



HEALTHCARE

April 2010

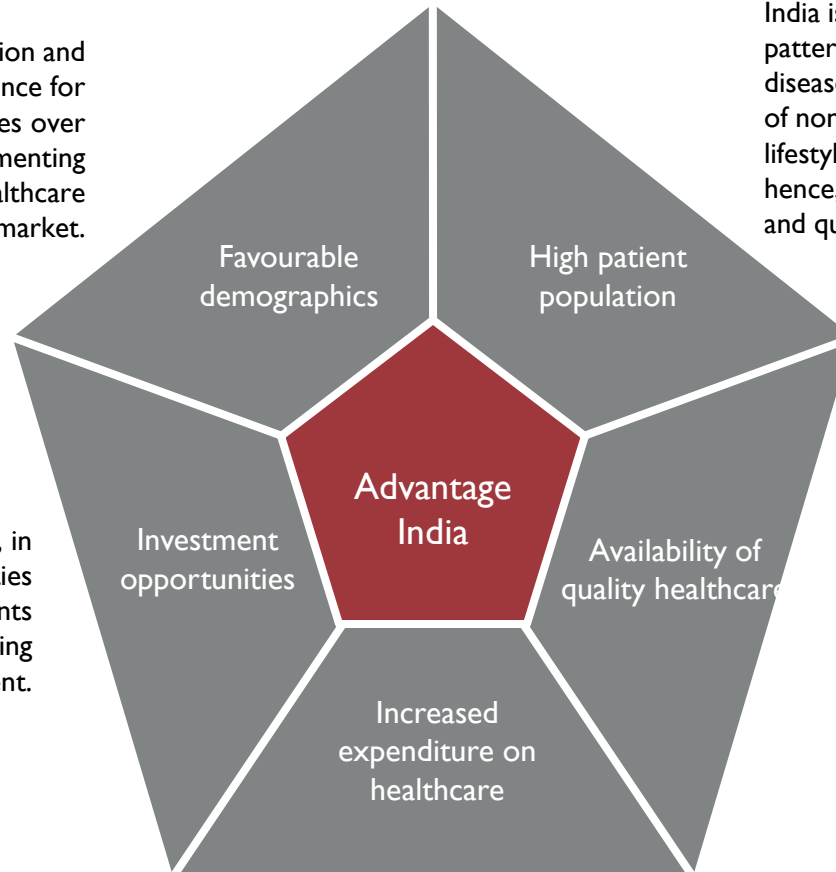
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Advantage India

India's growing population and increasing preference for private health services over public services is augmenting the growth of the healthcare delivery market.

India is seeing a shift in disease patterns from communicable diseases to the high incidence of non-communicable and lifestyle-related diseases — hence, the demand for tertiary and quaternary care.



The gap in infrastructure, in terms of healthcare facilities and personnel, presents opportunities for attracting foreign investment.

Among countries outside the US, India has one of the largest number of Joint Commission International (JCI) approved hospitals. The country has 0.5 million doctors, 0.9 million nurses and about 1 million beds. These factors have transformed it into a leading medical tourism destination.

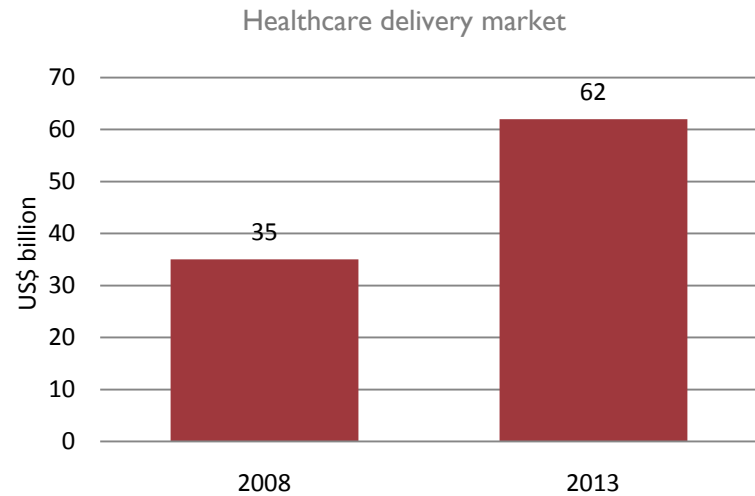
Population growth and increased disposable incomes are expected to result in better healthcare awareness and higher expenditure on healthcare.

