CAMBODIA

FIND
Because diagnosis matters

HEALTHCARE PROFILE

HEALTHCARE STATUS

POPULATION (2017)	LIFE EXPECTANCY AT BIRTH (2016)	TOP 3 CAUSES OF DEATH (2015)	HEALTH INSURANCE COVERAGE
16M	69 — 75 AVG IN EAST ASIA & PACIFIC	5% LRI 5% HEART DISEASES 4% STROKE	~30% OF POP.

FINANCING AND EXPENSES

TOTAL HEALTHCARE EXPENDITURE (2015)	HEALTHCARE BUDGET PER CAPITA	DOMESTIC GOV. HEALTH EXPENDITURE AS % OF GOV. EXPENDITURE (2015)	BREAKDOWN OF HEALTHCARE EXPENDITURE (2015)
$1.1 BN (5.9% OF GDP)	$65-70 — $332 AVG IN EAST ASIA & PACIFIC*	6.1%	20% FOREIGN DONORS 22% GOVERNMENT 1% PRIVATE INSURANCE 57% HOUSEHOLDS

INFRASTRUCTURE

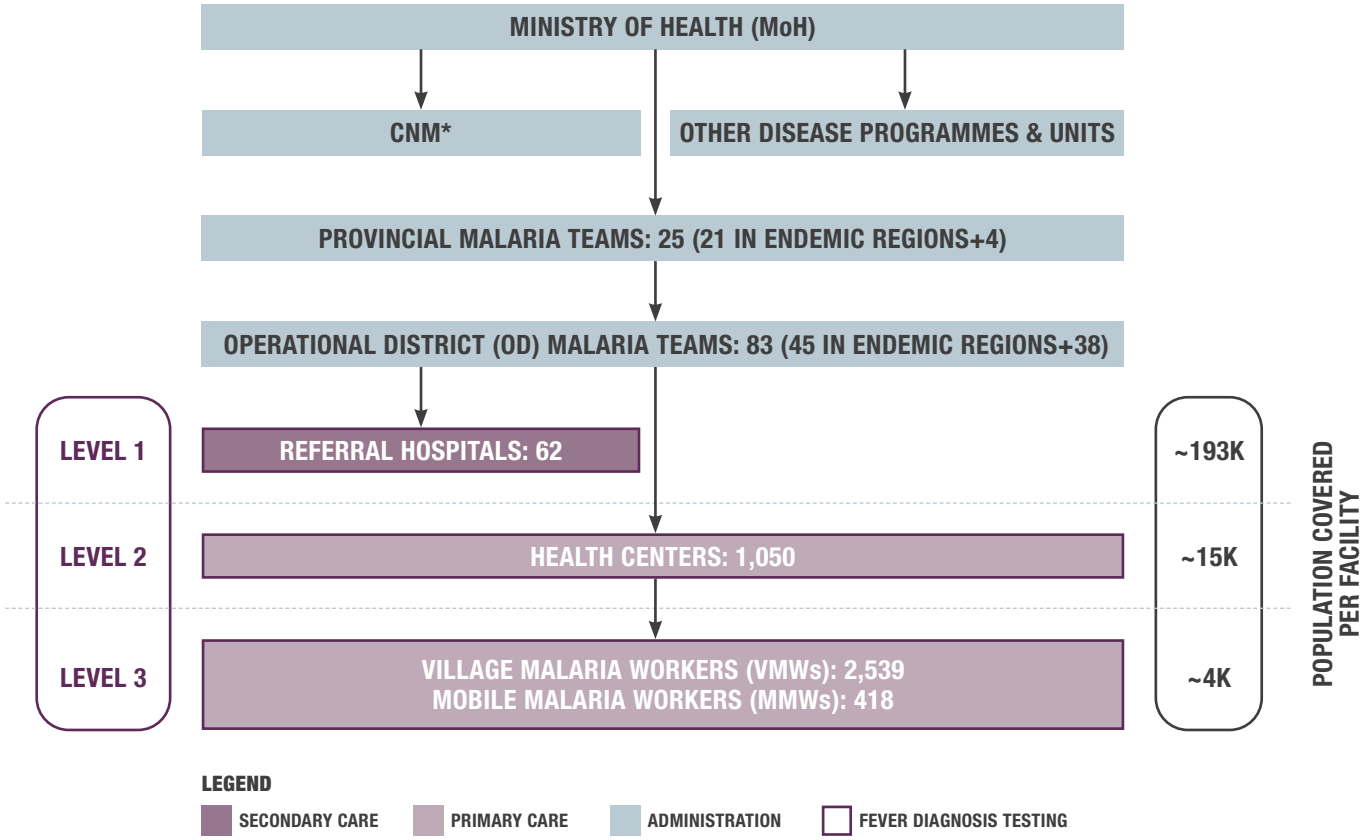
UNIVERSAL HEALTH COVERAGE (UHC): SERVICE COVERAGE INDEX (2015)	DENSITY OF PHYSICIANS (PER 1,000 POP.)	DENSITY OF NURSING & MIDWIFERY (PER 1,000 POP.)	NUMBER OF SPECIALIZED & GENERAL HOSPITALS	NUMBER OF REFERRAL HOSPITALS	NUMBER OF HEALTH CENTER & POSTS
55	~0.1 — 1 CAMBODIA — WHO RECOMM.	~1 — 2.5 CAMBODIA — WHO RECOMM.	~34	~62	~1,050

