



Healthcare

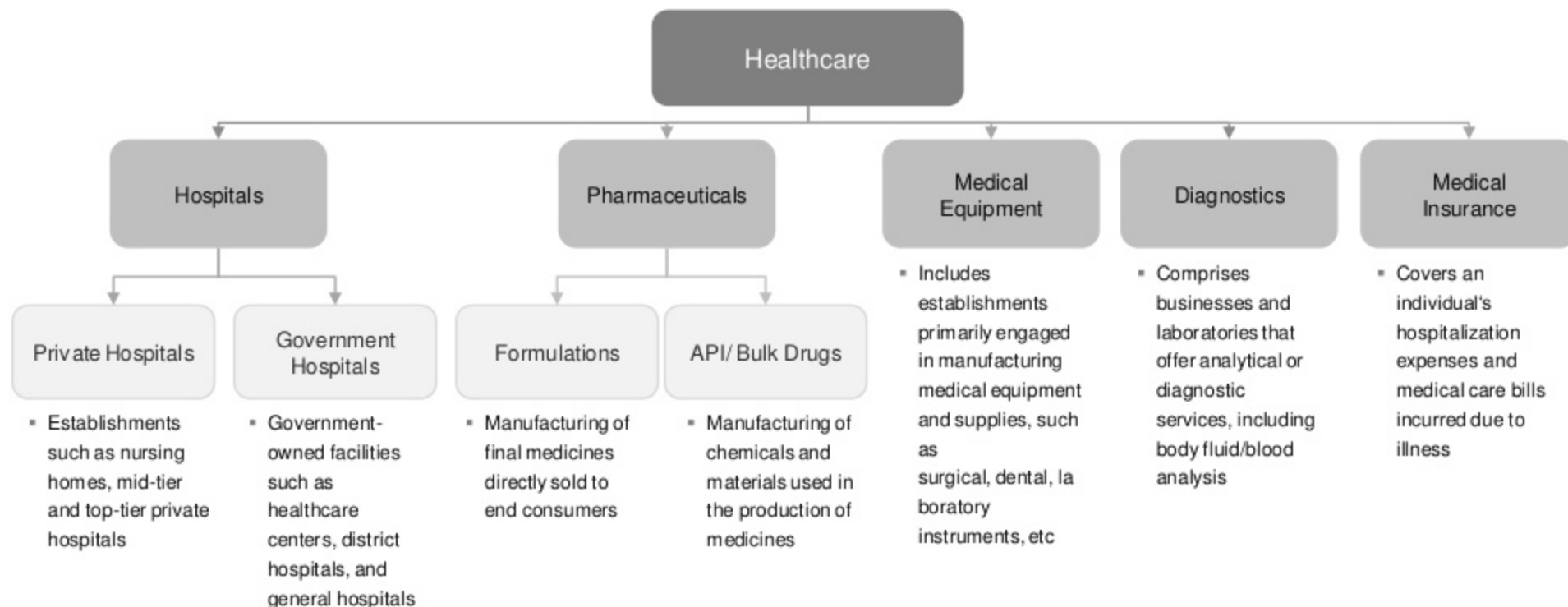
India Sector Notes

MAY 2014

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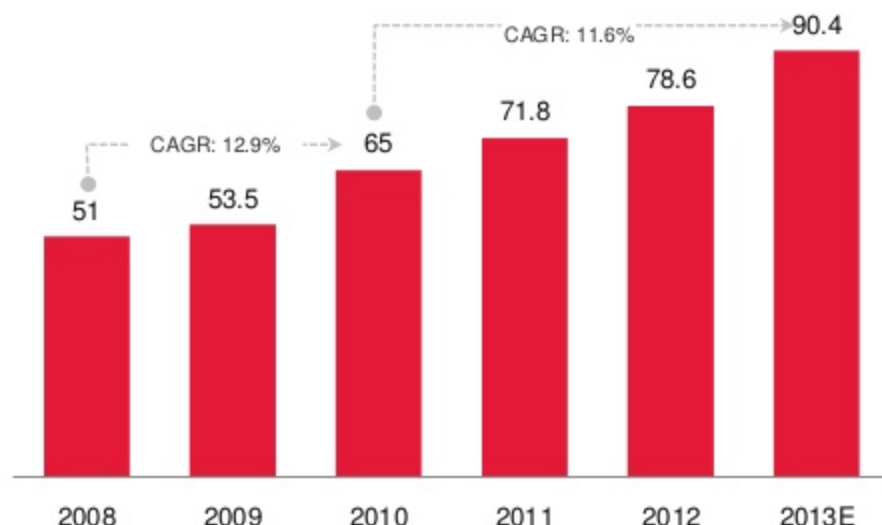
**USD90.4 billion***Healthcare Expenditure***hospital****71%***Hospital Share in Total  
Healthcare Expenditure***USD61***Per Capita Healthcare Expenditure***0.9***Hospital Beds Per Thousand  
Population***0.7***Physicians Per Thousand  
Population***33.1%***Government share in total healthcare  
expenditure***~15%***Health Insurance Penetration*



