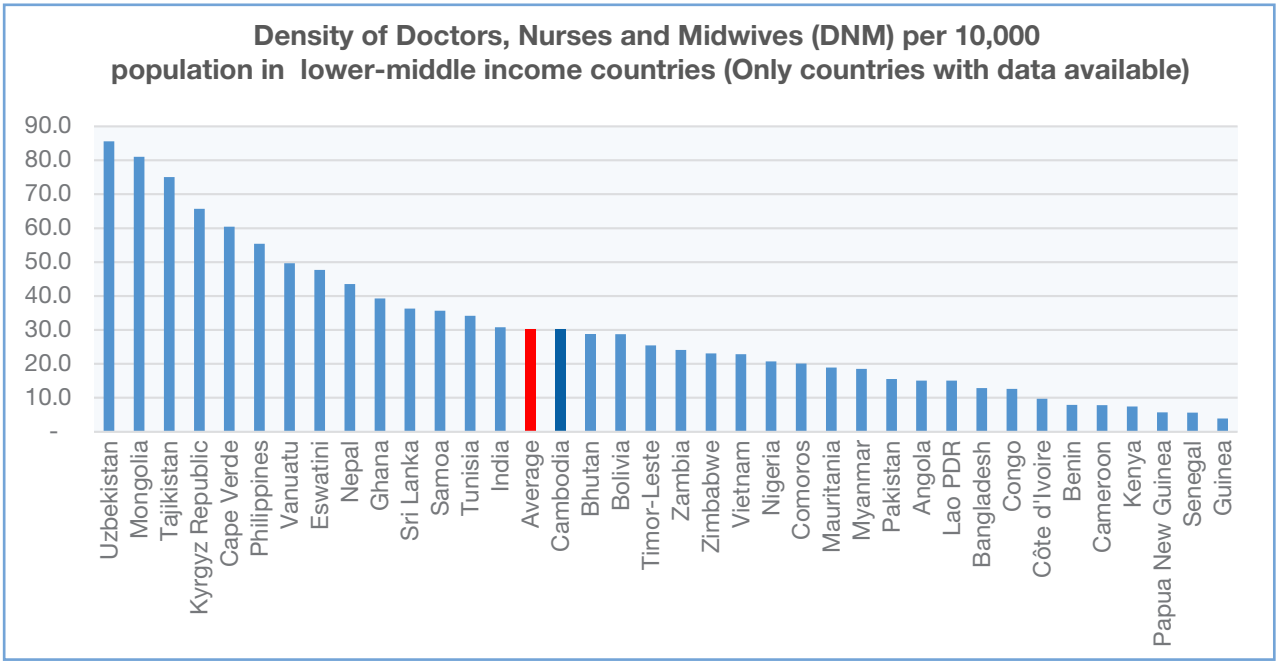
Source: Data from all five health professional councils, 2024



Country comparisons

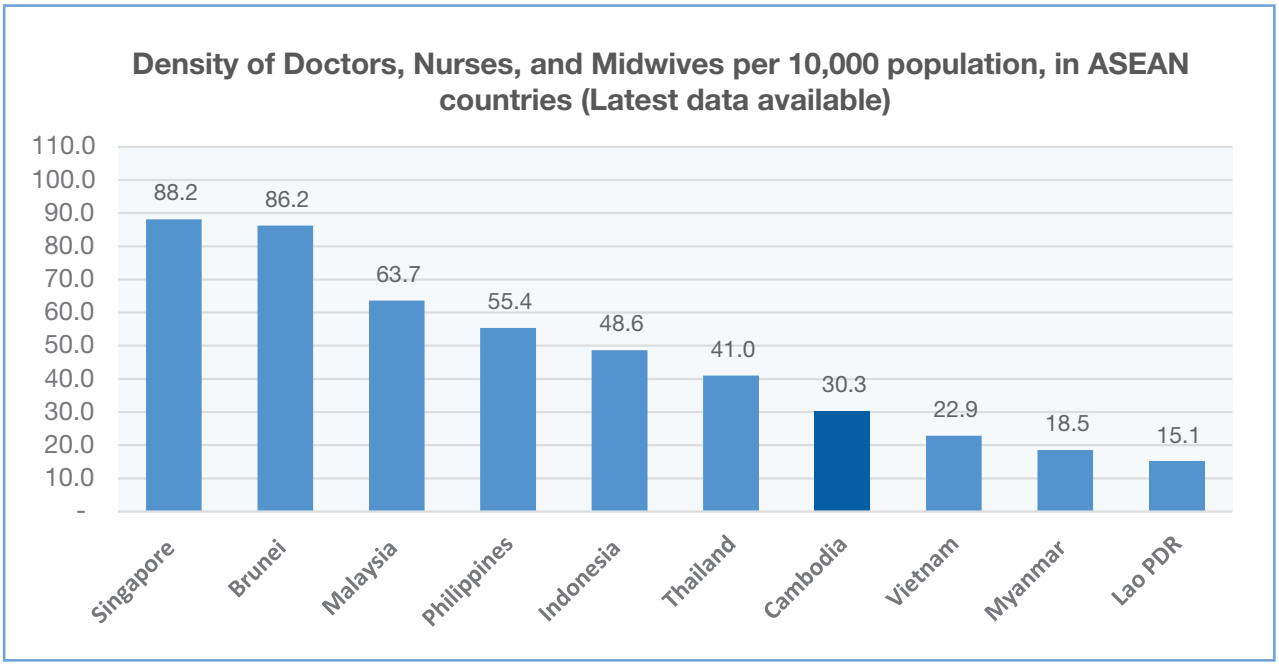
When compared to countries with the same economic profile, lower-middle-income countries, Cambodia's DNM density of 30.3 per 10,000 population is equivalent to the average among 36 countries (Figure 4). However, the country ranks fourth lowest in DNM density among ASEAN countries, after Lao PDR, Myanmar, and Vietnam (Figure 5).

Figure 4: DNM density in comparison to lower-middle income countries



Source: WHO National Health Workforce Account, (data for 2020, 2021, 2022 and latest year)

Figure 5: DNM density in comparison to ASEAN countries



Source: WHO National Health Workforce Account, (data for 2020, 2021, 2022 and latest year)

Numbers of health workforce need to meet MPA and CPA guidelines

Cambodia's health system is still struggling with health workforce shortage. Significant efforts have been made to absorb the appropriate number of health workers into the public MoH civil service given that current recruitment often only replaces those who leave. By 2023, based on MPA and CPA standard norms, CPA hospitals and health centers remain understaffed with a total shortage of 4,788 DNM. District and provincial hospitals required 127 more medical doctors, 962 nurses, and 24 midwives to provide the minimum essential services and interventions as defined in the CPA guidelines. At health centers, the total shortage of nurses and midwives was 3,172 and 504, respectively. Prey Veng, Kandal, Kampong Cham, and Siemreap provinces experienced the most significant shortages of DNM.

Table 7: Total shortage of doctors, nurses, midwives based on MPA and CPA guidelines 2023

DNM shortage by province, 2023	CPA			MPA		Total DNM shortage			Total shortage
	Doctor	Nurse	Midwife	Nurse	Midwife	Doctor	Nurse	Midwife	
Banteay Menchey	10	45	0	154	14	10	199	14	223
Battambang	1	24	0	194	18	1	218	18	237
Kampong Cham	10	62	2	300	51	10	362	53	425
Kampong Chhnang	1	6	0	96	19	1	102	19	122
Kampong Speu	2	51	0	112	8	2	163	8	173
Kampong Thom	0	40	0	141	16	0	181	16	197
Kampot	3	37	9	115	14	3	152	23	178
Kandal	1	89	0	343	84	1	432	84	517
Koh Kong	0	8	0	23	2	0	31	2	33
Kratie	16	45	0	80	7	16	125	7	148
Mondul Kiri	0	0	0	13	0	0	13	0	13
Phnom Penh	0	38	0	86	8	0	124	8	132
Preah Vihear	6	64	0	41	5	6	105	5	116
Prey Veng	33	139	5	318	96	33	457	101	591
Pursat	0	56	0	121	6	0	177	6	183
Ratanak Kiri	7	64	0	69	28	7	133	28	168
Siem Reap	14	34	8	291	46	14	325	54	393
Preah Sihanouk	0	13	0	22	0	0	35	0	35
Stung Treng	6	49	0	15	3	6	64	3	73
Svay Rieng	3	44	0	103	17	3	147	17	167
Takeo	5	17	0	238	13	5	255	13	273
Otdar Meanchey	0	2	0	94	10	0	96	10	106
Kep	5	15	0	8	1	5	23	1	29
Pailin	0	0	0	11	4	0	11	4	15
Tboung Khmum	4	20	0	183	34	4	203	34	241
Total	**127**	**962**	**24**	**3,171**	**504**	**127**	**4,133**	**528**	**4,788**

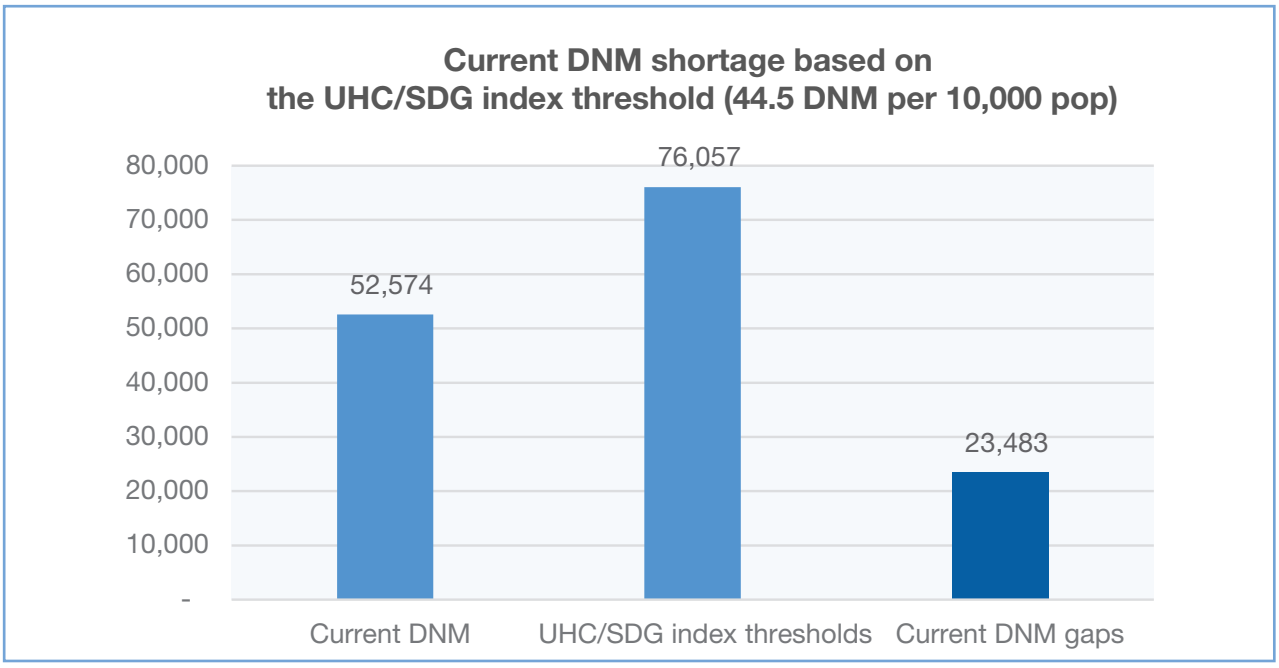
Source: Gap analysis based on MPA (2018) and CPA (2015) staffing requirements

Minimum threshold for WHO global comparisons

The Global Strategy for Health Workforce 2030 sets out the policy agenda to ensure a workforce capable of attaining the targets of the Sustainable Development Goals (SDGs)[1]. WHO developed a threshold for HWF density 44.5 health workers (doctors, nurses, and midwives) per 10,000 population (defined as an SDG index threshold). This represents an indicative minimum density reflecting the need for health workers. The threshold aims to assist global comparisons, monitor health workforce trends over time, and for advocacy. WHO does not recommend using it to set national targets for health workforce needs, because it does not reflect specific contexts such as, population health needs, health system structure, availability of financial resources, and presence of professional groups beyond the three professions (doctors, nurses, midwives) captured by this threshold[11]. HWF planning should be based on population needs and tailored to the context. The availabilities of HWF in terms of absolute numbers and density, and its composition (skill mix, for example physician to nurse ratio) should be determined according to national context.

Based on this DNM threshold, Cambodia recently has a shortage of 23,483 medical doctors, nurses, and midwives (Figure 6). According to Regional Framework to Shape a Health Workforce for the Future of the Western Pacific, increasing health workforce density is significantly associated with higher UHC Service Coverage Index[3]. On the other hand, in the African region, attaining 70% or more of UHC Service Coverage Index requires approximately 134 health workers (across a mix of 13 cadres) per 10,000 population[12].