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Market overview

The healthcare delivery market in India is at a nascent stage with high demand and growth potential.



Sources: "Apollo Hospitals Enterprise Limited," CRISIL independent equity research, 22 September 2009, p. 18, Ernst & Young analysis

Domestic demand

Treatment

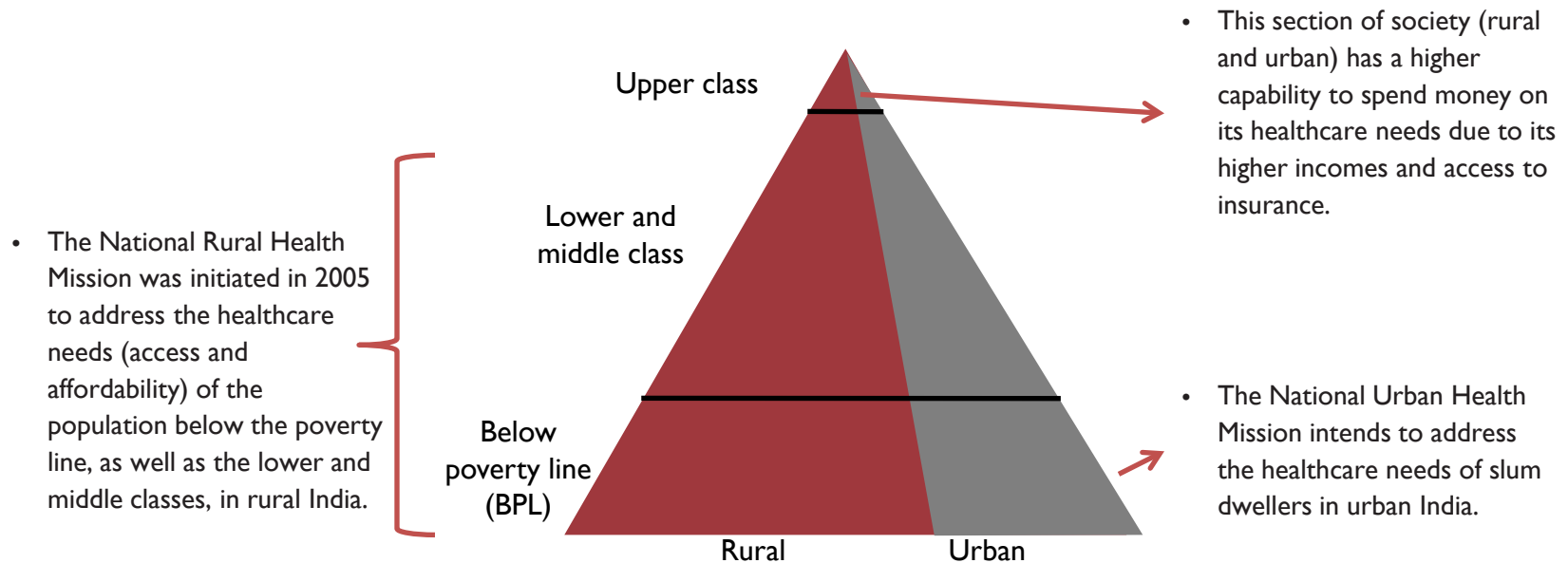
- The increase in the incidence of lifestyle-related diseases among Indians has triggered a demand for specialised treatment. For example, cardiac and related disorders.
- A higher proportion of the Indian population is living in urban areas, where the propensity to seek treatment for ailments is higher. This is primarily due to easy access to healthcare facilities and higher disposable income to undergo expensive treatments.

Tertiary and quaternary care

- Lifestyle-related diseases are likely to assume a greater share of the healthcare market .
- In-patient revenues of hospitals have increased since expenditure on lifestyle-related diseases has risen substantially.

Growth drivers — increasing expenditure on healthcare

- Healthcare expenditure in India is expected to increase by 15 per cent per annum.
- This segment is expected to constitute 6.1 per cent of the country's GDP and employ around nine million people in 2012 .



Source: Ernst & Young research

Growth drivers — demand-supply gap

- There is a growing demand for better public health infrastructure due to the country's high population and increasing disease profile.
- This highlights the need for better healthcare delivery, which addresses accessibility and affordability issues.