Source: Hospital Market - India by Research on India

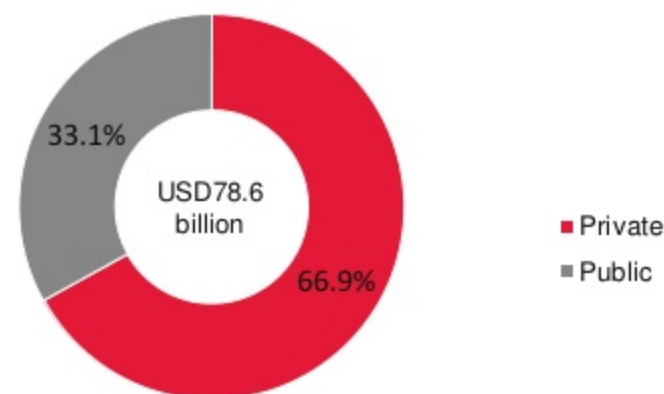
## HEALTHCARE EXPENDITURE GROWTH

(in USD billion)



- The growth in India's healthcare industry is driven by increasing population, rising incomes, changing lifestyle, easier access to high-quality healthcare facilities, and greater awareness of personal health and hygiene.

## SHARE OF HEALTHCARE EXPENDITURE, 2012

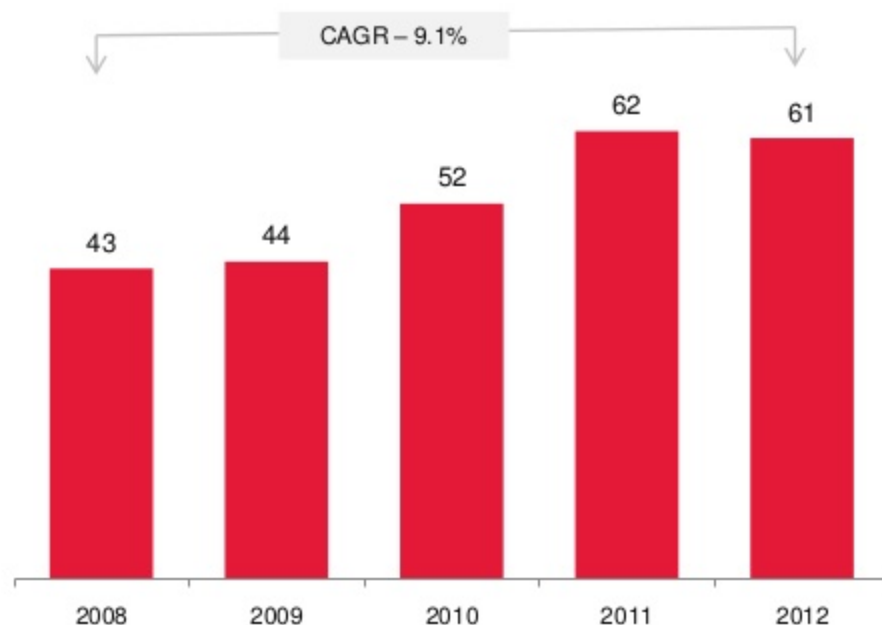


- Private sector has been the driving force behind the growth in the Indian healthcare sector
- Expenditure on private hospitals accounts for 66.9% of total healthcare expenditure in India, among the highest in the world.
- Most healthcare resources in India are with the private sector, which includes 80% of doctors, 26% of nurses, 49% of beds, 78% of ambulatory services, and 60% of in-patient care.