Figure 6: DNM shortage based on UHC/SDG threshold, 2024



Source: Gap analysis based on UHC/SDG index threshold

Key health and health system challenges

Cambodia's impressive advancement in rebuilding its health sector over the years has been strongly influenced by health workforce production and management. In particular, it has built the competency and skills of health workers to provide comprehensive services for maternal and child health, including immunization, resulting in dramatic reductions in maternal and child mortality.

Now, Cambodia finds itself at a critical crossroads in its health development, amid rapid transitions in its economy, demography, epidemiology, urbanization and environment. These transitions are driving similarly rapid changes in the country's health needs, resulting in challenges for the health system to meet people's aspirations and needs to promote, provide, and protect health.

Key health system issues:

- Increasing demand for better quality health services, as the current quality of health services provided in both public and private sector is generally considered inadequate.
- Effective delivery of quality health services is constrained by inadequate resources, mainly understaffing, limited diagnostic capacity, and unmet supply needs for medicines and health commodities. This results in consistently low utilization at public health facilities.
- Competency and skill mix of health workers remain limited. The shortage of health workers has implications on the efficient delivery of health services at various levels and across different facilities within the health system.
- Inadequate capacity and resources in PHC and public health systems for health promotion and prevention, and early detection, to address health problems related to CDs, NCDs, mental health, and chronic diseases, as well as to provide public health emergency response to emerging and re- emerging infectious disease pandemics, disaster preparedness, and response.
- Rapid growth of the private health facilities and dual practice, without strong management and regulation poses a health system and political economy issue that challenges the stewardship functions of the MoH and its ability to regulate and monitor the scope of practice.
- The health system is still significantly financed by OOP and externally funded programs and activities. Government expenditure on health will need to increase, along with consideration for expanding risk pooling.
- Low investment in medical technology and ICT, with limited capacity to analyze, interpret and use data, and limited use of health data and information by clinical staff and policymakers.

Key health issues:

- **Public health emergencies will continue:** COVID-19 exists everywhere, and it will not be the last pandemic. Health risks caused by pollution, environmental health risks and climate changes have increasingly become a potential threat to public health.
- **NCDs and mental health issues are on the rise in Cambodia:** An ageing population,

changing lifestyles, consumption patterns, and rapid urbanization have led to an increase in non- communicable diseases (NCDs) including mental health problems. Figure 7 below shows the rapid increase in NCDs as a disease burden, with significant increases in cancer, diabetes, and heart disease, alongside a concomitant decrease in communicable diseases. NCDs such as stroke and ischemic heart disease have been the leading cause of death since 2021 and increasingly becoming a major health concern, followed by lower respiratory infections, while COVID-19 is an exceptional case.

- **Communicable disease elimination as a realistic goal:** The downward trends continue, with zero deaths due to Malaria caused by P. Falciparum and major achievements for HIV/AIDS related deaths and transmission of new cases. Similar successes are possible for tuberculosis services and for reducing the risks of infection for Hepatitis C Virus (HCV) in Cambodia, among other communicable diseases. Sustainable efforts, supported by adequately funded and equitably distributed health workers, can ensure elimination and prevent future reversals as donor support gradually reduces.

- **High expectations are set for reproductive, maternal, newborn, child and adolescent health and nutrition:** This aligns with the country's ambitions as an upper-middle-income country by 2030. The challenge lies in the plateauing of maternal and infant mortality rates, with outcomes that vary by geographical location and income. Women who are poorer, less educated, from ethnic minorities or living in remote areas show lower utilization of maternal health services. Similarly, stunting which is an indication of access to quality health systems, must also be addressed.

- **Cross-cutting issues and social determinants of health:** Social determinants of health will remain a challenge, including income inequality, food insecurity to gender inequity, unless addressed as a priority area. Increasing urbanization, higher population density in cities, and reliance on temporary workers and migrants all contribute to a growing economy, which in turn can lead to negative consequences, widening the gaps in health outcomes.

Figure 7: Leading causes of deaths in Cambodia, 2011 - 2021

Communicable,maternal, neonatal, and nutritional diseases
Non-communicable diseases

Cause	2011 rank	2021 rank	Change in deaths per 100k, 2011-2021
Stroke	1	1	↑ +14.6
Ischemic heart disease	4	2	↑ +13.8
Lower respiratory infect	2	3	↓ -24.0
COVID-19	-	4	↑ +52.7
Cirrhosis liver	5	5	↑ +1.2
Tuberculosis	3	6	↓ -13.3
COPD	7	7	↑ +3.3
Neonatal disorders	6	8	↓ -11.6
Diabetes	11	9	↑ +5.6
Hypertensive heart disease	12	10	↑ +2.8

Source: Institute of Health Matrix and Evaluation: Cambodia | Institute for Health Metrics and Evaluation (healthdata.org) , accessed on June 19, at 2024 T 10:10am



Investment in health workforce

Cambodia is entering a crucial period of recovery from the COVID-19 pandemic and the restart of economic growth. Health is vital for economic recovery. The pandemic has shown that when health is at risk, everything, including economic development, is at risk. Investing in health today will help safeguard the Cambodian population from future health emergencies, and support progress towards universal health coverage.

Economic growth and country development depend on a healthy population. Around one quarter (25%) of economic growth between 2000 and 2011 in low- and middle-income countries is estimated to have resulted from improvements in health. According to the UN High-Level Commission on Health Employment and Economic Growth, one additional year of life expectancy has been shown to increase GDP per capita by about 4%.

Estimates predict that the economic impact of the COVID-19 pandemic could lead to a 3% to 8% drop in global GDP in 2020[14], while Cambodia's GDP fell by 3.1% compared to 2019[15]. Prioritizing health means prioritizing Cambodia's prosperity. Better health promotes economic growth by expanding the labour force and boosting productivity, while also delivering immense social benefits.

NCDs, including cardiovascular disease, diabetes, cancer, chronic respiratory disease, and mental health conditions continue to rise as leading causes of premature death in Cambodia[16]. According to the 2019 investment case on the prevention and control of NCDs in Cambodia, these NCDs impose significant costs on the Cambodian economy. A total amount of USD 1.5 billion is lost annually, representing close to 7 percent of GDP[17].



Areas and how to be invested

The health workforce is the backbone of strong, resilient health systems. Universal health coverage and guaranteed health security are only possible with adequate investment in the health workforce. Investment in the next generation of health workers is essential for overall health system strengthening. The Covid-19 experience has exerted significant pressure and provided valuable lessons, to change we how invest to achieve equity and prosperity for all. Doing business as usual is no longer an option, because future health needs will be different. Emerging pandemics (COVID-19 not being the last), and environmental, behavioural, and social changes contribute to emerging NCDs.

- Invest in high quality education through competency-based teaching and learning methods, and lifelong learning mechanisms, so that all health workforces are more competent than before and aligned with the future health needs of the population. The current government project on strengthening the Pre-Service Education System for health professionals (2020-2026) costs USD21.5 million, aims to strengthen Cambodia's pre-service education system and contribute to producing a future generation health workforce through competency-based education.

- Stimulate investments in pre-service health professional education to fit future purposes:
    - Health workforce fit for PHC and community health promotion
    - NCD readiness workforce
    - Public health workforce for core public health functions
    - Allied health professionals
- Invest in creating decent health sector jobs, particularly for women and the younger generation in leadership roles, and increase recruitment and recognition of the importance of public health professionals in the health system with the right skills, in the right numbers and in the right places.

SECTION

4

SHIFTING TO MORE FOCUS ON PHC WORKFORCE



SECTION

4

SHIFTING TO MORE FOCUS ON PHC WORKFORCE

Why does attention needs to be paid on PHC workforce?

The COVID-19 pandemic has brought about the need to build a stronger and resilient health system which focuses on revisiting the roles and functions of primary health care. Cambodia responded well to the COVID-19 pandemic, including through the rollout of vaccinations. The economy has rebounded – growing again towards pre-pandemic levels.

There are four interlinked reasons why we need to focus on primary health care as the foundation for UHC and a stronger and resilient health system:

- First, non-communicable diseases now account for more than 60% of all deaths and poor health, as the population rapidly ages. Primary health care is the most effective approach for managing NCDs, mental health conditions, and supporting healthy aging.
- Second, Cambodian citizens will increasingly need and demand for better health and quality health care closer to their communities.
- Third, primary health care provides the best value for money – saving individuals money, the country's budget, and protecting vulnerable populations from impoverishment due to healthcare payments.
- Finally, the public health workforce, including field epidemiology and surveillance, is critical for making health systems more resilient to crises, including detecting early signs of epidemics.

Targeted investment in health systems that refocus on PHC as the foundation of UHC is essential because:

- Investment in PHC is cost-effective.
- The RGC can achieve faster progress towards UHC if PHC intervention coverage is increased.
- Investing in PHC as the driver of improving health promotion and prevention of NCDs will save Cambodia money.
- No country can afford long term curative care for NCDs and health conditions resulting from an ageing population at the hospital level. Managing all these conditions at the PHC level is more affordable.
- Re-skilling the existing health workforce is necessary to align with the government's commitment to digital health.

Health centers and referral hospitals should be well connected to deliver a defined package of NCD services to prevent and control hypertension and diabetes. This includes sharing information, education and communication related to healthy lifestyle and proper nutrition; smoking control services; and regular medical check-ups for adults over 40 years of age through advancing the roles of community health workers and village health support groups. Primary health care facilities should be able to screen for and treat hypertension, diabetes, mental health problems, cervical cancer; establish community-based follow-up systems, and undertake relevant emergency management by expanding and strengthening the roles of nurses and midwives.

The Primary Health Care-Booster Implementation Framework (PHC-BIF), recently endorsed, proposed a core action area on shaping a competent and fit-for-purpose PHC workforce. This requires a multidisciplinary team including general practitioners, nurses and nurse practitioners, community health workers, counsellors, allied health professionals, clinical psychologists, physiotherapists, health promoters, and individuals with expertise in engaging people and communities[8]. Medical doctors, midwives, and nurses alone cannot meet all their patients' primary care needs. Thus, a broader and more diverse range of team members is needed to support the management of health conditions, strengthen efforts to prevent ill health, promote well-being and address workforce shortages.



Strengthening PHW capacity for EPHFs and provide public health services

An operational shift from a reactive to a resilient health system means that the health systems are prepared for, ready for and resilient to all forms of public health threats. Reorientation of the health workforce to perform the Essential Public Health Functions (EPHFs) has been recognized as the key foundation of the PHC approach and central to an integrated, comprehensive, sustainable, and cost-effective approach for enhancing individual and population health and reducing the burden of disease19. Recruitment and deployment plans for public health and community health workers at health centers, as along with financing plans to support public health promotion activities, represent a genuine reform to boost PHC implementation in Cambodia.

Many countries, including Cambodia, have experienced numerous public health challenges, such as emerging and re-emerging public health threats, infectious diseases and NCDs, increasing rates of antimicrobial resistance, ageing populations, rising multimorbidity, and the growing impacts of climate change. The increasing complexity of public health challenges has resulted in a renewed interest in and focus on applying EPHFs as a PHC approach to operationalize public health interventions for achieving health objectives, including universal health coverage, health security, improved population health, and the health-related SGDs[20 21 22 23].

Application of the EPHFs requires the skills and competencies of various health and non-core health service delivery occupations. While some core skills and capacities remain with public health specialists, the delivery of the EPHFs requires inputs across multiple groups of specialists, including epidemiologists, statisticians, health researchers, health policymakers, occupational health specialists, community and primary care health workers. It is critical to invest in the education, recruitment and retention of a fit-for-purpose, responsive and competent workforce[24 25].

Box 1:

Unified 12 Essential Public Health Functions

- **Public health surveillance and monitoring:** Monitoring and surveillance of population health status, risk, protective and promotive factors, threats to health, and health system performance and service utilization.
- **Public health emergency management:** Managing public health emergencies for international and national health security.
- **Public health stewardship:** Establishing effective public health institutional structures, leadership, coordination, accountability, regulations and laws.
- **Multisectoral planning, financing and management for public health:** Supporting effective and efficient health systems and multisectoral planning, financing and management for public health.
- **Health protection:** Protecting populations against health threats, for example environmental and occupational hazards and communicable and noncommunicable diseases, including mental health conditions, food insecurity, and chemical and radiation hazards.
- **Disease prevention and early detection:** Prevention and early detection of communicable and noncommunicable diseases, including mental health conditions and injuries.
- **Health promotion:** Promoting health and well-being as well as actions to address the wider determinants of health and inequity.
- **Community engagement and social participation:** Strengthening community engagement, participation and social mobilization for health and well-being.
- **Public health workforce development:** Developing and maintaining an adequate and competent public health workforce.
- **Health service quality and equity:** Improving appropriateness, quality and equity in provision of and access to health services.
- **Public health research, evaluation and knowledge:** Advancing public health research and knowledge development.
- **Access to and utilization of health products, supplies, equipment and technologies:** Promoting equitable access to and rational use of safe, effective and quality-assured health products, supplies, equipment and technologies.