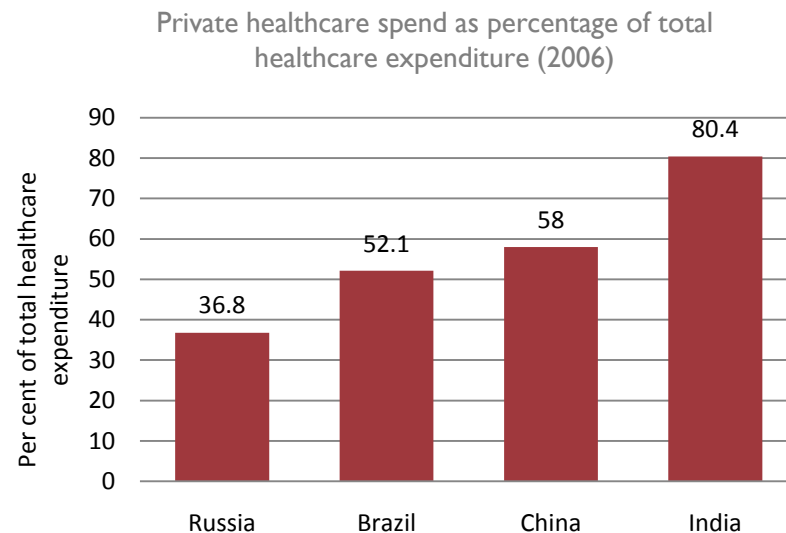
	Disease burden	Health infrastructure			
	DALY rate per 1,00,000 population (2002)	Density of doctors and nurses	Hospital beds per 10,000	Physicians per 10,000	Nurses per 10,000
India	27,536.79	1.6	7	6	13

Source: Ernst & Young research

Note: DALY: Disability Adjusted Life Years; DALY rate per 1,00,000 population is a universally accepted indicator of burden of disease. It is a measurement of the gap between current health status and an ideal situation where everyone lives into old age free of disease and disability.

Growth drivers — preference for private treatment

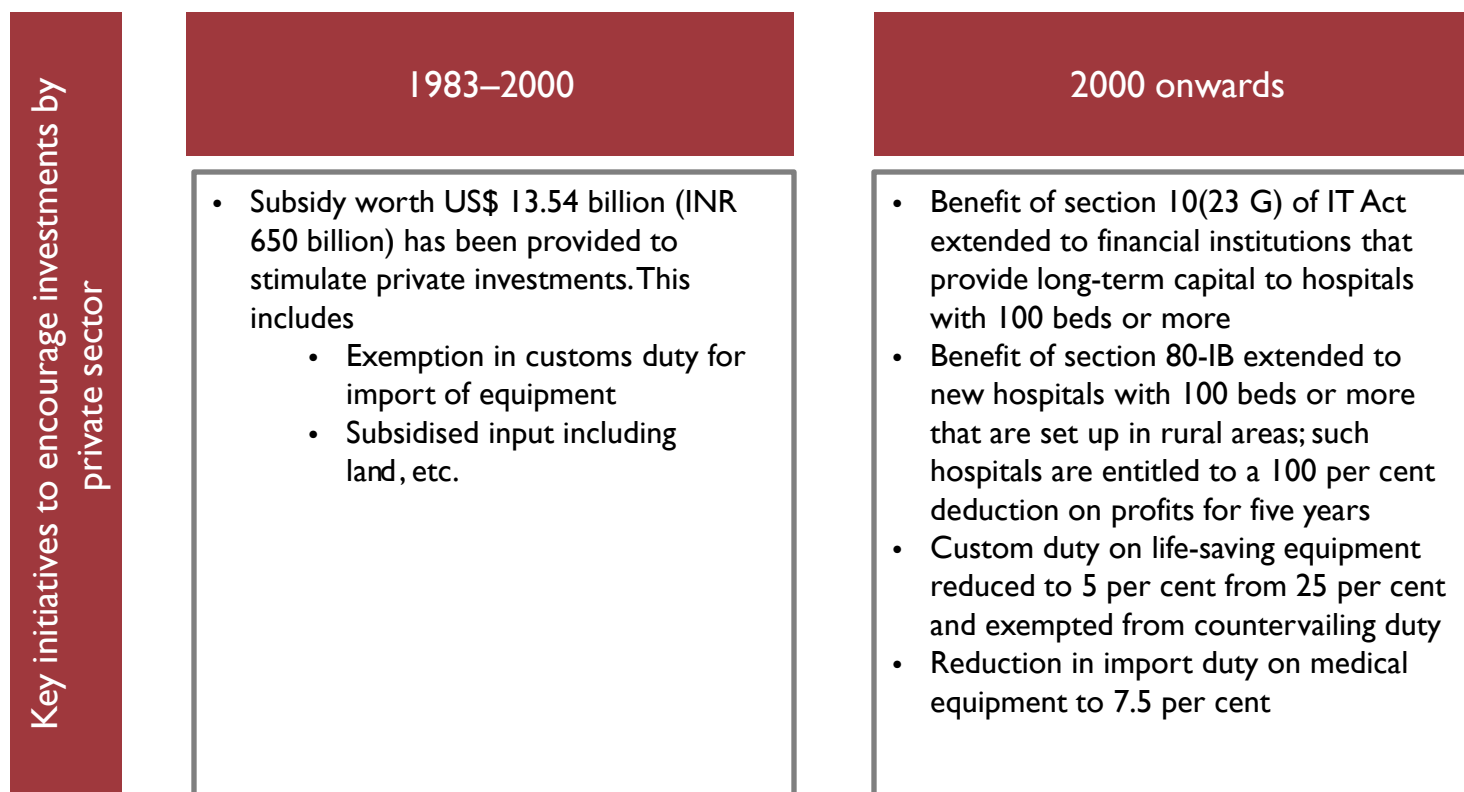
- In India, private healthcare accounts for nearly 80 per cent of the country's total healthcare expenditure, although it is more expensive as compared to public healthcare services.
- The preference for private healthcare can be attributed to better perceived quality and accessibility.