Source: Business Standard, Hospital Market - India by Research on India, World Bank, Business Monitor Report

## PER CAPITA HEALTHCARE EXPENDITURE

(in USD)



- India's per capita expenditure on healthcare is very low compared with developed countries such as the US (per capita healthcare expenditure of ~USD4,700 in 2010), the UK (~USD1,700), Japan (~USD2,800), etc.
- This is primarily on account of low disposable income and low government spend; the Indian government spend on the healthcare sector is among the lowest, accounting for ~4.2% of the total GDP (as against ~17% in the US in 2010 and over 9% in Japan and the UK)
- Currently, the general public meets around 78% of their total health expenditure with own income; of this, 72% is spent on drugs.

Source: World Bank, Aranca Analysis



# Hospitals account for the largest share of healthcare expenditure

## Medical Insurance – 4%

- Indian health insurance markets, one of the fastest growing markets, recorded a CAGR of over 20% during 2008–13.
- Less than 15% of the Indian population has some form of health insurance coverage; by 2020 the figure is forecast to reach 45%.
- The Indian health insurance industry is dominated by four public sector companies: National, New India, Oriental, and United India (60% market share).

## Medical Equipment and supplies – 9%

- The Indian medical device market is the fourth-largest in Asia, with 700 medical device manufacturers.
- India's medical device market is forecasted to expand at a CAGR of over 15% during 2012–2016, mainly due to increased financial support in the form of fiscal benefits as well as technological advancements and

## Pharmaceuticals – 13%

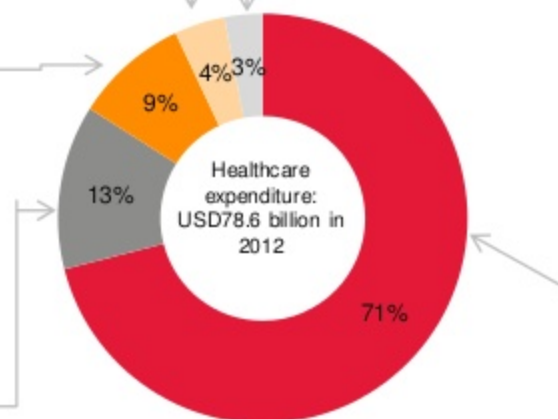
- The Indian pharmaceutical industry is estimated to expand at a CAGR of around 12% during 2012–20, mainly due to growth factors such as presence of epidemiological factors, increase in affordability due to increase in income, expansion of insurance coverage, and increased awareness.
- It is expected that India would be among the top three pharmaceutical markets by incremental growth and sixth-largest in absolute size.

## Diagnostics – 3%

- The Indian diagnostics market is estimated to rise at a CAGR of 19.5% during 2011–16.
- Major growth is expected in hematology, reagents, molecular diagnostics (currently accounting for the largest share of 30–40%), and specialty diagnostics,

## Hospitals – 71%

- Healthcare delivery market in terms of volume was ~4 billion treatments in 2012–13.
- Healthcare delivery comprises in-patient department (IPD) accounting for 72% and out-patient department (OPD) accounting for the remaining.
- The healthcare delivery market is dominated by private healthcare providers, accounting for around 80% of total healthcare delivery in value terms
- The market is estimated to expand at a CAGR of over 11% in value terms during 2013–17.