Source: World Health Organization[19]

Box 2:

List of Essential Public Health Services and intervention

Public health information management services	• Ongoing and systematic surveillance of public health-related data, including population health status, health-related behaviours, disease incidence and prevalence, and health risks and hazards • Monitoring and evaluation of health systems, services and interventions, including health system performance, the health workforce, health service utilization and user satisfaction, and health system threats and vulnerabilities • Population health needs assessment and risk profiling to inform policies and planning, and financing and management of population health • Syntheses and analyses of available data and evidence (including health, behavioural and social, and other multisectoral data and information) to inform decision-making
Health protection services	• Emergency, contingency and incident planning for public health incidents and emergencies with an all-hazards risk management approach • Prevention, mitigation, management and control of health hazards in a defined population • Incident response actions
Health-promoting services	• Development, implementation, and monitoring and evaluation of health literacy interventions and programs enhancing the accessibility of health information and empowering communities to participate in public health planning and services. • Development, implementation, and monitoring and evaluation of health promoting activities, programs, services and interventions targeting determinants of health. • Priority health promotion programs and services targeting specific risks, settings or populations, based on population need and priority risks • Working within the health sector, with partners and allied sectors, to develop environments that support health and healthy behaviours and reduce inequities through actions on the wider determinants of health
Disease prevention services	• Development, implementation, and monitoring and evaluation of actions, programs and interventions that aim to prevent adverse health outcomes, based on population need and equity (primary prevention) • Development, implementation, and monitoring and evaluation of actions, programs and interventions that support early identification and appropriate management of health risks to minimize their impact based on population need and equity (secondary prevention) • Development, implementation, and monitoring of actions, programs and interventions that minimize disease progression, complications or impacts (tertiary prevention)
Cross-cutting services	• Development, implementation, and monitoring and evaluation of public health institutional structures and capacities, including legislation, regulations, policies, institutions and workforce. • Promotion and development of cross-organizational and multisectoral responsibility and accountability for health and well-being • Advocating, implementing and evaluating a community participatory approach to public health planning, including health system planning and health service design that centers around the values of inclusion and equity.

- Communication between relevant stakeholders that ensures the timely exchange of appropriate and accessible information relating to actual and potential public health issues.
- Working with partners in the health sector and allied sectors to provide high quality health services to all populations in all contexts.
- Ensuring the availability and appropriate use of safe medicines and other medical products and health technologies in health services in support of better health outcomes and equity

Source: World Health Organization[19]

The MoH at national and subnational levels, multisectoral stakeholders, and development partners have their own roles to play:

- Seek for high-level political commitment and enabling factors for institutional structures and arrangements, multisectoral accountability mechanisms, resource requirements to implement EPHFs and public health services.
- Define and adapt the package of EPHFs and public health services to fit for national and local context implementation.
- Invest in education and training of public health workforce at bachelor's degree level such as epidemiologists, statisticians, public health specialists, health policy and planning, occupational health specialists, allied health professionals, community and primary care health workers, and social health workers.
- Tailor pre-service education and in-service training to equip health workforce with skills and competencies to respond to NCDs and public health emergencies with refocus on prevention, early detection and screening, care and treatment, counselling, sustained management of people with or at risk.
- Recruit and deploy public health workforce to implement and deliver the defined and adapted EPHFs.
- Shifting roles and functions of health workers (nurses and midwives) at health centers to more focuses on preventive care and integrated care, monitoring population's health in communities, and screening and early disease detection of communicable and non-communicable diseases.
- Elevate and expand roles of nurse and midwife to provide day to day services at health centers and communities, and allow them to provide basic prescriptions of antibiotics, hypertension, and NCD medications at PHC level.
- Strengthen community health workers, in particular VHSG cadre to be better utilized to support for some health interventions and public health activities with appropriate funding mechanism to incentivize and sustain their roles and functions, in accordance with the Policy on Community Participation.
- Create roster of experts or mobilize medical teams from national and provincial hospitals to support building skills and competencies for staff at health centers with strong coordination across national and provincial hospitals, and ODs, PHDs, and MoH levels for expanding health services at HC.

SECTION

5

STRATEGIC PRIORITIES AND INTERVENTIONS



SECTION

5

STRATEGIC PRIORITIES AND INTERVENTIONS

This is the main section of the HWDP and analyses key health workforce issues and challenges, demonstrating the rationale for why each strategic priority and its interventions are important. Moving forward to 2030 and beyond, healthcare priorities in Cambodia will evolve in different directions, with new challenges and threats to overcome, as well as opportunities that will bring new potential and expectations. The MoH's mission aims to enable all people in Cambodia to receive timely, safe, quality and effective people-centered health services and interventions across the continuum of promotive, preventive, diagnostic and treatment, follow-up and continuity, rehabilitative and palliative services throughout the life course, without financial hardship when they need them.

Achieving universal health coverage will require new models of service delivery, along with a workforce that is competent to deliver them, supported by innovative technology. The HWDP is based on Cambodia's future context, with a responsive and accountable health system that meets the health needs of all Cambodians. This plan aims to create a sustainable health workforce system that focuses on the entire career pathway from pre-service education to the years spent working as a health worker. There is also an emphasis on enhancing the capabilities to respond to changing health needs and demands while maintaining safety and quality.

Securing a health system for the future in an efficient, effective, equitable and sustainable way to address the health and socioeconomic development needs of the Cambodian population, will require refocusing on five strategic areas to ensure a fit-for-purpose health workforce and readiness for now and the future.

Key four strategic objectives of HWDP



1. ***Health workforce information:*** *Improved access to health workforce information and its use for decision making and future planning.*
2. ***Education and training:*** *The health system with competent health workforce to meet future needs and challenges.*
3. ***Distribution:*** *Equitable distribution and well-retained health workforce that is fit for purpose and responsive to the needs.*
4. ***Governance and regulation:*** *Strong governance and regulated health workforce for safe and quality health services with a supportive working environment.*



Strategic Objective 1: Health Workforce Information

Improved access to health workforce information and its use for decision making and future planning.

Why is this important?

The Health Workforce Development Plan aims to ensure that the production and distribution of health workers are aligned with population health needs and the capacity of the health workforce to meet those needs. It is a process not only of forecasting the health workforce needs required by the health system to provide the highest quality of health services, but also of identifying key strategies, goals, and policies to effect positive change and achieve optimal health outcomes.

The Health Workforce Development Plan is becoming a top priority for the health system. Using these plans helps national and sub-national institutions, and health facilities define their staffing needs, as well as improving recruitment, distribution, and retention. From a broader perspective, workforce planning is the most proactive method for adapting to the shifting demands of population health needs.

The Ministry of Health has established the Human Resource for Health Oversight Committee (HRH-OC) as a coordinated structure between the health and administrative/finance directorates of the Ministry. This Committee engages with all relevant departments, national hospitals and educational institutions26. Central MoH departments and institutions such as the Department of Personnel (DoP), Human Resource Development Department (HRDD), National Institute of Public Health (NIPH), and University of Health Science (UHS) also play important roles in health workforce management, production and research, while private sector provides additional support when needed.

What is the challenge?

Currently, the MoH captures data only on MoH government staff, which presents challenges in planning and reflects critical understaffing in the country due to the absence of data from the private sector. Information on health workers contracted through government funding and public health facilities has not been included in the HRH information system. Meanwhile, health worker information from the private sector relies on the five health professional councils for registration and licensing numbers, which is not a timely mechanism for reporting to the MoH. On the other hand, at the supply side, both public and private training institutions, as well as students graduated abroad, need to be properly recorded.

Recent efforts to strengthen health workforce information have focused primarily on administrative purposes. However, there are questions and uncertainties about how this information is being used, for what, and by whom, to generate evidence for decision-making, planning and policy changes.

Improving health workforce information and tracking

To develop health workforce planning and management effectively, reliable and quality data are required at all levels and institutions, including from the private sector and councils and associations. The DoP and HRDD have established a joint Human Resource Management Information System (HRMIS) to record, update, and track all health workforces in the public sector. However, it remains unclear how this data is being used, what improvements have been made, and what needs to strengthen further, whether the dataset is fit for purpose, and who needs to use it for which decisions.

This HRMIS will need to be expanded to cover the private sector and be interoperable with each HPC's database to annually collect aggregated data from all HPCs. The growth of private health facilities, the emergence of private health professional education institutions, and the imbalance between demand and supply of the health workforce have increasingly become a challenge in Cambodia over the last two decades, with limited policy or stewardship as a guide. Currently, there is no concrete information from the private sector, integrated health workforce information system to ensure timely availability of accurate and disaggregated data from both the public and private sector, which is critically important for planning and policy development.

National Health Workforce Account (NHWA) is a useful platform to facilitate the standardization of health workforce information to fit for planning and policy making purposes and for tracking the country's progress towards UHC[27].

Generate evidence-based policy and planning

Developing a health workforce plan involves analyzing, forecasting, and planning health workforce needs, supply and demand, assessing existing gaps, and determining prioritized interventions to fulfill the strategic goals and objectives of the health sector. There is limited evidence in the country to inform health workforce development and planning. Under the coordination and leadership of HRH-OC, the NIPH's Health System Research Center will be instrumental in generating evidence to assist in finding solutions to health workforce challenges. There should be involvement from academic institutions in analyzing health workforce information and data.

The Global Strategy on Human Resources for Health 2030 builds on this contemporary evidence and integrates the technical strengths of health labor market analyses as a guiding framework for governments and relevant stakeholders. It outlines how they can optimize the present workforce, align new investments with workforce needs, strengthen health workforce management, and generate the data needed for evidence-informed policy[28].

The formulation of health workforce policies and strategies requires evidence-based planning to support rational decision-making. A range of resources, models, and tools for health workforce planning and projections could assist in effective development29. Such policies and strategies typically include short- and long-term targets and cost estimates for scaling up education and training for health workers, reducing workforce imbalances, strengthening staff performance, improving retention and adapting to any major health sector reform. They should also address the human resources development needs of priority health programs and aim to integrate these into a primary health care framework, based on epidemiological evidence.

One of the key approach is health labour market analysis, which helps to comprehend the dynamics of the health labour market as a system, such as shortages and surpluses, skills mix and geographical imbalances, and sub-optimal performance. It facilitates the development of effective policies and planning to address these issues[30].

In addition, the analysis of Workload Indicators of Staffing Needs (WISN)31 could help health service managers determine the required number of health workers based on workload, ensure that health facilities have the right number of staff to meet patient demand efficiently, and provide a structured approach to workforce planning, ensuring that staffing decisions are based on actual workload rather than assumptions.

Strategic objective 1: Improved access to health workforce information and use for decision making and future planning.	
Priority areas	**Interventions and actions**
1.1 Improving institutional capacity in health workforce planning and implementation	1.1.1 Regularly update the roles and responsibilities of the HRH-OC for providing strong leadership and coordination of health workforce planning development and monitoring the progress of implementation.
	1.1.2 Update the HRH-OC members to include all key stakeholders including national and provincial levels, health professional councils, and academic institutions.
	1.1.3 Build national capacity, leadership and governance, in health workforce strategy development, planning, and implementation.
1.2 Strengthening health workforce information for policy decision making	1.2.1 Develop Human Resource Management Information System (HRMIS) to record and regularly update health workforce information from both public and private sectors.
	1.2.2 Establish mechanisms for systematic HRH data collection from both public and private sectors: numbers, types of health professions and private health care facilities they are practicing.
1.3 Building institutional capacity in health workforce research, analyses, projection for the future needs	1.3.1 Enhance institutional capacities in health workforce research and analyses for policy decision making and future planning, and funding support for undertaking these tasks.
	1.3.2 Project the current and future availability of the health work-force by types of professions based on the population needs to identify gaps, achieve policy goals, and ensure efficiency, quality, and equity of health service provision.
	1.3.3 Generate evidence for policy decision making and planning through implementation of National Health Workforce Account (NHWA) and health labour market analysis.

Strategic objective 2: Education and Training

The health system with competent health workforce to meet future needs and challenges.

Why is this important?

The health workforce is the main enabler of UHC. The collective commitment to UHC by 2035 aims to ensure that all people to have access to the full range of essential health services, from health promotion and injury, disability and disease prevention to treatment, rehabilitation, and palliative care, when and where required, without financial hardship[32].

Making progress and accelerating in Cambodia's journey towards UHC requires a stronger health system with a health workforce that is well-educated, managed, and empowered to provide comprehensive services that respond to population needs. Competency-Based Education (CBE) is an outcome-based approach to designing, implementing and evaluating health professions education training programs driven by the core competency frameworks. Competency encompasses the knowledge, skills and attitudes that health professionals need to perform their tasks under specific circumstances33. CBE equips health professionals with competencies to provide quality health care and deliver essential public health functions that are effective, efficient, equitable, inclusive, integrated, people-centered, safe and timely when working within aa system of support, supervision and adequate resources[34].