Source: WHO Statistical Information System, 2008, accessed 5 January 2010

Growth drivers — policy

Due to the introduction of several incentives by the government, the private sector has become more active after 1983.



Source: Ernst & Young research

Growth drivers — quality accreditation

In India, the Quality Council of India (QCI) operates the national accreditation structure and obtains international recognition for its accreditation schemes.

Joint Commission International

- Launched in 1999, Joint Commission International (JCI) currently surveys nearly 20,000 healthcare programmes through a voluntary accreditation process.
- The World Health Organisation (WHO) designated the Joint Commission on Accreditation of Healthcare Organisations (JCAHO) and JCI as its collaborating centres for patient safety in 2005.

JCI-accredited organisations

- Apollo Hospitals, Bengaluru
- Apollo Hospitals, Chennai
- Apollo Hospitals, Hyderabad
- Apollo Gleneagles Hospital, Kolkata
- Asian Heart Institute, Mumbai
- Fortis Hospital, Mohali
- Grewal Eye Institute, Chandigarh
- Indraprastha Apollo Hospital, New Delhi
- Satguru Partap Singh Apollo Hospital, Punjab
- Shroff Eye Hospital, Mumbai
- Sri Ramachandra Medical Centre, Chennai
- Wockhardt Hospital, Bengaluru
- Wockhardt Hospital, Mumbai

Key trends — players expanding to Tier II and III cities

- In view of the demand for private healthcare across Tier II and Tier III cities, the Indian Government has allowed the private sector to establish hospitals in these cities. As an indirect benefit extended by the Indian Government, the tax burden on these hospitals has been relaxed for the first five years.
- There is a substantial demand for high quality and specialty healthcare services in these cities, with two advantages for operators
 - Low-cost model
 - High patient turnover

Players expanding to smaller cities
Apollo Hospitals
Fortis Healthcare
Max Healthcare
HealthCare Global

Source: Ernst & Young research

Key trends — players exploring new models

- Traditionally, hospitals have been considered to be capital-intensive businesses with long gestation or breakeven periods.
- Faced with liquidity issues, players have been exploring models such as management contracts and public-private partnerships (PPP).

Focus on PPP

- The Indian Government is encouraging the participation of organised players to utilise their expertise in managing a quality set up.
- Private sector intervention has become imperative to enhance the efficiency of systems.