Source: Business Standard, Hospital Market - India by Research on India, Crisil, The Hindu, Fortis, McKinsey, BioSpectrum, IRDA

## INCREASED USE OF TECHNOLOGY

- Indian healthcare providers are increasingly adapting new technologies to offer better healthcare services, reach inaccessible regions, and improve operational efficiency
  - **Improve operational efficiency:** Hospitals are adopting digital health knowledge resources, electronic medical record, hospital information system to control costs and stream operations
  - **Increase accessibility:** Medical experts are opting for telemedicine as a way to reach rural India and create a network of health service providers.
- Spending on technology is estimated to increase from USD53 billion in 2012 to USD57 billion in 2013

## INNOVATIVE BUSINESS MODEL

- Healthcare providers are looking for innovative business models to remain competitive and cost-effective in the competitive Indian landscape
  - Healthcare providers open multispecialty outpatient clinics to provide primary care. The trend of focusing on provision of primary care is likely to continue. For instance, CARE Hospitals, the fifth-largest chain of multispecialty hospitals in India, unveiled the country's largest integrated outpatient center in Hyderabad
  - Adapting interactive patient care models such as interactive technology platform, online patient self-help groups, mobile health, social media platforms, and patient remote monitoring. These models enable healthcare providers to improve customer service levels as well as increase revenues

## GROWING MEDICAL TOURISM

- The number of medical tourists is estimated to grow from 150,000 in 2005 to 3.2 million in 2015
- Foreigners visit India for cosmetic and regenerative treatment, knee replacement, cardiac treatment, cancer, and other serious ailments. Previously, India received medical tourists from Iraq, Afghanistan, the former Soviet Union; however, the country now also receives patients from the US and Europe
- Inflow of medical tourists is mainly due to low cost advantage, a wide range of treatments, advance medical facilities, and qualified doctors. For instance, dental procedures are seven to eight times cheaper in India compared to the US. Cataract surgery in India costs half of what it does in the US

## OUTSOURCING AND APPOINTMENT OF FULL-TIME DOCTORS

*Outsourcing*

- Indian healthcare facilities are focusing on core business and outsourcing non-core operational activities, including laundry, kitchen, housekeeping, security.
- The facilities are outsourcing revenue-centric operations such as imaging, laboratory, and pharmacy

*Full-time doctors*

- Hospitals are eradicating the visiting doctors practice by appointing full-time doctors, ensuring full-time availability of doctors for patients.
- Hospitals, such as Kokilaben, Hiranandani, and Seven Hills, have opted for all, or majority of specialties, to have full-time consultants on board

Source: Desk Research





## KEY GROWTH ENGINES

- ↑ **Healthcare expenditure:** India's per capita healthcare expenditure increased at a 10.3% CAGR from USD43.1 in 2008 to USD57.9 in 2011. Furthermore, it is estimated to increase to USD88.7 by 2015 due to:
  - **Increasing population:** Indian population is estimated to increase to 1.4 billion by 2026, of which the geriatric population is expected to grow to ~168 million.
  - **Rise in disposable income:** Disposable income in India grew 15–21% in nominal terms between 2008-09 and 2011-12.
  - **Rising literacy:** Literacy rate in India has increased to 74% in 2011 from 64.8% in 2001, leading to increased general awareness, patient preferences, and better utilization of institutionalized care in India.
- ↑ **Lifestyle diseases:** Due to change in lifestyle, incidence of lifestyle-related diseases, such as heart problems, oncology, and diabetes, have increased, and are expected to grow further.
- ↑ **Health insurance:** Penetration of health insurance in India is expected to increase from the current 15% to about 45% by 2020. The surging health insurance industry would address the affordability problem faced by the Indian healthcare sector.
- ↑ **Growing private sector:** Government support in the form of tax relief for the first five years for hospitals setting up operations in tier II and tier II cities will drive growth of private hospitals. The share of private sector in the Indian healthcare industry is forecasted to rise from 66% in 2005 to 81% by 2015.
- ↑ **Technological advancements:** The telemedicine market is expected to rise at a 20% CAGR to USD18.7 million by 2017 compared with USD7.5 million in 2012. Robust infrastructure and 4G services are estimated to fuel growth in the Indian mobile health industry and help it reach USD0.6 billion by 2017.