Continuing Professional Development (CPD) and in-service training must be aligned with CBE, organized and delivered to meet the needs for improving the core competencies of caregivers, facility managers, health system leaders, policymakers, and regulators. Various approaches are used to continuously assure and improve the quality of health care, including broad clinical governance mechanisms; peer review and clinical audit; individual feedback; supervision and training; clinical decision support tools based on guidelines; and multidisciplinary learning collaboratives[35]. By aligning CPD with CBE, we can ensure that health professionals continuously develop the necessary competencies to meet evolving healthcare needs.

What are the challenges?

The quality and standard of pre-service education and in-service training for health professionals face several challenges. This results in health workforce production that is unresponsive to rapidly changing, complex health systems and evolving population health demands. These demands stem from ageing populations, the growing burden of non-communicable diseases, and other public health concerns, including public health emergencies and emerging threats.

Pre-service education programs focus primarily on building knowledge and skills of the health workforce to deliver clinical care and treatment of ill individuals. Some courses such as health promotion and prevention and community health, have been integrated into the curricula. However, specialized professions including health promotion and community health workers, primary health

care practitioners, and public health professionals trained in international health regulations, have not been introduced as standalone programs in pre-service education.

Competency-based curricula for some health professions have been developed since 2012. However, these curricula are neither comprehensives, nor fully utilized with little or no monitoring and regular review of the existing curricula. Many efforts have focused on competency-based instruction, such as case-based learning and simulation-based training, rather than starting with the core competency frameworks to drive curriculum development. Additionally, teaching hospital requirements are not standardized and often lack essential infrastructure and resources to function effectively as clinical practice sites. Consequently, students have limited exposure to clinical training and practice. Most curricula have been developed entirely based on clinical needs, even though health service delivery are predominantly provided at the community level.

Faculty members have very limited opportunities for capacity building and continued professional development. Faculty development typically lacks both clinical expertise and formal preparation in education, teaching and learning. As a result, students do not acquire the necessary counseling and clinical reasoning skills for safe practice, this is intensified by inadequate clinical supervision.

Student intake selection does not prioritize those from rural, remote, and underserved areas where the significant health workforce shortage exists. The quality of national exit exams needs to be adapted to CBE. From 2010 to 2023, only 44% of total graduates were annually absorbed as MoH's public civil servants. This indicates a critical imbalance between absorption capacity and needs. The remaining could not secure stable posts in public health services and ended up as contract staff, or moved to the private health sector to open their own business.

Moreover, a disconnection between health service needs, and educational and workforce planning still exists. This contributes to inefficiencies and misalignment in training and deployment of workforce.

Shifting from Content-Based to Competency-Based Education (CBE)

Shifting to CBE is the key foundation for training the health workforce to address current and future population health needs. CBE has been the gold standard for curriculum development in health professions education in the 21st century. Competency-based curricula must be designed based on the core competency frameworks or outcomes driven by evolving population health needs. The curriculum development process involves identifying population health needs, then by defining the outcomes needed to meet those needs, and finally by tailoring the curriculum to achieve those outcomes. Achieving full CBE requires more than consistency of the core competency frameworks. It also requires a range of competency-based instruction, tailored learning experiences, and programmatic assessment to support learners in developing competencies and achieving defined outcomes[36].

Traditional education models focus on curricular content in which competence is measured through the acquisition of knowledge, skills and attitudes, and the time completed in training. Curricula were developed based on subject matter, with subject-centered and lecture-dominated approaches that prioritized teacher preferences and learning desired by the school and its overall program.

Aligning and adapting the core competency framework to address future health needs.

Lessons learnt from COVID-19 demonstrate the need to act now to prepare for future threats. This requires investing in health security and preparedness, refocusing on primary health care as the foundation for UHC, and recognizing that health extends beyond the health sector to communities and other professionals. This is an opportunity to build a strong and resilient health system for long-term sustainability, ensuring it can reliably meet the current and future health needs of the population. It is essential to emphasize that ongoing emerging public health issues, NCDs and ageing will overwhelm the health system in the future.

The core competency frameworks and curriculum development using CBE must be aligned and integrated across all health professions and at undergraduate, postgraduate and CPD levels. These frameworks and curricula need to meet the demands of current and future health practices, particularly in competency domains such as ethics and professionalism, collaboration and communication, leadership and management, research and education, and people-centeredness. This alignment is essential for delivering people-centered, integrated and team-based health care. Interprofessional education (IPE) should also be incorporated into CBE as an educational strategy to produce a "collaborative practice-ready" current and future health workforce. IPE occurs when two or more health professions students learn about, with and from each other to improve collaboration and the quality of care and services.

It is also a crucial stage for the country to focus on improving knowledge, skills, and attitudes of health professionals and expanding pre-service education programs to a wider scope of professions. These include public health specialists, allied health professionals, epidemiologists, statisticians, PHC practitioners, health economists and policymakers, and community health workers to address all aforementioned health challenges in the future. The MoH needs to recognise and position all these professions in the health system and emphasise the public health roles alongside the clinical practice.

Strategic objective 2: The health system with competent health workforce to meet future needs and challenges.	
Strategic priority	**Interventions**
2.1 Strengthening competency-based pre-service education system	2.1.1 Strengthen the roles, functions, and capacity of HRDD in governance, coordination, and monitoring health professions education including development and strengthening of regulations, standards, guidelines and accreditation of health professions education.
	2.1.2 Develop/update the national qualifications and core competency frameworks for all health professions programs, and ensue the core competency frameworks of each profession are consistent.
	2.1.3 Develop the national curriculum frameworks for each health professions education program. Provide technical assistance to health training institutions for curriculum development and implementation.

	2.1.4 Develop a national pedagogy framework for CBE and provide training of trainers for core faculty members. Ensure that they are well-versed, capable and confident in training other teachers.
	2.1.5 Establish learning systems for advancing use of the MoH approved core competency frameworks and curricula by health science training institutions.
	2.1.6 Establish academic accreditation body, education programs, and regulatory systems to ensure the quality of health professions education.
	2.1.7 Regular review curricula for all health professions to ensure their alignment with the approved core competencies, and roll out implementation for all health training institutions at both public and private.
2.2 Enhancing clinical practice	2.2.1 Developing standards and criteria for clinical practice sites for strengthening clinical training capacity.
	2.2.2 Strengthening partnerships between health sciences training institutions and clinical practice sites at public and private health facilities.
	2.2.3 Strengthening clinical practice training and clinical practice sites through more streamlined processes, greater consistency, increased supports and extended learning and practicing opportunities.
	2.2.4 Supporting the faculty and preceptorship trainers to learn and apply new methodologies for teaching to be able to provide CBE effectively and meet the standards.
	2.2.5 Improving infrastructure and increasing uses of technology to supports teaching and learning including libraries, clinical practice sites, and simulation rooms.
	2.2.6 Develop student portfolios at each faculty to record their learning progress such as their ability to self-direct learning, interests, talents, learning style, and achievements.
	2.2.7 Continue to provide national guidance and resources to health sciences training institutions and regional training centres on new and applied learning opportunities including supporting learning before preceptorships.

2.3 Improving the National Entrance and Exit Examinations	2.3.1 Continue and strengthen the roles of the National Examination Committee to enhance national entry and exit exams.
	2.3.2 Institutionalize the management and administration of the national Entrance and Exit Examinations by establishing a National Examination Unit (NEU).
	2.3.3 Regularly revise and update the criteria and qualification requirements (questionnaires, MQCs, and other assessment tools) for the National Entry Exam.
	2.3.4 Regularly revise and update clinical examinations for the National Exit Exam based on CBE structures and Objective Structured Clinical Examination (OSCE)
2.4 Balancing the numbers of intake with professional and geographical shortage	2.4.1 Prioritizing enrollment of students from the underserved healthcare service areas or rural and remote areas by providing scholarships, accommodation, or other supporting mechanisms.
	2.4.2 Define numbers of intake to align with current and future needs by types of professions, skills, geographical shortage, and capacity of training institutions.
	2.4.3 Increase interest and attraction of high school graduations to undertake health professional education, especially Associate and Bachelor's degree on Nursing and Midwifery.
2.5 Expand pre-service education programs to a wider scope of professions.	2.5.1 Expand health professional education programs to include other important health professions with the current shortage to meet the needs of health systems. Those professions such as: • Public health specialist, and field epidemiologist, senior laboratory personnel, • Health policy and health financing, • Health professions education, • Clinical psychologist • Allied health professionals • Biomedical engineering, • Digital and health informatics • Infection prevention and control specialist • PHC nurse and other nurse specialists, and community health workers, • Other professions
	2.5.2 Propose a clear academic pathway and equivalent criteria: from Association's degree to Bachelor's degree, Master's degree and PhD, or Bachelor's degree to Medical Doctor and Specialist, clinical tracks to non-clinical tracks.

	2.5.3	Planning recruitment and official recognition of these health professions as the MoH government civil servants.
2.6 Improving in-service training and continuing professional development	2.6.1	Establish multiple learning platforms to increase access to and participating in in-service training and continuing professional development including on-site and virtual learnings.
	2.6.2	Organize in-service training programs based on identified staff development needs and training requirements to meet the objectives of the local institutions and longer-term career development of the health workforce, including soft skills and patient-centeredness.
	2.6.3	Develop a comprehensive plan for mandatory CPD programs for public and private health workforce to meet the minimum requirements for re-licensing with professional councils and/or career development and promotions.
	2.6.4	Provide in-services training courses based on skill and competency needs for improving quality, patient safety, and expanding service delivery (MPA and CPA guidelines) and for improving leadership and management skill for health leaders.
	2.6.5	Establish peer learning groups on key areas such as clinical safety, human factors, socio-behavioural changes, research, innovation and quality improvement, and provide rewards and incentives for health workforce participation in making and managing changes to improve health outcomes.
	2.6.6	Provide orientation for all staff to be aware of relevant MoH technical guidance, policy and strategic documents, clinical protocols and guidelines, and healthcare accreditation standards, and ensure the implementation and practices are aligned.
	2.6.7	Enable rural health workers to enhance their scopes of practice to better meet the needs of their communities by on-site training and coaching.



Strategic objective 3: Distribution

Equitable distribution and well retained health workforce that is fit for purpose and responsive to needs.

Why is this important?

Managing the health workforce is a challenging task in every health system context to ensure it fits the needs of the health system. A strong health system requires adequate numbers of competent, well-motivated, and equitably distributed health workers with appropriate skill mixes and proper regulation. The effectiveness and efficiency of health workforce management requires refocusing on effective strategy implementation to increase health workforce availability in remote and rural areas through improved recruitment, deployment, and retention. This requires a strong coordination mechanism for multisectoral collaboration, strong political commitment, and sustained financial investments to ensure adequate numbers of and competent health workforce are available, accessible, and acceptable to deliver a wide range of essential health services. In addition, a well-designed system to attract and facilitate health workers for the highest performance of their roles and responsibilities contributing to optimal health outcomes need to consider the following factors:

- Personnel system – including staffing norms and information tracking, availability of accurate data required for planning, training, appraising and supporting the workforce.
- Recruitment – the hiring process must shift to focus on competence-based selection. Developing a recruitment system to ensure meritocracy, fairness, transparency, inclusion, and efficiency in compliance with the perspective of appropriate selection and distribution.
- Deployment – equitable distribution and based on recurrent significant shortages, rural and remote priorities, and based on comprehensive functional analysis.
- Retention – financial and non-financial mechanisms to attract health workers to stay longer at remote and underserved health care facilities.
- Working environment and conditions – employee relations, workplace safety, gender equity, job satisfaction and continuing professional development
- Performance management – performance appraisal, rational workload distribution, supportive supervision and productivity, the scope of practice, and absence of or outdated job descriptions require further improvement. Developing strategic plans within a monitoring and evaluation framework, as well as other methods and means to improve the incentive system based on high performance and the principles of consistency, equity, efficiency and sustainability.

What are the challenges?

Cambodia has experienced significant shortages and maldistribution of health workforce, with varying degrees across provinces. Large numbers of doctors, nurses, midwives, and other health care professionals are collectively concentrated in urban areas, leaving rural areas underserved and resulting in inequities in workforce distribution 26. This phenomenon resulted from:

- Low public sector absorption capacity and lack of prioritization for those who originally resided in rural and remote areas in terms of student selection into health education programs and MoH civil servant selection.
- Health facility staffing establishments are based on institutional staffing norms (CPA and MPA), which may not reflect the actual workload. This may also lead to low levels of efficiency and under-utilization of available staff.
- Unwillingness of new and existing staff to work in remote areas where current service conditions and living standards are not conducive to attract health workers in rural and remote areas.
- There is no retention policy and mechanism in place to attract health workforce in rural and remote health facilities.

