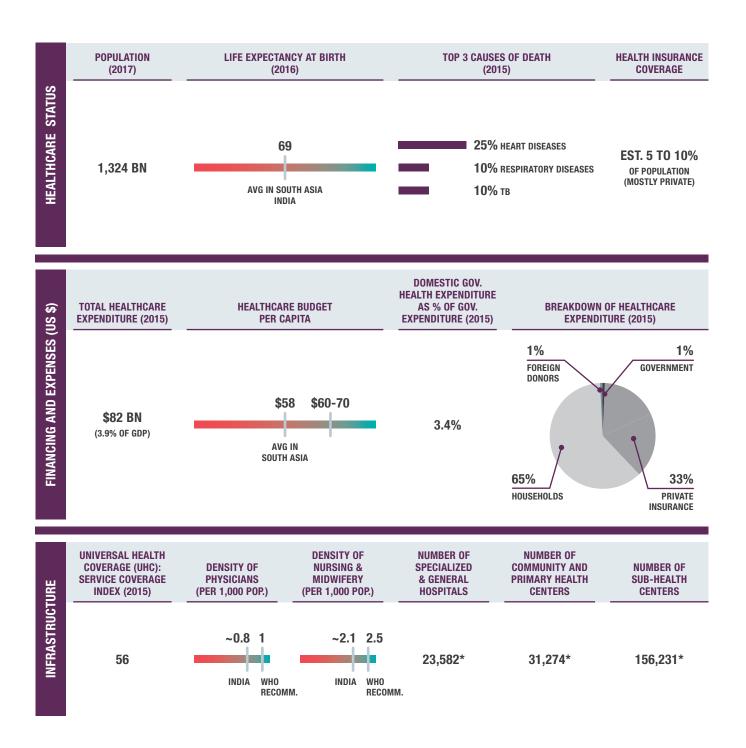




HEALTHCARE PROFILE

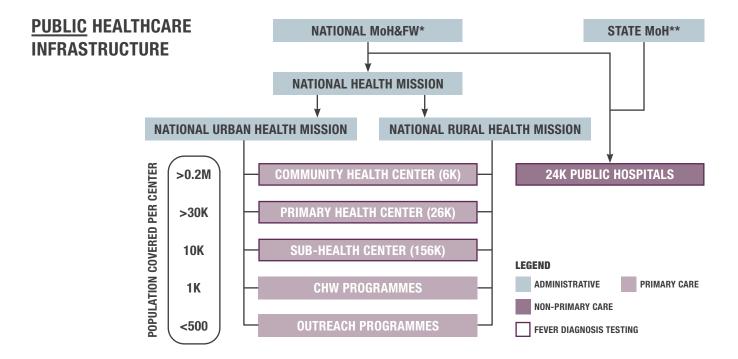


Health in India is mostly funded by households (65%) and private insurance (33%)

Note: (*) Public facilities operated by the Ministry of Health and Family Welfare. Sources: WHO, World Bank, Advention



HEALTHCARE INFRASTRUCTURE



COMMENTS

The majority of healthcare in India is provided by the private sector

- 79% of urban and 72% of rural healthcare was provided by the private sector in 2014, with 80K private hospitals or clinics of all sizes in 2011 (+4.4% CAGR 2001-11)
- Private healthcare regulation remains limited and varies by state, with varying requirements for certification of physicians, nurses and other staff. Some private healthcare providers evade regulation and practice with very limited or no certifications, in particular in rural regions

Hospitals (public and private):

 Hospitals are not aimed at primary care – severe febrile cases presenting can be diagnosed and managed for multiple pathogens in most hospitals

Community Health Center:

- 30 to 100 beds for inpatient treatment, aimed mainly at triage of severe diseases
- Diagnostic of febrile illnesses and treatment for common pathogens

Primary Health Center:

 Small facility (1-3 Physicians, 3-7 Nurses) for outpatient diagnosis of febrile illnesses and treatment of common pathogens

Sub-Health Center:

 Non-physician facility staffed by nurses or senior CHWs which provides routine testing and diagnosis of febrile illnesses and treatment of common pathogens

CHW programmes:

• Community members (ASHA) with basic medical training who visit underserved slums or villages and can provide basic diagnosis and treatment for key pathogens

Outreach programmes:

 Community-driven organizations aiming to educate atrisk persons and reduce risk behaviors, including reporting persons with medical danger signs to CHWs



The Indian public healthcare infrastructure includes multiple primary care levels both in urban and rural areas

Notes: (*) Ministry of Health and Family Welfare; (**) Certain hospitals and a small share of lower-level institutions are co-managed by other administrations, including the Ministry of Defence and the Ministry of Railways. Sources: Ministry of Health and Family Welfare, Advention





FOCUS ON THE INDIAN PRIVATE SECTOR

	CARE PROVIDED FOR FEBRILE ILLNESSES	SHARE OF Patients tested	TESTS USED	
LARGE HOSPITALS (>200 BEDS)	Diagnosis and treatment for all cases, including emergencies	Low	Total blood count and/or malaria microscopy	
SMALL HOSPITALS (<200 BEDS)	Diagnosis and treatment for all cases, including emergencies	Low	Mainly sent to a partner laboratory	
INDEPENDENT GPs AND PHYSICIAN CLINICS	Diagnosis of all cases, in some cases emergency treatment for severe fevers awaiting transfer	Very Low	Mainly referred to partner laboratory	
PHARMACIES AND DISPENSARIES	Treatment for non-severe out-patient cases	Nil	No testing	
LABORATORIES	Only sample collection from patients and testing for other facilities	All	Total blood count and/or malaria microscopy	
INFORMAL AND TRADITIONAL HEALTHCARE PROVIDERS*	Diagnosis and treatment for non-severe out-patient cases	Nil	No testing	

COMMENTS

A significant share of practitioners in all types of private institutions rely on clinical diagnosis to prescribe treatment, even when they have access to diagnostic tests.

Out-patient services and diagnostics are almost always excluded from insurance, and represent an out-of-pocket expense for all patients, which may reduce desire for confirmatory diagnostic tests.

Pharmacies do not provide diagnoses, but many patients selfmedicate for febrile illnesses, usually with artimisinin-based combination therapy (ACT) or antibiotics.

Informal health providers do not use recognized medical tests, and rely exclusively on clinical diagnosis or traditional or non-medical tests. A survey of private practitioners in a large city observed less than 5% testing for malaria, including by microscopy.

In rural areas the share of patients tested is perceived to be lower than in urban settings, and significantly lower than in large cities.

Some overlap may exist between categories, such as pharmacies that act as informal healthcare providers in rural settings for patients seeking to self-medicate.

Laboratories provide kick-backs to physicians or hospitals based on revenue generated.

Testing for febrile illnesses is limited in the private sector, and is rarely performed using RDTs

Note: (*) including AYUSH (Ayurveda, Yoga & Naturopathy, Unani, Siddha, Sowa Rigpa and Homoepathy) practitioners and persons without a medical qualification. Sources: Ministry of Health and Family Welfare, interviews, Advention



MALARIA DIAGNOSIS PROVIDERS' BUSINESS MODEL

PUBLIC HEALTHCARE FACILITIES

Despite significant government support and subsidies aiming to provide universal outpatient care, **public facilities are strongly constrained with regards to the availability of staff, of equipment and of medicines**

- Due to a lack of qualified personnel, many public facilities are under-staffed or lacking key staff members such as physicians or pharmacologists, limiting their opening hours and the number of patients that can be seen concurrently
- Equipment is often limited in variety and depending on the facility level not always available
- Medicine is intended to be provided free of charge, but availability is often low, with up to 50% of references not being in stock in some hospitals in a survey of 80 public facilities in 2015, and 25% not having been available for at least 3 months

Inpatient care remains an out-of-pocket expenditure for patients, which represents a significant revenue stream for public facilities

- Average inpatient stays in public hospitals cost \$90, but are perceived as lesser quality than inpatient treatment in private hospitals which costs an average of \$350
- A small number of poor citizens may be covered by government insurance for inpatient but not outpatient care

PRIVATE HEALTHCARE FACILITIES

All care in private facilities is linked to out-of-pocket expenditure...