Source: Business Standard, Economic Times, Healthsite



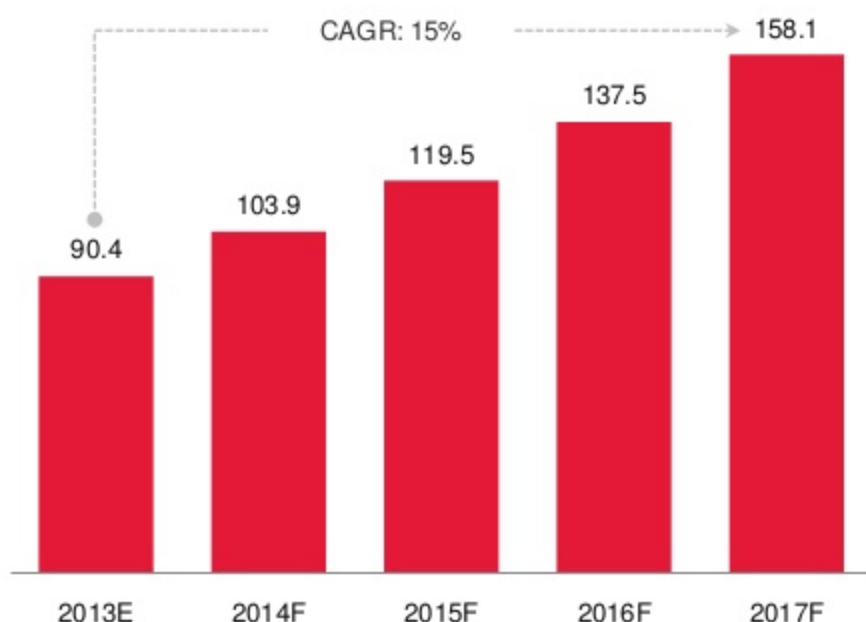
## KEY GROWTH INHIBITORS

- ↓ **Lack of infrastructure and manpower:** India has the lowest healthcare delivery rate due to acute shortage of beds and skilled personnel. To meet the world standards of 2.6 beds per 1,000 population, the country needs additional 1.7 million beds. Furthermore, as per World Health Organization's mandate, India should double the number of doctors, triple the number of nurses, and quadruple the number of paramedics.
- ↓ **Inaccessibility of healthcare services:** Almost 72% of India's population resides in the rural areas and 28% in the urban areas. The urban population has access to 66% of India's available hospital beds, leaving one-third for the rural population. Also, around 50% of the total Indian population, which is about 75% of the total rural population, has to travel beyond five kilometers to access healthcare services due to lack of proper infrastructure.
- ↓ **Shortage of medical specialists:** The number of post graduate medical seats in India is 14,000 compared with 32,000 in the US, leading to shortage of medical specialists. Under the regulatory framework, only a specialist can perform certain tasks. Thus, with low number of specialists, the growth of Indian healthcare industry is at risk.
- ↓ **Nursing profession:** The nursing profession in India is losing its grip. The admissions to nursery colleges have dropped 50%, leading to closure of half of the colleges in Karnataka. If this persists then it could pose a serious challenge to the healthcare sector.
- ↓ **Inefficiency of public healthcare providers:** Lack of proper services from public healthcare providers has forced Indians to shift to private healthcare providers whose services are comparatively expensive. It is believed that private healthcare facilities are around two to nine times more expensive than the public services, proving them to be extremely expensive for poor people.

Source: KPMG

## HEALTHCARE EXPENDITURE - PROJECTED GROWTH

(in USD billion)