Health workers' decisions to accept positions in, remain in, or leave those areas, are influenced by several factors notably social stability, labour relations, deployment policy and management (posting and transfer) and remuneration, local environment (including general living conditions) and the social and working environment (including management, local labour relations and infrastructure). This wide range of intertwined factors highlights the importance of an intersectoral approach and interconnected bundled intervention packages.

The Global Political Declaration of the High-Level Meeting on Universal Health Coverage in September 2019 requires countries to scale up efforts to promote the recruitment and retention of competent, skilled and motivated health workers, especially in rural, hard-to-reach and underserved areas. Cambodia will need to explore a financial mechanism to attract and retain health workers to remain longer to provide PHC at health centers including essential public health functions and emergency preparedness and response.

Strategic objective 3: Equitable distribution and well retained health workforce to fit for purpose and responsive to the needs.	
Strategic priorities	**Interventions**
3.1 Ensuring qualification in recruitment and equity in deployment to rural and remote areas and the most shortage	3.1.1 Improving and strengthening recruitment procedure to best select the applicants with skills and competencies to meet the job descriptions.
	3.1.2 Developing policy options, generating strong evidence and rational for advocacy and negotiation to increase numbers of health workforce into public sector based on MPA and CPA staffing norms, and scaling up to meet SDG/UHC requirement.

	3.1.3	Prioritizing selection of the applications who are from and distribute to underserved areas, rural and remote health facilities.
	3.1.4	Mapping and figuring out health centers and hospitals with understaffing as per MPA and CPA staffing norms, provide timely refilling the gaps of retirements and leaving the current posts.
	3.1.5	Planning recruitment and deployment of multidisciplinary workforce targeted by national institutions, national centers and programs, and MoH technical departments, rather than just medical or clinical cadres. Multidisciplinary workforce such as: • Public health specialist, and field epidemiologist, senior laboratory personnel, • Health policy and health financing, • Health professions education, • Clinical psychologist • Allied health professionals • Biomedical engineering, • Digital and health informatics • Infection prevention and control specialist • PHC nurse and other nurse specialists, and community health workers, • Other professions
3.2 Develop mechanisms for attracting and retaining health workers in rural and remote health facilities.	3.2.1	Develop national retention policy to identify mechanisms for increasing and retaining health workforce at remote and rural areas.
	3.2.2	Review policy feasibility for enrolling students from rural background in health professional education programmes and prioritizing to recruit them back to their hometown posts.
	3.2.3	Provide financial incentives and non-financial incentives to remain them remote or rural health facilities.
	3.2.4	Improve living condition and working environment to ensure safety and security of staff in rural and remote areas.
	3.2.5	Develop and strengthen career pathways for rural health workers, provide opportunity for continuing professional development.
	3.2.6	Identify staff gaps in relation to the service delivery needs and develop strategies to address them including task shifting or task sharing.
	3.2.7	Implement performance based-financing to ensure availability and accessibility of health workforces at any time in health facilities.



Strategic objective 4: Governance and Regulation

Strong governance and regulated health workforce for safe and quality health services with supportive working environment.

Why are these important?

Health workforce regulation and governance play crucial roles in guiding all health professionals' behaviors to provide quality and safe of health services and ensure competency while maintaining professional and ethical conduct. Weak regulation and governance of health professionals, from education to practice, leads to poor quality health services. Even when available at affordable fees, poor quality health services create a barrier to achieving UHC. People will not use services that they do not trust and perceive as non-beneficial, or worse, as harmful. This wastes valuable resources that could be invested in other important drivers of social and economic development to improve citizens' lives35. Therefore, strengthening health workforce regulation and governance is critical to ensure quality and safety of health services, including registration and licensing with compliance to the laws, policies, standards, and protocols implementations.

Governance

Global estimates suggest that approximately 20-40% of health expenditure are being wasted40. Inefficiencies and weaknesses in governance and oversight of health workforce are responsible for a large proportion of that1. The government of Cambodia proposes priority actions to conduct functional analysis to guide administrative reform. The findings will be used as a tool to improve effectiveness and efficiency of daily operations and functions of the MoH for both national and subnational levels. Functional Analysis is a technique used to identify the labour competencies inherent in a productive function41. It is a process of collecting and analysing information about the work people do to ensure that the right people are doing the work required to meet the goals of the MoH as efficiently and effectively as possible. In other words, it ensures the right skills in the right jobs in the right numbers.

The HRH-OC is an existing and a unified health workforce coordination mechanism. It plays a prominent role in coordination and oversight of HWPD implementation across key implementing institutions from national to provincial levels. However, the roles and functions of HRH-OC need to be reviewed and empowered to engage in intersectoral and multistakeholder cooperation and support, such as thet Ministry of Economics and Finance, and Ministry of Civil Service in decision making. HRH-OC continues to provide guidance on HRH management and planning.

With decentralization and deconcentration (D&D) reforms, the role and responsibilities of health sectors are being shifted to sub-national administrations, including the commune/Sangkat, district, municipal, or Khan, and capital and provincial levels of government. This provides opportunities for monitoring and implementation of HWDP at the sub-national level, and great potential for identifying mechanisms to retain and attract health workers at rural and remote areas.

Regulation

Cambodia endorsed the Law on Regulation of Health Practitioners in 2016, which requires all health professionals to register and obtain license from their respective Health Professional Council (HPC) to practice. Qualification and fitness to practice are mandatory assessments conducted through five Health Professional Councils. Some professions do not yet have councils, and there is a requirement to establish them to meet the mandate.

Figure 8: Health professional councils and associations



High level of dual practice

The Ministry of Health of Cambodia allows public civil servants to hold multiple jobs and practice in the private sector, this is called "dual practice", to generate additional income to supplement government salaries and support living costs. The authorization is granted only for hours before and after official working hours, but there is minimal monitoring in place.

The negative impacts of dual practice may far exceed the positive impacts[42]. These include the perpetuation of self-gain by health workers through generating demand for their own services in the private sector by overprescribing treatment and overcharging. Health workers may lower the quality of services they provide in the public sector to drive patients to the private sector. Dual practice may also be associated with absenteeism, tardiness, inefficiency and lack of motivation among public sector health workers. Health workers may spend less time on their duties at public facilities, some may use their public roles to persuade and attract patients to shift their current utilization patterns to their private providers. They may tend to underperform when on public duties, spend less time with patients, exhibit unprofessional behaviour in some circumstances, and lack the ability to provide correct diagnoses and integrate the care required.

In some countries, governments have imposed bans on dual practice, or have attempted to regulate working hour arrangements, or imposed the limitation on earnings from this practice. In other countries, health workers are given special incentives such as higher salaries and promotions if they agree to work only in the public sector, while other countries have allowed limited private practice (health workers seeing private patients) within public facilities[42].

An exceptional case, is Kantha Bopha Hospital, one of Cambodia's national hospitals, which is mainly funded by external donors for salaries, medicines, and commodities. The hospital has effectively implemented a complete ban on dual and is perceived as providing good quality care, is trusted by the public and is free of charge.

A complete ban of dual practice is neither an option, nor realistic in Cambodia due to the complexity of contextual systems and political economy. Proposing stronger actions with robust regulation such as working hours or incentive/performance-based mechanisms are more likely to function well for most professionals. Other regulatory mechanisms would be useful, including progressively rethinking and reorganizing health services at public facilities to establish attractiveness and trust by the population. This will require actions to closely monitor providers' behaviour and utilization patterns.

Law on regulation of Health Practitioners

Cambodia has made progressive implementation of the law on Regulation of Health Practitioners adopted by the National Assembly on October 7, 2016. The purpose of this law is to protect the health and safety of members of the public by providing the mechanisms for ensuring that all health practitioners are qualified, competent and fit to safely practice their profession[43].

Regulatory instruments such as Sub-Decrees and Prakas recently provide the framework for the establishment and delivery of health professional regulation44. One of the Health Strategic Plan 2025- 2034's strategic shift is refocusing from volume to value-based care. This indicates that the assurance of both quality and safety of health care services from both public and private sectors in Cambodia requires consideration on optimal methods to strengthen regulatory systems of health professionals to meet the needs, cultural context and resources of Cambodia.

Gender mainstreaming in health workforce

At the global level, women account for 70% of the total health workforce but hold only 25% of senior roles45. Progress towards gender equality in leadership roles varies by country and sector, but generally men hold the majority of senior positions in health from global to community levels. Global health is predominantly led by men, 69% of global health organizations are headed by men, and 80% of board chairs are men. Only 20% of global health organizations have gender parity on their boards, and 25% have gender parity at senior management level roles[46].

In Cambodia, women health workforce account for 54% of the total MoH government civil servants9. According to the Ministry's Prakas No: 0017ស.ខ.ល dated September 4, 2023 on designated roles and responsibilities of senior leadership of MoH, women hold only 20% senior roles as secretaries and undersecretaries of state positions, and only one woman out of 25 directors of provincial health departments.

WHO developed the Gender Value Gaps framework demonstrate how health and care work is undervalued. One of the causes of undervaluation is a gender issue and the framework proposes policy interventions to address it. The framework builds on the concept of the gender division of labour and is designed to address four key gender gaps: (1) Gender Gap in Care; (2) Gender Gap in Participation; and (3) Gender Gap in Earnings, (4) Gender Gap in Working Conditions[47].

Health systems will be stronger when the women who deliver them have an equal voice and empowerment in the design of national health plans, policies and systems. Targeted and mainstreamed policy action to address gender inequality in the health and care workforce, such as through creating

working conditions conducive to the participation of women and ensuring equal representation of women in leadership and decision-making roles, could have a significant impact on societies, and the lives of women[48 49]. Ensuring that women health and care workers are adequately valued, supported, protected and promoted is core to the attainment of UHC and SDG targets[1].

Strategic objective 4: Governing and regulating health workforce for a safe and quality health services, and supportive working environment.	
Strategic priorities	**Interventions**
4.1 Exploring mechanisms to manage and regulate dual practice more effectively.	4.1.1 Create platform and policy space to raise and discuss the positive and negative impacts of dual practice in Cambodia.
	4.1.2 Exploring and understanding political economy and the scope of dual practice in Cambodia.
	4.1.3 Exploring and understanding the current remuneration to assess the gap that needs to be covered alongside other measures to regulate dual practice.
	4.1.4 Develop a case study, lesson learned, best practice in managing dual practice and deriving the relevant policy options for Cambodia.
	4.1.5 Strengthen public and private sectors monitoring, restrict absenteeism, conduct annual staff performance assessment purposively links to incentives.
	4.1.6 Regularly review and consistently re-organize health service delivery models at public facilities to build attractiveness, enhanced perception of quality and trusted by the population.
4.2 Improving quality of health services as routine	4.2.1 Enhance the knowledge of health workers to implement and comply with all new and relevant updated clinical protocol, standards, guidelines, MoH policies and strategies.
	4.2.2 Continuously build capacity of health workers to optimize performance and orienting them toward Cambodian Hospital and Health Center Accreditation Standards.
	4.2.3 Develop an incident reporting system in health facilities to track adverse or unwanted medical occurrence, quality indicators such as IPC compliances, re-admission rate, hospital acquired infections, and complains from the users.
	4.2.4 Promote a blame-free culture where health workers can report incidents and errors occurring in their workplace, share and learn to enhance patient safety and continuous quality improvement.
	4.2.5 Establish collaborative and team-based improvement cycles to bring together multiple teams from national and provincial hospitals to work together to improve on a focused topic area.

	4.2.6 Ensure that the health facility's environment, each service delivery room, and toilets areclean. Cleanliness and warm welcomes by health workers serve as potential entry points for perceiving good quality of care and trust.
	4.2.7 Regularly review on staff arrangement in each unit/ department, what is working well and what need to be improved. Provide flexibility of working arrangement, shift, duty, and shortening the length of duty.
	4.2.8 Build a team spirit of dignity, compassion and respected care for patients regardless of age, religion, social and cultural values.
	4.2.9 Promote integrated people-centered health services that seek to engage and empower patients, caregivers and families including healthier behaviors, enhanced patient experience, more effective utilization of services.
	4.2.10 Promote a culture of good communication and interaction between providers and consumers. Patients, caregivers, and family are clearly informed on clinical procedures and are involved in decision-making and provided choices. The information must be complete, accurate, timely, unambiguous, and culturally and ethnically acceptable.
4.3 Improving roles and functions Health Profession Councils (HPC)	4.3.1 Develop HPC strategic and operational plan, and support a sustainable business model that can mobilize human and financial resources for efficient and effective health workforce regulation.
	4.3.2 Strengthen each PHC's functions and responsibilities for registration, issuing health practitioner license and regulating the health professional practice to due standards and norms.
	4.3.3 Regularly review and update the scopes of practice for each health profession, minimum requirements for professional competency to practice, including continuing professional development.
	4.3.4 Establish a common framework and guidance for continuing professional development to ensure that every health professional regularly completes continuing professional development (CPD) to maintain the minimum standard of competence.
	4.3.5 Establish new HPCs to cover all kinds of health profession
	4.3.6 Develop and publish annual progress/achievement reports with coordination by Health Professional Council Coordination Committee.