Health in Cambodia is underfinanced by government and relies on international help and household expenditures

Note: (*) includes long term care, preventive care, ancillary services and other unclassified health expenditures. Sources: WHO, World Bank, Advention

PUBLIC MALARIA HEALTHCARE INFRASTRUCTURE

PUBLIC NATIONAL MALARIA PROGRAM HEALTHCARE INFRASTRUCTURE



COMMENTS

The public sector dominates for major communicable disease control, yet for most other health services the private health infrastructure is largely preferred over the public.

- People commonly choose to consult private providers ahead of public facilities; if the patient's condition deteriorates, private providers generally refer them to a public facility
- Public healthcare providers generally also work in their own private practice and public facilities often suffer from commodities shortage

Regarding malaria, **the government issued the Malaria Elimination Action Framework (MEAF) 2016-2020** that aims to provide universal access and robust coverage for high quality early diagnosis and effective treatment services, ideally delivered within both public and private facilities.

The National Malaria Program is organized as follow:

- **The CNM** sits within the MoH along with other disease programmes
- **Provincial malaria teams** are made of 1 supervisor and 2 assistants per provincial health department (PHD). There are 21 of them in malaria endemic regions providing complete packages of malaria support and 4 in non-malaria endemic regions providing limited packages (i.e. Health staff training, drugs and diagnostics)
- **Operational district malaria teams** are made of 1 supervisor and 1-2 assistants per OD. There are 45 OD malaria teams in endemic regions and 38 in non-malaria endemic regions
- **Village Malaria Workers (VMWs), Mobile Malaria Workers (MMWs),** and local authorities have been deployed to improve the availability and accessibility of malaria services

The National Malaria Program is vertically organized and provides accessibility to malaria services up to the most rural level

Note: (*) National Center for Parasitology, Entomology and Malaria (CNM). Sources: PMI, MoH, Advention

PRIVATE HEALTHCARE INFRASTRUCTURE

FORMAL PRIVATE HEALTHCARE INFRASTRUCTURE, 2012

MoH issues licenses for private healthcare facilities

PRIVATE HOSP. 5	POLYCLINICS 48	CLINICS 136	GPs 2,640	PMW*	PRIVATE PHARMA

Some private providers offer home-visiting services, including basic medical care and deliveries, especially in rural areas

INFORMAL PRIVATE HEALTHCARE INFRASTRUCTURE, 2012

TRAD. HEALERS	MAGICIANS	UNLICENSED DOCTORS ~1,700	TRAD. BIRTH ATTENDANTS	UNQUALIFIED DRUG SHOPS

LEGEND

SECONDARY CARE | PRIMARY CARE | FEVER DIAGNOSIS TESTING

COMMENTS

A substantial share of healthcare services is provided through the private sector, which dominates curative healthcare delivery and has grown rapidly in scope.