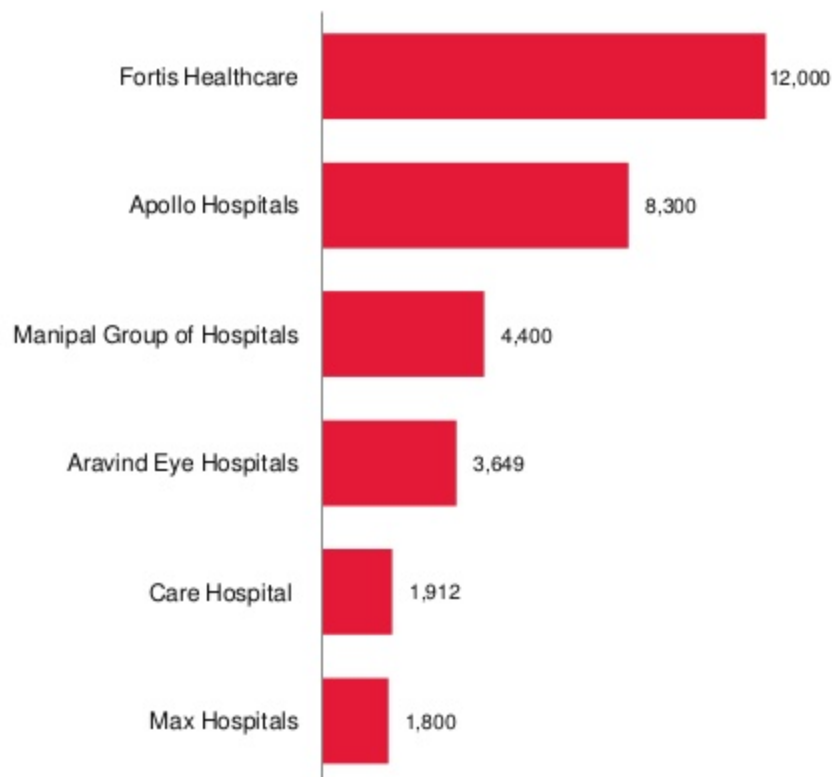
- Growth of India's healthcare sector would be principally driven by increase in per capita healthcare expenditure on the back of rising awareness and disposable income; per capita healthcare expenditure is expected to reach USD88.7 by 2015.
- Technological advancements will be another major factor driving market growth; rapid growth is expected to be witnessed in telemedicine and mobile-based healthcare industry.
- The private sector is expected to continue to witness accelerated growth momentum; by 2015 the sector is forecast to account for over 80% of the healthcare expenditure.

Source: India's healthcare sector to grow to \$158.2bn in 2017 by Economic Times, Dec 2013, Aranca Analysis

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## NUMBER OF BEDS WITH TOP FIVE PRIVATE PLAYERS



Source: Company Website

## HOSPITAL LOCATION OF TOP FIVE PRIVATE PLAYERS

## GEOGRAPHICAL PRESENCE IN INDIA

**Pan India** – Mumbai, Bengaluru, Kolkata, Mohali, Noida, Delhi, Amritsar, Raipur, Jaipur, Chennai, Kota

**Pan India** – Chennai, Madurai, Hyderabad, Karur, Karim Nagar, Mysore, Visakhapatnam, Bilaspur, Aragonda, Kakinada, Bengaluru, Delhi, Noida, Kolkata, Ahmadabad, Pune, Raichur, Ranipet, Ranchi, Ludhiana, Indore, Bhubaneswar

**South India** – Udupi, Bengaluru, Manipal, Attavar, Mangalore, Goa, Tumkur, Vijaywada, Kasaragod, Visakhapatnam

**South India** – Theni, Tirunelveli, Coimbatore, Puducherry, Madurai, Amethi, Kolkata

**South and West India** – Hyderabad, Vijayawada, Nagpur, Raipur, Bhubaneswar, Surat, Pune, Visakhapatnam

**North India** – Delhi, NCR, Punjab, and Uttarakhand

## FUTURE PLANS IN INDIA

Aims to add 500–600 beds every year for the next two to three years  
Focus regions – Bengaluru, Noida, Gurgaon, and Ludhiana, among others

Plans to have 12,000 beds by end of 2015 through investment of INR22.5 billion  
Focus regions – Mumbai, Patna, Vishakhapatnam, Indore, Chennai, and Bangalore

Invest INR15 billion to expand operations in India and abroad by adding 7–12 more hospitals to its current network of 15

Establish a state-of-the-art, 700-bed ophthalmic hospital at Maduravoyal, Chennai, in the coming years

Achieve target of 3,200 beds by end of 2015 by investing INR4 billion  
Focus regions – Andhra Pradesh, Orissa, and Chattisgarh

Aims to expand presence in Punjab by investing INR450 million. The company plans to expand its Mohali hospital and add 90–100 beds as well as intensive critical units (ICUs), high dependency units (HDUs), and two operation theatres