- Both for outpatient and inpatient diagnostics and treatment, private healthcare is an out-of-pocket expense
- Private facilities have an incentive to over-prescribe treatments and diagnostic procedures to increase revenue, one example of which is the over-reliance on inpatient treatment that is billed at a higher rate than outpatient care
- Private insurance only covers an estimated 5% to 10% of the population, with varying financial and care conditions

...and is perceived as being of higher quality than public options

 Patients prefer private facilities despite a significantly higher cost than in the public system, mainly based on perceived better equipment, faster and more convenient service, as well as a more complete availability of treatments

Both public and private facilities rely on out-of-pocket payments by patients, entirely for the private sector, and as a significant complement to state funding for public facilities





HEALTHCARE STAFF AND TRAINING

		PHYSICIANS	NURSES	CHWs	
GENERAL JOB DESCRIPTION		Examines in and out patients in line with standard medical procedures using various types of diagnostic mechanisms 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	Promote knowledge of health facilities and available services Performs basic clinical diagnosis of patients for referral Distributes basic palliative medicine for referred patients	
MALARIA SPECIFIC TASKS		Use IMCI and IMAI approach to diagnose through clinical diagnostic and microscopy confirmation for severe cases	Triage patients for suspected malaria fevers and take blood sample	Refer potential malaria fevers	
MEDICAL TRAINING		5.5 years including internship (however, in 2001, only 43% of self-reported physicians had a medical qualification)	3 years for general nurses 2 years for auxiliary nurses	One week (introductory) with additional training of two days every two months	
RDT USE KNOWLEDGE		O	Θ	⊗*	
BLOOD SAMPLING KNOWLEDGE				Θ	
POP. RATIO (2014)	HIGH API STATES	1:2434	1:1587	1:810	
	MID API States	1:1609	1:1875	1:1526	
	LOW API STATES	1:1407	1:1152	1:1467	
		LEGEND Complete Knowledge incompl	LETE / PARTIAL KNOWLEDGE 🛛 NO / VERY L	IMITED KNOWLEDGE	

States with higher malaria risk have fewer trained medical professionals CHWs are not trained in using RDTs or blood sampling

Note: (*) Some community health workers (CHWs) in high malaria-transmission areas with low access to health facilities are trained to use malaria RDTs. Sources: WHO, Ministry of Health & Family Welfare, Advention





ACCESS TO CARE

ACCESS TO CARE, 2015

UNIVERSAL HEALTH COVERAGE INDEX (S-SE ASIA, UHC)*	34 afghanistan	56 INDIA	>80 SINGAPORE
NO. OF HOSPITAL BEDS FOR 10K POPULATION	6.6		
NO. OF PHYSICIANS FOR 10K POPULATION		0.7	

Although over 70% of the population resides in rural areas, only 40% of health professionals practice in them, creating a significant disparity in access to healthcare with:

- 3.8 times more doctors per person in urban areas
- 4.0 times more nurses and midwives in urban areas

Rural care providers are also less qualified:

 37% of urban health doctors and nurses have a medical qualification, versus 19% of rural care providers In urban areas, however, there remain marked differences in access to care between rich and poor as access to care is largely gated by out-of-pocket expenditures in the private sector and availability of resources in the public sector.

ADDITIONAL COMMENTS ON ACCESS TO CARE DYNAMICS, SPECIALLY IN RELATION TO FEBRILE ILLNESSES

Due to the seasonal pattern of many febrile illnesses, access to care can be severely degraded

- "During the season of malaria and dengue, patients often have long waits, even in private hospitals because of the number of cases that doctors need to manage. It is common for overloaded hospitals to give IV fluids to all waiting patients, while doctors have less time to see patients and request fewer tests." NVBDCP, former Director
- During a perceived local epidemic of a certain pathogen, private care providers may default to the relevant treatment without fully ruling out other diseases

Febrile illnesses are often brought to healthcare providers only when the patient or family perceives it as being an emergency

- "Patients often visit hospitals rather than GPs or CHWs for fevers because it is seen as requiring an urgent treatment, while GPs and CHWs are consulted more for chronic or long-term health concerns, such as pregnancy." FIND India, Regional Technical Director
- Patients and their families often do not seek medical care on the first day of fever, but wait 2-5 days depending on their means and the severity of the fever before consulting and may self-medicate during this period

Health coverage in India is still limited, with significant differences between urban and rural areas as well as between rich and poor areas

Note: (*) UHC is made of 16 indicators such as child treatment, malaria prevention, hospital access, health worker density. Sources: WHO, World Bank, interviews, Advention