A large proportion of the licensed private healthcare providers are small practices or one-person enterprises:

- **GPs** provide clinical consultations and outpatient treatment
- **Clinics** provide outpatient and inpatient services with at least 10 beds providing various medical specialties and diagnostic services
- **Polyclinics** provide outpatient and inpatient services with at least 20 beds providing a wide range of specialized services
- **Private pharmacies** are a frequently accessed and yet inadequate source of treatment

The quality of care of some private providers is questionable and sometimes harmful, and is characterized by improper prescriptions and unnecessary injections and infusions

- In some cases, such as malaria, tuberculosis or immunization services, public–private partnerships (PPPs) have been developed to standardize quality of care and establish pathways between the public and private sectors, though they remain at an early stage of development

Cambodia's "National Strategic Plan for Elimination of Malaria 2011-2025" calls for the gradual prohibition of all antimalarials through the private sector outlets. The ban on treatment at private facilities will be prioritized in areas implementing pre-elimination activities

- Registered private outlets which can assure directly observed therapy (DOT) and establish reliable referral systems will be permitted to continue functioning

The private sector is growing rapidly but remains under-regulated and includes many unlicensed providers

Malaria services are more controlled and standardized thanks to PPP initiatives

Note: (*) Plantation Malaria Workers. Sources: Asia Pacific Observatory on Health Systems and Policies, Advention

MALARIA DIAGNOSIS PROVIDERS' BUSINESS MODEL

PUBLIC HEALTHCARE FACILITIES

The Government funds the main health infrastructure and staff while also delivering subsidized care across a standard package of preventive, primary and curative care.

Revenues at public facilities are supplemented by nominal user charges, with funded exemptions widely provided to the poor. A number of demand-side financing schemes provide social health protection, including Health Equity Funds (HEFs), voucher schemes, and voluntary community-based health insurance (CBHI).

The services delivered at public facilities are regulated: the MoH has defined a Minimum Package of Activities (MPA) for Health Centers and a Complementary Package of Activities (CPA) for Referral Hospitals.

The MPA consists mainly of preventive and basic curative services, supplemented by specific activities for disease programmes.

The public health sector provides free access to malaria diagnosis and treatment.

PRIVATE HEALTHCARE FACILITIES

Private sector costs are covered by patient out-of-pocket (OOP) payments, as private health insurance is very limited.

Malaria diagnosis and treatment is highly subsidized in the private sector. Since 2003, Population Services International (PSI) Cambodia has managed a nationwide subsidized private sector malaria treatment programme in Cambodia. It reaches >1,500 outlets per month that are given access to unbranded subsidized RDTs (Pf/Pv), in line with the national malaria control programme.

In 2011, the CNM and the Ministry of Health (MoH) established a public-private partnership (PPP) programme to further engage the private sector and provide commodities, training, and supervision to registered public-private mix (PPM) providers.

Since 2013, Population Services Khmer (PSK) and other partners have established a network of plantation malaria workers (PMWs) throughout Cambodia, who are provided with the necessary training and supplies for malaria diagnosis and treatment, including free malaria case management for plantation workers. PMWs are required to report their cases either monthly or quarterly in exchange for new supplies.

The public and private sector is mainly funded through OOP except for certain disease programmes, such as malaria, that are government-sponsored

Sources: MoH, PSK, interviews, Advention

HEALTHCARE STAFF AND TRAINING

	PHYSICIANS	NURSES	VMWs AND MMWs
GENERAL JOB DESCRIPTION	Examines in and out patients in line with standard medical procedures using various types of diagnostic mechanisms Administers and prescribes drugs based on examination, test reports and findings and counselling services	Provides nursing care, preventive and curative care Triages patients for physician consultation and perform basic patient assessment have the ability to prescribe 1st line antibiotics	Performs basic malaria education, clinical diagnosis, treatment, DOT and follow up, and referral The MoH intend to expand their role to other diseases too but it is unlikely that they will handle antibiotics in the future
MALARIA SPECIFIC TASKS	Uses IMCA and IMAI approaches to diagnose through clinical diagnostic and microscopy confirmation for severe cases	Triage patients for suspected malaria fevers, take blood sample, perform RDTs and treat	Perform malaria RDTs and provide treatment
MEDICAL TRAINING	8 years	Registered nurses 3 years Primary nurses 1 year	2 days + monthly meeting for continued education
RDT USE KNOWLEDGE	✓	✓	✓
BLOOD SAMPLING KNOWLEDGE	✓	✓	✓

LEGEND

✓ COMPLETE KNOWLEDGE − INCOMPLETE / PARTIAL KNOWLEDGE ✗ NO / VERY LIMITED KNOWLEDGE

The health workforce relies strongly on nurses, with 3.5 nurses per doctor. At central and provincial levels, medical doctors are the largest component of the health staff, while in rural areas nurses prevail. >40% of general medical practitioners are located at central-level facilities.