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

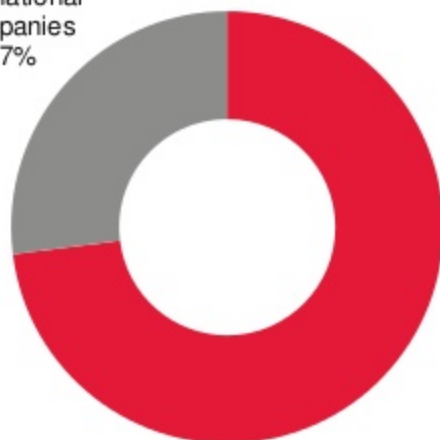
## KEY PLAYERS IN INDIAN PHARMACEUTICALS MARKET

**Key international players**

Abbott Laboratories

GlaxoSmithKline plc

Pfizer

**Market share for 2013**International companies  
27%Indian companies  
73%

- Currently, Abbott Laboratories leads the market with a 6.5% market share.
- With Sun Pharma's acquisition of Ranbaxy expected to complete in 2014, the market share of Indian companies is forecasted to become 77%.
- The combined entity is estimated to replace Abbott Laboratories' market share by holding a combined market share close to 9.3%.

**Key domestic players****Revenues (INR million)**

|                          |                |
|--------------------------|----------------|
| Sun Pharma               | 116,880 (2013) |
| Lupin Limited            | 96,691 (2013)  |
| Cipla                    | 85,240 (2013)  |
| Ranbaxy                  | 65,607 (2012)  |
| Glenmark Pharmaceuticals | 50,188 (2013)  |
| Zydus Cadila             | 37,286 (2013)  |

Source: Company Website, Economic Times, Aranca Analysis, PwC

## KEY PLAYERS BY MEDICAL EQUIPMENT PRODUCT SEGMENTS

| Serial no | Product Segment      | Key Players  |
|-----------|----------------------|--|
| 1         | Immunochemistry      | Transasia Bio Medicals, BioMeriux India, Siemens Medical Solutions |
| 2         | MRI Equipment        | GE Healthcare, Philips Healthcare, Hitachi Medical                 |
| 3         | HPLC Equipments      | Waters Corporation, Agilent Technologies, Shimadzu                 |
| 4         | Biochemistry         | Transasia Bio Medicals, BioMeriux India, Siemens Medical Solutions |
| 5         | Ultrasound Equipment | GE Healthcare, Philips Healthcare, Trivitron                       |
| 6         | CT Scanners          | GE Healthcare, Philips Healthcare, Siemens Medical Solutions       |
| 7         | Hematology           | TransasiaBiomedicals, Mindray, Beckman Coulter                     |
| 8         | Cath Labs            | Allengers, GE Healthcare, Philips Healthcare                       |
| 9         | Patient Monitoring   | L&T Medical, GE Healthcare, Philips Healthcare                     |
| 10        | X-Ray Equipment      | Allengers, Carestream Health India, GE Healthcare                  |
| 11        | Ventilators          | Maquet Medical, GE Healthcare, DraegerMedical                      |
| 12        | ECG Equipment        | BPL Healthcare, Concept Integration, GE Healthcare                 |
| 13        | Anesthesia Equipment | GE Healthcare, Philips Healthcare, Maquet Medical                  |

Source: IMAP



2014

Acquires

**RANBAXY**  
LABORATORIES LIMITED

- Sun Pharma proposed acquisition of Ranbaxy Labs to increase its market share to 9.3% in the Indian pharmaceutical market. Subsequently, the company aims to become world's fifth-largest generic drug maker.
- The deal would increase market share of Indian companies to 77% from 73% in the Indian pharmaceutical market.
- Each share of Ranbaxy would be exchanged for 0.8 shares of Sun Pharma

**Total equity value of the transaction is ~USD3.2 billion**



2012

Invested



- Advent International Corporation invested in the Hyderabad-based hospital chain Care Hospitals.
- Advent International invested with the aim to enhance Care Hospitals' operations as well as enter the healthcare sector.

**USD110 million**


**Medical Equipment & Systems**  
Electrical & Electronics Division (EBG)

2012

Divested



- Larsen & Toubro (L&T) divested its Mysore-based medical equipment business to privately held Skanray Healthcare Pvt Ltd.