4.4 Strengthening registration and licensing process and ensure a harmonized information system	4.4.1	Ensure that alladministrative procedures and requirements for registration, license, and re-license of health professionals, including operational guidelines for clients' rights and providers' rights-duties are publicly available.
	4.4.2	Proactively identifying other mechanisms/options to ensure all health professional practitioners are registered and licensed: • Mandatory automated registration right after they are fresh graduated • Mandatory obtaining licensed certificate requirement when counter-signed contract as the new government civil servant, contracting staff, and voluntary jobs, as well as for private health facilities, and NGOs. • Develop a framework and action plans to interface HRMIS, HPC-RMS, and Universities databases including the private sector, through establishing interoperability standard and system.
	4.4.3	Build a notification mechanism for re-licensing to remind them on renewing their license in one-two months before expired date.
	4.4.4	Build registration and licensing system enable to generate information linking to MoH's policy goals: • Updated information on continuing professional development, • Information on numbers of health professionals at public and private health care facilities separately and types of profession, and where they are practicing.
4.5 Strengthening governance across the health systems to promote gender mainstreaming and equity in health workforce	4.5.1	Conduct gender equity analysis in health workforce to better inform policy development in Cambodia.
	4.5.2	Improve the working environment and condition for health workforce especially for highly feminised occupations at remote and rural areas through a strong supportive and protective mechanism.
	4.5.3	Protect health workers from all forms of violence, attacks, sexual harassment, and discriminatory practices, and to promote safe working environment and conditions at all times.
	4.5.4	Scale up efforts to promote the recruitment and retention of competent, skilled and motivated women health workers, and secure the equitable distribution.
	4.5.5	Mainstream a gender perspective on a systems-wide basis when designing, implementing and monitoring health policies, taking into account the specific needs of all women and girls, with a view to achieving gender equality and the empowerment of women in health policies and health systems delivery
	4.5.6	Provide better opportunities and working environment for women to ensure their role and leadership in the health sector, with a view to increase the meaningful representation, engagement, participation and empowerment of all women in the workforce, addressing inequalities and eliminating biases against women.
	4.5.7	Address barrier in access to essential health services particularly for women health condition, specific needs of women and girls which are sensitive, those need to be delivered by women health staff.

SECTION

6

ENABLING FACTORS



SECTION

6

ENABLING FACTORS

Health financing

Health systems need adequate fundings to ensure people can use services they need, and protect them from financial catastrophe or impoverishment associated with having to pay for those services. It provides incentives for providers and users to be efficient50. There is a need for cost estimates of scaling-up and then maintaining the expanded health workforce, as well as ways to address financial sustainability, and use it for dialogue with the Ministry of Economics and Finance. Allocating sufficient and timely disbursement of domestic fundings to health facilities can help to ensure adequate staffing to deliver health services at different levels of the system (primary, secondary, tertiary), and monitor and improve their performance.

The government expenditure on health as percentage of GDP was 1.4% in 2012 with only slight increase to 1.7% in 201951. This increase is not reflective of the annual economic growth that Cambodia has made since the last two decades. On the other hand, the government spending on health per capita increased from USD 13 in 2012 to USD 28 in 2019 which demonstrated, high out-of-pocket expenditure on health in the region as a result of low investment in health.

The government of Cambodia increased their health spending to 251.6% from its approved budget plan in 20219 in response to the COVID-19 pandemic to address pressing health needs and to protect people, jobs and businesses. Government spending on health is expected to remain high, to preserve investment in the health system based on the experience of COVID-19.

Substantially increasing the national budget for recruitment, deployment, training, retention and protection of the health workforce is an integral part of managing the health workforce towards better health outcomes. The government's budget planning, negotiation and execution process must be taken into consideration to secure financial investment in skills, competencies, and multidisciplinary health workforce to meet the demands of each level of the health systems.

Prioritizing government financing for health by leveraging potential new sources of revenue, streamlining, strengthening performance-based financing, and exploring and harnessing opportunities for innovative financing approaches through public private partnership. There are other potential resources that should be mobilized from the taxes on products or services that directly impact health outcomes, this effort is often perceived as politically acceptable. The National Multisectoral Action Plan for the Prevention and Control of Noncommunicable Diseases[52], have enhanced advocacy for health taxes on unhealthy products such as tobacco, alcohol, and sweetened beverages.

A health workforce that receives appropriate incentives and renumerations, will be motivated to provide quality care, serve longer at remote health facilities, and refrain from dual practice. The mixed provider payment methods purposively merge capitation with other payment methods such as fee-for-service or performance-based financing for selected high priority services, and budgets to cover unavoidable fixed line-item costs to optimize performance and greater access to health services.

Paying providers through a method that aligns with policy goals would ensure efficiency and equity. Revisit provider payment mechanism and reconsidering a mechanism that creates incentives for maximizing quality, efficiencies, and motivation of health workers. This mechanism makes providers more accountable for the population they serve, especially make communities be proud of and appreciate and trust on services being provided.



Innovation and digital health technology

Introducing and expanding uses of innovation and technology to support and enhance health professional education, people-centred health services, and information systems is one of the enabling factors to achieve goals and objectives. Emerging digital technology and innovations provide opportunities to enhance the ways of teaching and learning, improving delivery of a wide range of health services and organization, improving people's access, and adapting responsiveness of health systems to the needs of individuals and communities.

Health workforce ranging from frontline health workers, health leaders, and policymakers must all be digitally literated and enabled them to perform their roles innovatively and reshape the existing workforce and build a talent pipeline workforce for the future. One of the strategic priorities in Digital Health Strategy is to enhance a digitally-talent health workforce to improve accessibility and enhance the quality, safety and efficiency of healthcare services, with the following milestones from 2023-2030:

- Digital health integrated into national workforce education and recruitment.
- Digital health curriculum incorporated throughout training institutions including pre-service training, and involved industry certifications.
- 70% of public health professional received training on digital health that help them to work safely and productively.
- Sufficient numbers of trained health informatics professionals available to support national health information system.
- A health workforce confidently using digital health technologies to deliver healthcare.

To reach the intended milestones, strategies and actions must be put into implementation such as optimizing institutional roles and responsibilities for digital health across the levels of the health system. It is important to build and develop competencies and skills on digital health and health

information technology, and promoting digital health competencies in the education and training to prepare health workforce for the future of digital health.

Making all training materials, clinical protocols and guideline documents such as MPA, CPA, CPG, and others in electronic versions via applications is very helpful for health workers to access and use. Innovations such as new digital and telehealth platforms must be deployed to support individuals and their families to manage and control their own health.



Partnership and engagement

Realizing HWPD4 operation requires collective and sustained political and institutional commitments, good governance, and intersectoral and multistakeholder cooperation in long-term workforce investments to achieve the stated goals and objectives. Strengthening and leveraging participation and engagement at all levels in health workforce development and planning, skill and competencies, recruitment and deploys, retaining and protection, and motivation are very important for making progress.

Active engagement and supports from all of relevant Ministries and agencies, MoH national and sub-national administrative levels, Development Partners, non-Government Organization, private sectors and communities are urged for successful implementation of HWDP as a key foundation for building a strong and resilient health system to improve health outcomes for the people of Cambodia.

SECTION

7

IMPLEMENTATION AND MONITORING



SECTION

7

IMPLEMENTATION AND MONITORING

Successful implementation of this plan requires strong leadership and governance from the MoH, as well as cross-collaboration and engagement from inter-ministries, and national and sub-national levels to work together to achieve the shared goals and objectives. Firstly, there will be a need to focus on increasing the investment and infrastructure for health service delivery to manage the absorption of new graduates into service, ensure equitable distribution across the country, with timely recruitment and retention of health workers. It is recognized that the growth of education, skills and jobs in health is linked to financial and social benefits for local economies in Cambodia, and this investment will form part of a broader ambition for Cambodia.

Secondly, the MoH will need to focus on developing new skills pipeline and expanding pre-service education and in-service training (including postgraduate education) to build a competent health workforce. With the provision of safe and effective care being essential for Cambodia now and in 2033, this investment will enable the health system to meet the needs and demands of the population. Alongside this, there is a need to develop accredited work and learning enabling environments that enhance capabilities to ensure full participation and an outcome-focused approach to delivering care.

The implementation of the Health Workforce Strategic Framework will be based on guiding principles that emphasize timely action and monitoring, using strategies and implementation activities including:

- Proactively identifying and putting in place enabling factors that advance progress toward achieving the objectives and priorities within appropriate and realistic timescales.
- Being responsive to and addressing emerging barriers and challenges, ensuring that progress toward achieving the objectives and priorities is not restricted or limited.
- Regularly measuring progress and conducting reviews to ensure the achievement of objectives and priorities, with allocation of resources and stewardship at strategic and leadership at national and subnational levels.

HRH-OC, Department of Personnel, and Human Resource Development Department, of the MoH, will lead and coordinate the implementation and track progress. By taking timely action and monitoring progress (see more detail in Annex I and II), this plan will be implemented in three stages:

- **2025-2026 (Inception period):** Proactively identifying and putting in place enabling factors that advance progress to achieve the objectives and priorities within appropriate and realistic timescales.
- **2027-2030 (implementation period):** Being responsive to and addressing barriers and challenges, ensuring progress remains on track.
- **2031-2034 (acceleration period):** Regularly measuring progress and conducting regular reviews to ensure the achievement of all of defined objectives and priorities.

ANNEXES

ANNEXES

Annex I. Key implementing coordination institutions and timelines

Strategic objective 1: Improved access to health workforce information and use for decision making and future planning					
Strategic priority	**Interventions**	**Key implementing facilitators**	**2025-26**	**2027-30**	**2031-34**
1.1 Improving institutional capacity in health workforce planning and implementation	1.1.1 Regularly update the roles and responsibilities of the HRH-OC for providing strong leadership and coordination of health workforce planning development and monitoring the progress of implementation.	HRH-OC	✓		
	1.1.2 Update the HRH-OC members to include all key stakeholders including national and provincial levels, health professional councils, and academic institutions.	HRH-OC	✓		
	1.1.3 Build national capacity, leadership and governance, in health workforce strategy development, planning, and implementation.	HRH-OC	✓	✓	✓
1.2 Strengthening heath workforce information for policy decision making	1.2.1 Develop Human Resource Management Information System (HRMIS) to record and regularly update health workforce information from both public and private sectors.	DoP, HRDD, DDH, DPHI, DHS, HPC	✓	✓	✓
	1.2.2 Establish mechanisms for systematic HRH data collection from both public and private sectors: numbers, types of health professions and private health care facilities they are practicing.	DoP, HRDD, DDH, DPHI, DHS, HPC		✓	
1.3 Building institutional capacity in health workforce research and analyses	1.3.1 Enhance institutional capacities in health workforce research and analyses for policy decision making and future planning, and funding support for undertaking these tasks.	NIPH, DoP, HRDD, UHS	✓	✓	✓
	1.3.2 Project the current and future availability of health workforce by types of professions based on the population needs to identify gaps, achieve policy goals, and ensure efficiency, quality, and equity of health service provision.	NIPH, DoP, HRDD, UHS	✓		
	1.3.3 Generate evidence for policy decision making and planning through implementation of National Health Workforce Account (NHWA) and health labour market analysis.	NIPH, DoP, HRDD, UHS	✓	✓	✓

Strategic objective 2: The health system with strong competent health workforce to meet future needs and challenges					
Strategic priority	**Interventions**	**Key implementing facilitators**	**2025-26**	**2027-30**	**2031-34**
2.1 Strengthening competency-based pre-service education system	2.1.1 Strengthen the roles, functions, and capacity of HRDD in governance, coordination, and monitoring health professions education including development and strengthening of regulations, standards, guidelines and accreditation of health professions education.	HRDD, UHS, NIPH, PHC, DoL, DHS, DoP	✓	✓	✓
	2.1.2 Develop/update the national qualifications and core competency frameworks for all health professions programs, and ensue the core competency frameworks of each profession are consistent.	HRDD, UHS, NIPH, DoL	✓		
	2.1.3 Develop the national curriculum frameworks for each health professions education program. Provide technical assistance to health training institutions for curriculum development and implementation.	HRDD, UHS, NIPH, DoL	✓		
	2.1.4 Develop national pedagogy framework for CBE and provide training of trainers for core faculty members and ensure that they clearly comprehend, capable and confident to lecture other teachers.	HRDD, UHS, NIPH, DoL	✓		
	2.1.5 Establish learning systems for advancing the use of MoH approved core competency frameworks and curricula by health science training institutions.	HRDD, UHS, NIPH, DDH,	✓	✓	✓
	2.1.6 Establish an academic accreditation body, education programs, and regulatory systems to ensure the quality of health professions education.	MoH, HRDD, UHS, DoL, HPC	✓		
	2.1.7 Regular review curricula for all health professions to ensure their alignment with the approved core competencies, and roll out implementation for all health training institutions both public and private.	HRDD, UHS, NIPH, DHS	✓		
2.2 Enhancing clinical practice	2.2.1 Develop standards and criteria for clinical practice sites for strengthening clinical training capacity.	HRDD, UHS, DHS	✓	✓	
	2.2.2 Strengthen partnerships between health sciences training institutions and clinical practice sites at public and private health facilities.	HRDD, UHS, DHS	✓	✓	