Management contracts

- These provide an additional revenue stream to hospitals and are being explored in terms of private and government healthcare establishments.
- Players such as Fortis and the Manipal Group have entered this space.

Source: Ernst & Young research

Key trends — players targeting new segments

Primary care and diagnostics

- Demographics, health awareness and increasing capacity to spend are the key drivers of the preventive healthcare segment in India.
- There is an increasing demand for health management plans for corporate employees, which is providing an additional revenue stream for organised players.
- Players such as Apollo, Max Healthcare and the Manipal Group are early entrants into the segment.

Primary care — clinics	
Apollo	27
Aravind Eye Hospital	2
Sankara Nethralaya	4
Manipal Group	9

Source: Ernst & Young research

Key players

Company	No of beds*	Presence
Apollo Hospitals Enterprise Ltd	4,356	Chennai, Madurai, Hyderabad, Karur, Karim Nagar, Mysore, Visakhapatnam, Bilaspur, Aragonda, Kakinada, Bengaluru, Delhi, Noida, Kolkata, Ahmedabad
Aravind Eye Hospitals	3,537	Theni, Tirunelveli, Coimbatore, Puducherry, Madurai, Amethi, Kolkata
CARE Hospitals	1,666	Hyderabad, Vijaywada, Nagpur, Raipur, Bhubaneshwar, Surat, Pune, Visakhapatnam
Fortis Healthcare Ltd	5,044	Mumbai, Bengaluru, Kolkata, Mohali, Noida, Delhi, Amritsar, Raipur, Jaipur, Chennai, Kota
Max Hospitals	800	Delhi and NCR
Manipal Group of Hospitals	+7,000	Udupi, Bengaluru, Manipal, Attavar, Mangalore, Goa, Tumkur, Vijaywada, Kasargod, Visakhapatnam

Source: Ernst & Young research

*Note: No of beds include owned, subsidiaries, joint ventures and affiliations.

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Industry infrastructure ... (1/2)

Service infrastructure

- India has 0.7 beds per thousand patients, as against a world average of 2.6.
- Most private hospitals operate as a proprietorship or partnership business.
- Corporate hospitals account for approximately 10.4 per cent of the total number of hospitals.*

Source: Ernst & Young research

*Note: Across six major cities —

Bengaluru, Chennai, Hyderabad, Kolkata, Mumbai, NCR

Service infrastructure	
Hospitals#	11,289
Beds	4,94,510
Sub centers	1,45,272
Primary Health Centres (PHCs)	22,370
Community Health Centres (CHCs)	4045

Blood banks	
Government-licenced	924
Voluntary	368
Private hospitals	718
Private charitable centers	520

#Note: Includes hospitals run by central government, state government and local government bodies

Industry infrastructure ... (2/2)

Special Economic Zones (SEZs)

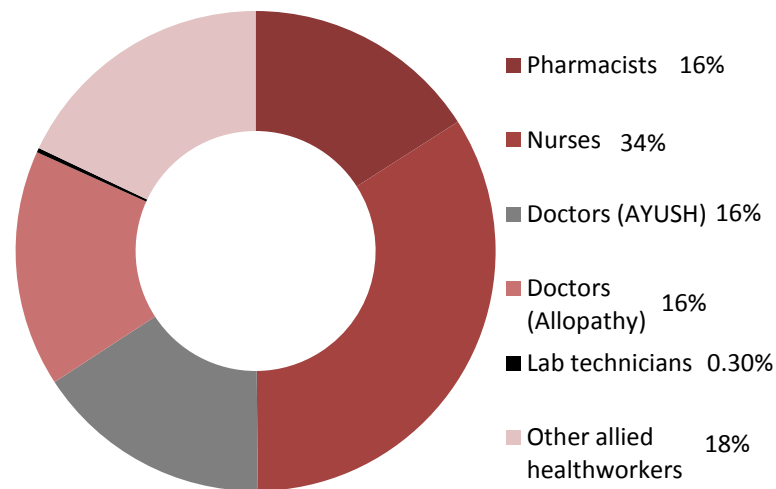
A hospital with 25 beds is permitted in a sector-specific zone, while a multi-product SEZ can have 100 beds.