About two thirds of the private providers with formal training, including medical doctors and nurses, are also public employees. Private practice is usually a supplement to inadequate salaries and often involves conflict of interest, which leads to absenteeism in public facilities.

According to a 2016 study, VMWs are usually trusted and appreciated by the community. Nevertheless, they reported that this is often eroded when a patient presenting with fever and other malaria symptoms tests negative for malaria. Protocol dictates that such patients must be referred to the nearest health center, which is often inaccessible. Patients want and sometimes demand treatment from VMWs/MMWs for other illnesses, and workers are frustrated when they cannot provide it.

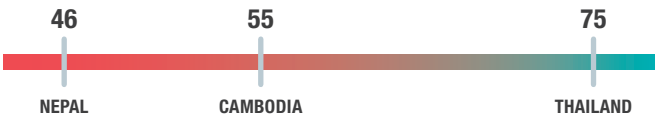
"VMWs have a major role in malaria elimination but as the malaria burden decreases, they might be useful for other diseases too. Yet, their training is so little, I doubt they will be able to prescribe antibiotics." CNM, Cambodia, Lab expert 1

Nurses and VMWs have a central role in malaria fighting in Cambodia

Community trust in VMWs would be reinforced if they had tools to treat non-malarial fevers rather than referring them to a higher and often inaccessible level

Sources: Malaria Journal, MoH, interviews, Advention

ACCESS TO CARE

UNIVERSAL HEALTH COVERAGE INDEX (SOUTH EAST ASIA, UHC)*, 2015	
NO. OF HOSPITAL BEDS FOR 1K POPULATION, 2010	~0.9
NO. OF PHYSICIANS FOR 1K POPULATION, 2016	~0.1

Cambodia has one of the lowest rates of physicians per 1,000 population in the world. This is a result of the Khmer Rouge attempt to reboot the society from 1975 to 1979, which led to the genocide of doctors and the shutdown of universities and hospitals, making the country lose an entire generation of caregivers.

Since 1990, Cambodia has started to rebuild its medical infrastructure but qualification and resources are still missing to train new doctors, and lack of trust remains an issue.

Hundreds of unlicensed doctors, as well as traditional healers, proliferate and are usually the preferred caregivers for patients, particularly in rural area. After a 2014 HIV outbreak in a village, caused by an unlicensed doctor using tainted needles, the government is working to limit unlicensed medical practice.

Local populations trust untrained practitioners and some people have never even visited a qualified one. They are perceived as accessible, fast, affordable and also as offering a better, or at least equivalent, level of care as official health centers that are lacking staff and equipment.

"Health centers are often only staffed with nurses and midwives. Doctors are lacking and so is equipment; that's why patients tend to go to the private sector." Head of Laboratory, CNM

A 2014 World Bank survey found only 1/3 of official doctors in rural health centers were able to correctly diagnose a series of illnesses and of those just 17 percent were able to prescribe the relevant drugs.

While the geographic coverage of public hospitals is mostly complete, the costs of transport to facilities, the opportunity cost of time spent at facilities, user fees and ancillary costs all create barriers to access.

ADDITIONAL COMMENTS, SPECIALLY IN RELATION TO FEBRILE ILLNESSES

Cambodia's malaria burden continues to be disproportionately borne by ethnic minority groups and mobile, migrant, and cross-border populations, representing a huge challenge for control and elimination of malaria. The current target is to place at least one VMW in every village, including at cross-border sites.

Artesunate and other monotherapies can still be found in the unregulated private sector in Cambodia, although efforts to ensure availability of high-quality artemisinin-based combination therapy (ACT) and a ban on oral artesunate monotherapies have had some success in improving the quality of treatment in the private sector.

Certain sectors, in particular military hospitals, continue to use non-WHO pre-qualified antimalarials for first-line treatment.

Cambodian access to care is quite precarious due to historical reasons and capacity-building needs

Note: (*) The UHC index is made of 16 indicators such as child treatment, malaria prevention, hospital access, health worker density. Sources: Phnom Penh Post, World Bank, PMI, Advention