	2.2.3	Strengthen clinical practice training and clinical practice sites through more streamlined processes, greater consistency, increased supports and extended learning and practicing opportunities.	HRDD, UHS, DHS	✓	✓	
	2.2.4	Supporting the faculty and preceptorship trainers to learn and apply new methodologies for teaching to be able to provide CBE effectively and meet the standards.	HRDD, UHS, DHS	✓	✓	
	2.2.5	Improve infrastructure and increasing the use of technology to supports teaching and learning including libraries, clinical practice sites, and simulation rooms.	HRDD, UHS, DHS	✓	✓	
	2.2.6	Develop student portfolios in each faculty to record their learning progress including their ability to self-direct learning, interests, talents, learning style, and achievements.	HRDD, UHS		✓	✓
	2.2.7	Continue to provide national guidance and resources to health sciences training institutions and regional training centres on new and applied learning opportunities including support for learning prior to preceptorships.	HRDD, UHS	✓	✓	✓
2.3 Improving the National Entrance and Exit Examinations	2.3.1	Continue and strengthen the roles of the National Examination Committee to enhance national entrance and exit exams.	HRDD, NEE, UHS	✓	✓	✓
	2.3.2	Institutionalize the management and administration of the National Entrance and Exit Examinations by establishing a National Examination Unit (NEU).	HRDD, NEE, UHS		✓	
	2.3.3	Regularly revise and update the criteria and qualification requirements (questionnaires, MCQs, and other assessment tools) for the National Entrance Exam.	HRDD, NEE, UHS	✓		
	2.3.4	Regularly revise and update clinical examinations for the National Exit Exam based on CBE structures and Objective Structured Clinical Examination (OSCE)	HRDD, NEE, UHS		✓	
2.4 Balancing the numbers of intake with professional and geographical shortage	2.4.1	Prioritize the enrollment of students from underserved healthcare service areas or rural and remote areas by providing scholarships, accommodation, or from other supporting mechanisms.	HRDD, DoP, DPHI, DHS	✓	✓	✓
	2.4.2	Define the number of student intakes to align with current and future needs considering the types of professions, skills, geographical shortages, and the capacity of training institutions.	HRDD, DoP, DPHI, DHS	✓	✓	✓

	2.4.3	Increase interest and attraction of high school graduations to undertake health professional education, especially Associate and Bachelor's degree on Nursing and Midwifery.	HRDD, DoP, DPHI, DHS	✓	✓	✓
2.5 Expand pre-service education programs to a wider scope of professions.	2.5.1	Expand health professional education programs to include other important health professions with the current shortage to meet the needs of health systems. Those professions include: • Public health specialist, and field epidemiologist, senior laboratory personnel, • Health policy and health financing, • Health professions education, • Clinical psychologist • Allied health professionals • Biomedical engineering, • Digital and health informatics • Infection prevention and control specialist • PHC nurse and other nurse specialists, and community health workers, • Other professions	HRDD, UHS, DoP, DPHI, DHS	✓	✓	✓
	2.5.2	Propose a clear academic pathway and equivalent criteria: from Associate's degree to Bachelor's degree, Master's degree and PhD, or Bachelor's degree to Medical Doctor and Specialist, clinical tracks to non-clinical tracks.	HRDD, UHS, DoP	✓	✓	✓
	2.5.3	Plan recruitment and official recognition of these health professions as MoH government civil servants.	DoP	✓		
2.6 Improving in-service training and continuing professional development	2.6.1	Establish multiple learning platforms to increase access and participation in in-service training and continuing professional development including on-site and virtual learnings.	HRDD, NIPH HPC, HPA, DDH	✓	✓	✓
	2.6.2	Provide in-service training programs based on identified staff development needs and training requirements to meet the objectives of local institutions and support the long-term career development of the health workforce, including soft skills and patient-centeredness.	HRDD, UHS, HPC,	✓	✓	✓
	2.6.3	Develop a comprehensive plan for mandatory CPD programs for public and private health workforce to meet the minimum requirements for re-licensing with professional councils and/or career development and promotions.	MoH, HRDD, HPC,	✓	✓	✓

	2.6.4 Provide in-services training courses based on the skill and competency needs for improving quality, patient safety, and expanding service delivery (MPA and CPA guidelines) and for improving leadership and management skill for health leaders.	HRDD, DHS	✓	✓	✓
	2.6.5 Establish peer learning groups on key areas such as clinical safety, human factors, socio-behavioural changes, research, innovation and quality improvement, and provide rewards and incentives for health workforce participation in driving and managing changes to improve health outcomes.	NIPH, PMD, CDC	✓		
	2.6.6 Provide orientation to all staff on relevant MoH technical guidance, policy and strategic documents, clinical protocols and guidelines, and healthcare accreditation standards, and ensure the implementation and practices are aligned.	DHS, HRDD,	✓	✓	✓
	2.6.7 Enable rural health workers to enhance their scopes of practice to respond fully to the needs of their communities by on-site training and coaching from ODs, PHDs, and National Programs.	UHS, HRDD, DHS		✓	✓

Strategic objective 3: Equitable distribution and well retained health workforce to fit for purpose and responsive to the needs.

Strategic priorities	Interventions	Responsible	2025-26	2027-30	2030-34
3.1 Strengthen qualified health workforce recruitment and equity in deployment to rural and remote areas and the most shortage.	3.1.1 Improving and strengthening recruitment procedure to best select the applicants with skills and competencies to meet the job descriptions.	DoP		✓	
	3.1.2 Developing policy options, generating strong evidence and rational for advocacy and negotiation with Ministry of Economics and Finance and Ministry of Civil Service to increase numbers of health workforce into public sector based on MPA and CPA staffing norms, and scaling up to meet SDG/UHC requirement.	DoP, DPHI, DHS, NIPH	✓	✓	✓
	3.1.3 Prioritizing selection of the applications who are from and distribute to underserved areas, rural and remote health facilities.	DoP, DPHI, DHS, NIPH	✓	✓	✓
	3.1.4 Mapping and figuring out health centers and hospitals with understaffing as per MPA and CPA staffing norms, provide timely refilling the gaps of retirements and leaving the current posts.	DoP, DPHI, DHS, NIPH	✓		

	3.1.5 Planning recruitment and deployment of multidisciplinary workforce targeted by national institutions, national centers and programs, and MoH technical departments, rather than just medical or clinical cadres. Multidisciplinary workforce such as: • Public health specialist, and field epidemiologist, senior laboratory personnel, • Health policy and health financing, • Health professions education, • Clinical psychologist • Allied health professionals • Biomedical engineering, • Digital and health informatics • Infection prevention and control specialist • PHC nurse and other nurse specialists, and community health workers, • Other professions	DoP, DPHI, DHS,	✓	✓	✓
3.2 Develop mechanisms for attracting and retaining health workers in rural and remote health facilities.	3.2.1 Develop national retention policy to identify mechanisms for increasing and retaining health workforce at remote and rural areas.	DoP, DPHI, DoL	✓	✓	✓
	3.2.2 Review policy feasibility for enrolling students from rural background in health professional education programmes and prioritizing to recruit them back to their hometown posts.	HRDD, DoP,	✓	✓	✓
	3.2.3 Provide financial incentives and non-financial incentives to remain them remote or rural health facilities.	DBF, DoP, DPHI, DoL	✓	✓	✓
	3.2.4 Improve living condition and working environment to ensure safety and security of staff in rural and remote areas.	DoP, DoL, DPHI	✓	✓	✓
	3.2.5 Develop and strengthen career pathways for rural health workers, provide opportunity for continuing professional development.	DoP, HRDD, DPHI,	✓	✓	✓
	3.2.6 Identify staff gaps in relation to the service delivery needs and develop strategies to address them including task shifting or task sharing.	NIPH, DoP	✓	✓	✓
	3.2.7 Implement performance based-financing to ensure availability and accessibility of health workforces at any time in health facilities.	DHS, DBF	✓	✓	✓

Strategic objective 4: Strong governance and regulated health workforce for safe and quality health services, and supportive working environment.					
Strategic priorities	**Interventions**	**Responsible**	**2025-26**	**2027-30**	**2030-34**
4.1 Exploring mechanisms to manage and regulate dual practice more effectively.	4.1.1 Create a platform and policy space to raise and discuss the positive and negative impact of dual practice in Cambodia.	HRH-OC	✓	✓	✓
	4.1.2 Exploring and understanding political economy and the scope of dual practice in Cambodia.	NIPH, DPHI, DoP, DoL	✓		
	4.1.3 Exploring and understanding the current remuneration to assess the gap that needs to be covered alongside other measures to regulate dual practice.	NIPH, DPHI, DoP, DoL	✓		
	4.1.4 Develop a case study, lesson learned, best practice in managing dual practice and deriving the relevant policy options for Cambodia.	NIPH, DPHI, DoP, DoL	✓		
	4.1.5 Strengthen public and private sectors monitoring, restrict absenteeism, conduct annual staff performance assessment purposely links to incentives.	DHS	✓	✓	✓
	4.1.6 Regularly review and re-organize health service delivery models at public facilities to be more attractive, perceived as better quality and trusted by the population.	DHS	✓	✓	✓
4.2 Improving quality of health services	4.2.1 Enhance the knowledge of health workers to implement and comply with all new and relevant updated clinical protocol, standards, guidelines, MoH policies and strategies.	DHS	✓		
	4.2.2 Continuously build capacity of health workers to optimize performance and orient them toward the Cambodian Hospital and Health Center Accreditation Standards.	DHS	✓	✓	✓
	4.2.3 Develop an incident reporting system at the health facilities to track adverse or unwanted medical occurrences, quality indicators such as IPC compliances, re-admission rate, hospital acquired infections, and complains from users.	DHS	✓	✓	✓
	4.2.4 Promote a blame-free culture where health workers can report incidents and errors that occur at their workplace, share and learn to enhance patient safety and continuous quality improvement.	DHS	✓	✓	✓

	4.2.5 Ensure that the health facility's environment, each service delivery room, and toilets are clean. Cleanliness and warm service provided by health workers are the first impression of good quality of care and trust.	DHS	✓	✓	✓
	4.2.6 Make sure health facility's environment, each service delivery room, and toilets cleaned. Cleanliness and warmly welcome by health workers are the potential entry point of perceiving good quality of care and trust.	DHS	✓	✓	✓
	4.2.7 Regularly review staff arrangement in each unit/department, what is effective and needs improvement. Provide flexibility of working arrangement, shift, duty, and shortening the length of duty.	DHS	✓	✓	✓
	4.2.8 Build a team spirit of dignity, compassionate and respected care for patients regardless of age, religion, social and cultural values.	DHS	✓	✓	✓
	4.2.9 Promote integrated people-centered health services that seek to engage and empower patients, caregivers and families including healthier behaviors, enhanced patient experience, and more effective utilization of services.	DHS	✓	✓	✓
	4.2.10 Promote culture of good communication and interaction between providers and consumers. Patients, caregivers, and family are clearly informed about clinicalProcedures, provided choices and are involved in decision- making. The information must be completed, accurate, timely, unambiguous, and culturally and ethnically acceptable.	DHS	✓	✓	✓
4.3 Improving roles and functions of Health Profession Councils (HPC)	4.3.1 Develop HPC strategic plan and support a sustainable business model that can mobilize human and financial resources for efficient and effective health workforce regulation.	HPC	✓	✓	
	4.3.2 Strengthen each HPC's functions and responsibilities in registering health practitioners, issuing license and regulating the health professional practice to due standards and norms.	HPC	✓	✓	
	4.3.3 Regularly review and update the scopes of practice for each health profession, minimum requirements for professional competency to practice, including continuing professional development.	HPC	✓	✓	