Human resource infrastructure

	No of institutes	Total intake
Medical colleges	289	32,815
General nurse midwives	1,620	62,647
Pharmacy diplomas	523	31,513

Source: Ernst & Young research

Human resource composition of Indian healthcare industry



Source: Fostering quality healthcare for all, Ernst & Young, 2008; Period under consideration: 2000-2006; AYUSH = Ayurvedic, Unani, Siddha and Homeopathy practices
Note: Numbers for 'other allied health workers' are for the year 2004, all other data is for 2007; other allied health workers include: dentistry personnel, environment and public health workers, community and traditional health workers, other health service providers

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Investments ... (1/2)

- Two deals (outbound and domestic) were completed in 2009.
- Fortis Healthcare Ltd, a majority-owned unit of Fortis Healthcare Holdings Ltd, acquired 10 hospitals owned by Wockhardt Hospitals Ltd (a unit of Khorakiwala Holdings & Investments Pvt Ltd, a subsidiary of Wockhardt Ltd). The transaction included hospitals located in Bengaluru, Mumbai and Kolkata.

M&A scenario — details		
Period: January 1, 2009 to November 30, 2009		
Deal type	No of deals	Deal value (US\$ million)
Inbound	-	-
Outbound	1	-
Domestic	1	17.6

Sources: Bloomberg, accessed 4 December 2009; Ernst & Young analysis

Cumulative FDI inflows	
Period: April 2000 to January 2010	
Sector	FDI inflow (US\$ million)
Hospital and diagnostic centres	761.18
Medical and surgical appliances	328.16

Source: "Fact Sheet On Foreign Direct Investment (FDI)", Department of Industrial Policy and Promotion, www.dipp.nic.in, accessed 29 April 2010

Investments ... (2/2)

Deal summary							
Deal	Deal type	Announcement date	Announced total value (US\$ million)	Target name	Target country	Acquirer's name	Acquirer's country
Domestic	PE	Feb 27, 2009	17.6	Kavery Medical Centre and Hospital	India	India Venture Advisors	India
Outbound	ACQ	Jan 29, 2009	NA	Fortis Clinique Darne	Mauritius	Fortis Healthcare and Novelifa	India

Source: "Transactions," Bloomberg, accessed 4 December 2009; Note: ACQ:Acquisition; PE: Private Equity

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Policy and regulatory framework

National Health Policy 2002

- The National Health Policy 2002 focusses on the need for enhanced funding and organisational restructuring of national public health initiatives to facilitate more equitable access to healthcare facilities.
- The policy focusses on diseases that mainly contribute to the disease burden — tuberculosis, malaria and blindness from the category of historical diseases and HIV/AIDS from the category of newly emerging diseases.
- This policy aims to achieve gradual convergence of health under a single field of administration and lays emphasis on the implementation of programmes through local self government institutions.
- It also aims to identify specific programmes targeted at women's health and strengthening of food and drug administration, in terms of laboratory facilities and technical expertise.
- Under this policy, a larger contribution is proposed from the central budget for the delivery of public health services at the state level.

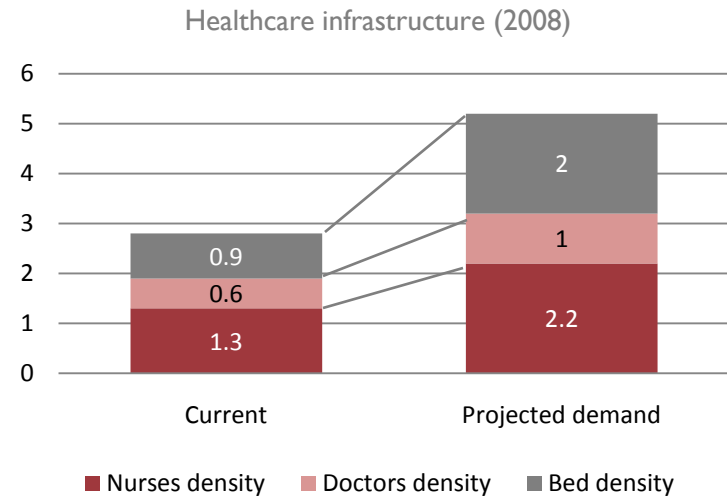
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Opportunities — building healthcare infrastructure

- The number of hospital beds per 1,000 population is less than the current national average.
- An additional 1.75 million beds are needed for India to achieve the target of two beds per 1,000 population by 2025.
- An additional 7,00,000 doctors will be required by 2025 to reach a ratio of one medical doctor per 1,000 individuals.
- To maintain the current doctor-to-nurse ratio of 2.2, an additional 1,600,000 nurses will have to be trained by 2025.
- Achieving these targets will require a total investment of US\$ 77.9 billion.

Source: Ernst & Young research

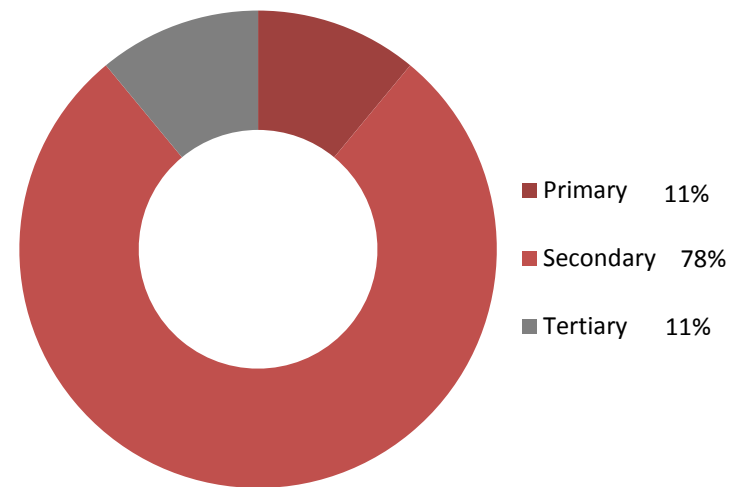


Note:
Estimated density of doctors, nurses and beds per 1000 population by year 2025

Opportunities — developing tertiary care units

- The market for tertiary care is expected to grow exponentially due to the rise in complex ailments such as heart diseases and cancer.
- India's changing demographics and the increasing incidence of non-communicable and lifestyle-related diseases is expected to trigger the need for more tertiary care hospitals to cater to this demand.
- The share of tertiary care in the total healthcare market is currently about 11 per cent.

Healthcare infrastructure — types of service (2008)



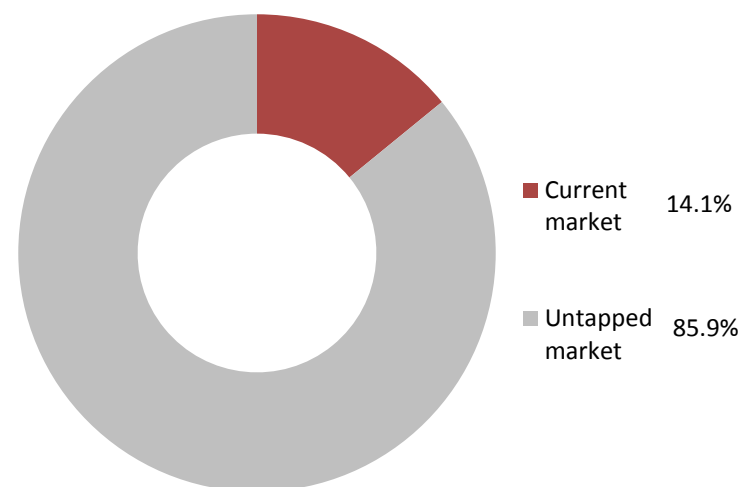
Source: Ernst & Young research

Opportunities — health insurance

- About 14 per cent of the Indian population is health insured.
- Several private insurance companies have entered the market and have empanelled hospitals to provide cashless treatment facilities to subscribers of the insurance companies.
- Competition among insurers is driving their marketing efforts, resulting in higher penetration of health insurance.
- This is expected to improve the affordability of healthcare services.
- The potential increase in the penetration rate of medical insurance and employer plans could result in a higher demand for premium healthcare services in India, and consequently, increase the demand for hospital beds and medical equipment.

Source: Ernst & Young research

Scheme-wise penetration of relevant market segments *



Note:

*Community health insurance, Central Government Health Scheme, Employees State Insurance Scheme, Group insurance, Government schemes for poor including BPL and voluntary insurance

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Industry association

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Note

Wherever applicable, numbers in the report have been rounded off to the nearest whole number.

Conversion rate used: US\$ 1 = INR 48

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