	4.3.4 Establish a common framework and guidance for continuing professional development to ensure that every health professional regularly completes continuing professional development (CPD) to maintain the minimum standard of competence.	HPC	✓		
	4.3.5 Establish new HPCs to cover all types of health professions	HPC-CC	✓	✓	✓
	4.3.6 Develop and publish annual progress/achievement reports with coordination by the Health Professional Council Coordination Committee.	HPC, HPC-CC	✓	✓	✓
4.4 Strengthening registration and licensing process and ensure a harmonized information system	4.4.1 Publicize all administrative procedures and requirements for registration, licensing, and re-licensing of health professionals, including operational guidelines for clients' rights and providers' rights-duties.	HPC	✓		
	4.4.2 Proactively identify other mechanisms/options to ensure all health professional practitioners are registered and licensed: • Mandatory automated registration promptly after graduation. • Mandatory to have a valid license when signing the contract as a new government civil servant, contracting staff, and voluntary jobs, as well as for private health facilities, and NGOs. • Develop a framework and action plans to interface HR MIS, HPCs RMS, and Universities databases including the private sector, through establishing interoperability standard and system.	HPC	✓	✓	✓
	4.4.3 Build a mechanism to alert on re-licensing as a reminder torenew their license one-two months before the expired date.	HPC	✓		
	4.4.4 Build a registration and licensing system that generates information linked to MoH's policy goals: • Updated information on continuing professional development, • Information on the numbers of health professionals at public and private health care facilities separately and types of profession, and where they are practicing.	HPC, DPHI, DDH, DHS	✓		

4.5 Strengthening governance across the health systems to promote gender mainstreaming and equity	4.5.1 Conduct gender equity analysis on the health workforce to better inform policy development in Cambodia.	DHS, DoA	✓		
	4.5.2 Improve the working environment and condition for health workforce especially for highly feminized occupations at remote and rural areas through a strong supportive and protective mechanism.	DHS, DoA	✓	✓	✓
	4.5.3 Protect health workers from all forms of violence, attacks, sexual harassment, and discriminatory practices, and to promote safe working environment and conditions at all times.	DHS, DoA	✓	✓	✓
	4.5.4 Scale up efforts to promote the recruitment and retention of competent, skilled and motivated women health workers, and secure the equitable distribution.	DHS, DoA	✓	✓	✓
	4.5.5 Mainstream a gender perspective on a systems-wide basis when designing, implementing and monitoring health policies, taking into account the specific needs of all women and girls, with a view to achieving gender equality and the empowerment of women in health policies and health systems delivery	DHS, DoA	✓	✓	✓
	4.5.6 Provide better opportunities and working environment for women to ensure their role and leadership in the health sector, with a view to increasing the meaningful representation, engagement, participation and empowerment of all women in the workforce, addressing inequalities and eliminating biases against women.	DHS, DoA	✓	✓	✓
	4.5.7 Address barrier in access to essential health services particularly for women health condition, specific needs of women and girls which are sensitive, those need to be delivered by women health staff.	DHS, DoA	✓	✓	✓

NOTE: HRH-OC: Human Resources for Health Oversight Committee; HRDD: Human Resource Development Department; DoP: Department of Personnel; DPHI: Department of Planning and Health Information; DHS: Department of Hospital Services; DoL: Department of Legislation; CDC: Department of Communicable Disease Control; DBF: Department of Budget and Finance; PMD: Preventive Medicine Department; DDH: Department of Digital Health; DoA: Department of Administration; HPC: Health Profession Council; HPC-CC: Health Profession Council Coordination Committee; NIPH: National Institute of Public Health; UHS: University of Health Sciences.

Annex II. Indicators

Indicators	(2024) Baseline	2025-26	2027-30	2031-34
1. Density of medical doctor, nurse, midwife per 10,000 population	30.3	33.8	39.8	44.9
2. Density of medical doctor per 10,000 population	7.3	7.9	9.0	9.8
3. Density of nurse per 10,000 population	15.7	17.4	20.4	22.9
4. Density of midwife per 10,000 population	7.3	8.5	10.4	12.2
5. Density of medical specialist per 10,000 population	0.8	1	1.7	2.2
6. Density of dentist per 10,000 population	1.3	1.5	2	3
7. Density of pharmacist per 10,000 population	3.8	4.5	6	7
8. Percentage of medical doctor registered and has valid license	90%	95%	100%	100%
9. Percentage of dentist registered and has valid licensed	90%	95%	100%	100%
10. Percentage of pharmacist registered and has valid license	90%	95%	100%	100%
11. Percentage of nurse registered and has valid license	90%	95%	100%	100%
12. Percentage of midwife registered and has valid license	90%	95%	100%	100%
13. Number of health professional education programs shifting to full CBE.	9	12	15	20
14. Percentage of health centre having at least 8 staff	70%	80%	90%	100%
15. Percentage of CPA1 hospitals that have sufficient staff as per CPA 1 guideline (50-81).	70%	80%	90%	100%
16. Percentage of CPA1 hospitals that have sufficient staff as per CPA 1 guideline (50-81).	70%	80%	90%	100%
17. Percentage of CPA1 hospitals that have sufficient staff as per CPA 1 guideline (50-81).	70%	80%	90%	100%
18. Percentage of female staff in MoH	53.7%	55%	57%	58%

Annex III. Glossary

Terms	Explanations
Accreditation	A process by which a governmental, parastatal or private body evaluates the quality of a higher education institution or a specific higher education program or course in order to formally recognize it as having met certain predetermined criteria or standards and award a quality label[53].
Allied health professionals	A diverse group of professions that provide a wide range of preventive, diagnostic, rehabilitative, and therapeutic services in connecting with health care in a variety of settings. They are typically distinct from the fields of medicines, nurses, and midwives[54]. For example: physiotherapist, prosthetist, audiologist, pharmacist, radiation therapist, community health worker, etc.
Competencies	The abilities of a person to integrate knowledge, skills and attitudes in their performance of tasks in a given context. Competencies are durable, trainable and, through the expression of behaviours, measurable[34].
Competency-based curriculum	A curriculum that emphasizes the complex outcomes of learning rather than mainly focusing on what learners are expected to learn about in terms of traditionally defined subject content. In principle, such a curriculum is learner centered and adaptive to the changing needs of students, teachers and society. It implies that learning activities and environments are chosen so that learners can acquire and apply the knowledge, skills and attitudes to situations they encounter in work environments[55].
Competency-based education	An approach to preparing [health workers] for practice that is fundamentally oriented to outcome abilities and organized according to competencies. It de-emphasizes time-based training and facilitates greater accountability, flexibility and learner-centeredness[56].
Competency framework	An organized and structured representation of a set of interrelated and purposeful competencies[35].
Continuing professional development	Training that not only involves clinical updates or educational activities but also includes wide-ranging competencies such as research and scientific writing; the multidisciplinary context of patient care; professionalism and ethical practice; communication, leadership, management and behavioural skills; team building; and the use of information technology[38].
Curriculum	The comprehensive educational activities and environments that are designed to achieve specific learning goals. The curriculum encompasses the content of learning; the organization and sequencing of content; the learning experiences; teaching methods; the formats of assessment; and quality improvement and programmatic evaluation[57].
Dual practice	Multiple health-related practices by a health worker in the same or different organizations. Dual practice in this sense refers to practice at both public and private health facilities.[58].
Essential public health functions	The set of fundamental, interdependent activities, both within and beyond the health sector, that are required to ensure comprehensive delivery of public health[19].
Health workforce, Human resources for health, health worker	These terms are used interchangeable, it refers to all people engaged in actions whose primary intent is to enhance health. This includes those front-line health professionals who provide health services (such as doctors, nurses, physicians, midwives, pharmacists, lay health workers and community health workers) and those who support the health services (such as hospital managers, ambulance drivers and allied health professionals)[59 60 61].

In-service training	Any structured learning activity for individuals already employed in a service setting[62].
Integrated health services	Integrated health services refer to the management and delivery of health services so that people receive a continuum of health promotion, disease prevention, diagnosis, treatment, disease management, rehabilitation and palliative care services through the different functions, activities and sites of care within the health system[63].
People-centered care	An approach to care that consciously adopts individuals', caregivers', families' and communities' perspectives as participants in, and beneficiaries of, trusted health systems that are organized in accordance with the comprehensive needs of people rather than individual diseases and respects social preferences. People-centred care also requires that patients have the education and support they need to make decisions and participate in their own care and that caregivers are able to attain maximal function within a supportive working environment. People-centred care is broader than patient- and person-centred care, encompassing not only clinical encounters, but also including attention to the health of people in their communities and their crucial role in shaping health policy and health services[64].
Pre-service education	Any structured learning activity that takes place prior to and as a prerequisite for employment in a service setting[62].
Public health services	Actions with a primary focus on improving population-level health outcomes while promoting equity and reducing risks and promoting health at the individual level. Public health services reflect a wide range of activities that seek to positively impact the broader determinants of health and wider issues in the promotion and protection of health, including those across various sectors, such as health, agriculture, education, transport and housing[19].
Public health workforce	Public health workforce refers to a diverse health workforce whose prime responsibility is the provision of core public health activities, and those who are indirectly involved in public health activities, however their work can contribute to improving population health, irrespective of their organization base. The broader public health workforce can be divided into three groups, including (1) public health specialists; (2) people indirectly involved in public health activities through their work; and (3) people who should be aware of public health implications in their professional life[65].
Skill mix	A broad term that refers to the combination or grouping of different categories of staff in the workforce, or the demarcation of their roles and activities. It is also used to describe the mix of posts, grades or occupations in an organization[27].
Social determinants of health	The non-medical factors that influence health outcomes[66].

Annex IV. Working group to develop HWDP 2025-2034

Human Resource for Health Oversight Committee (HRH-OC) members:

- HE. Prof Yit Sunnara,	Secretary of State, MoH, Chair of HRH-OC
- HE. Prof Mam Bunsocheat	Under Secretary of State, MoH, Vice Chair of HRH-OC
- HE. Chin Visal	Director General for Administration and Finance, MoH, member
- HE. Dr Hok Kimcheng	Director General for Health, MoH, member
- HE. Prof Saphonn Vonthanak	Rector, University of Health Science, member
- HE. Prof Chhea Chhorvann	Director, National Institute of Public Health, member
- Mr Sim Sophon	Deputy Director General for Administration and Finance, MoH, member
- Phar. Hun Huong	Deputy Director General for Health, MoH, member
- Dr Phom Samsong	Director, Department of Personnel, MoH, member
- HE. Hok Khiev	Director, Legislation Department, MoH, member
- HE. Dr Sok Srun	Director, Department of Hospital Services, MoH, member
- Prof. Touch Sokneang	Director, Human Resource Development Department, MoH, member
- Dr Ly Vichearavouth	Director, Department of Planning and Health Information, MoH, member
- HE. Prof Laim Eng Hour	Representative from Medical Council of Cambodia, member
- Prof. Va Sokea	Representative from Pharmacy Council of Cambodia, member
- Prof. Sok Ly	Representative from Dental Council of Cambodia, member
- Mr Kab Noeun	Representative from Cambodian Council of Nurses, member.
- Mr Un San	Former representative from Cambodian Council of Nurses, member.
- Ms Nguon Sopheap	Representative from Cambodian Midwives Council, member.
- Miss Yit Sophanic	Officer, Cabinet of the Minister of Health, MoH

Secretariat Members of Human Resource for Health Oversight Committee:

- Mr Yin Chamroeun	Deputy Director, Department of Personnel, MoH, Chair of HRH-OC Secretariat.
- MA Lim Rathnary	Deputy Director, Human Resource DevelopmentDepartment, MoH, Vice Chair of HRH-OC Secretariat
- Mr Mey Ponlork	Head of Bureau, Department of Personnel, MoH, member
- Dr Chan Sakha	Deputy head of Bureau, Department of Personnel, MoH, member.
- Ms Sim Somontha	Technical officer, Human Resource Development Department, MoH, member.

Development Partners:

- Mr Mo Mai,	Technical Officer, health system development, WHO
- Ms Tomoko Onoda,	Coordinator, health system development, WHO
- Ms Debbie Muirhead,	Health Economist, WHO
- Dr Masahiro Zakoji,	Technical Officer, WHO Region Office for the Western Pacific
- Dr Lluis Vinals Torres	Director, Health System Division, WHO Region Office for the Western Pacific.
- Dr Sengkhuon Lim	Health Advisor, GIZ
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- Dr Yuta Yokobori	Health Advisor, JICA
- Ms Soleine Scotney	Country Director, CHAI Cambodia
- Mr Mao Lan	Deputy Country Director, CHAI Cambodia,
- Dr Sang Minh Le	Co-Task Team Leader of SPESHP project, World Bank
- Mr Sum Naisim	Senior Program Manager, DFAT Australia
- Mr Pros Nguon	Technical Officer, UNFPA
- Ms Lisa Dolan-Branton	Chief of Party, USAID EQHA-II
- Prak Manila	Deputy Chief of Party, USAID EQHA-II
- Mr Rin Phearak	Technical Officer, USAID EQHA-II
- Dr Hong Rathmony	Health Specialist, UNICEF

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