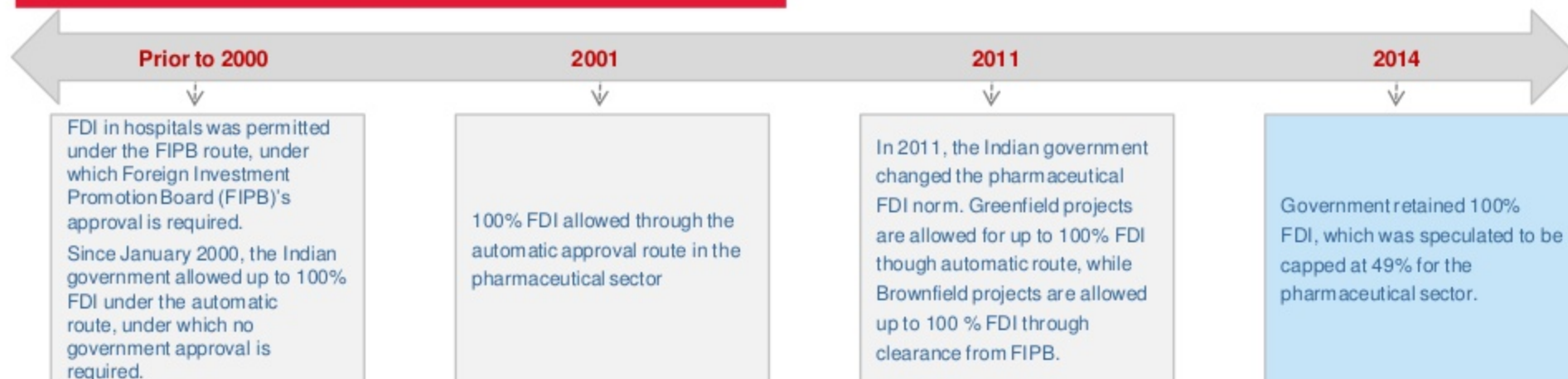
**NA**

Source: Business Standard



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## Evolution of FDI in Indian Healthcare



## FDI IN HEALTHCARE SECTOR (Apr 2000 – July 2013)

(in USD million)

Drug and Pharmaceuticals



11,320

Hospital and Diagnostic Centers



2,008

Medical and Surgical Appliances



702

- Increase in healthcare demand, cost advantages, and favorable government policies have attracted the inflow of FDI.
- The Indian government encourages foreign investment in the automobile sector and allows 100% FDI under the automatic route for all health-related services.
- The Indian government is promoting FDI in healthcare to further enhance healthcare facilities in India, which are still at par with the global level.

Source: Business Today, Planning Commission, Department of Industrial Policy and Promotion (DIPP)

## GOVERNMENT SUPPORT (1/2)

## National Rural Health Mission (NRHM)

- The Government of India set up a National Rural Health Mission (NHRM) in 2005 (the mission ran until 2012) to ensure provision of effective healthcare to the country's rural population.
- This initiative has helped in reduction of the maternal mortality rate (MMR), infant mortality rate (IMR), and total fertility rate (TFR) across the country.

## National Urban Health Mission (NUHM)

- To cater to the healthcare needs of slum dwellers across urban India, the government set up a National Urban Health Mission (NUHM) in 2005.
- This initiative caters to nearly 42.6 million slum dwellers spread across 640 towns and cities in India.

## Encouraging policies

- To encourage growth of the healthcare sector, the government has introduced supporting policies such as reduction in import duties on medical equipment, high depreciation on prices of life-saving medical equipment (40%, up from 25%), and a number of other tax incentives.

## Reduction in customs duty

- The government has reduced customs duty on life-saving equipment to 5% from 25%, and exempted it from countervailing duty.
- Import duty on medical equipment has been reduced to 7.5%.

## Rise in funding for the sector

- In the 12<sup>th</sup> five year plan, the Planning Commission allotted USD83 billion for healthcare spending, USD60 billion more compared with the 11<sup>th</sup> plan.
- The Ministry of Human Resource Development has been allocated USD11.05 billion and Ministry of Health and Family Welfare has been allocated USD5.53 billion under the Union budget 2014–15.

Source: Business Today, Planning Commission, InvestIndia, RBI, Deloitte, Livemint

**GOVERNMENT SUPPORT (2/2)****International co-operation**

Indian government is affiliating with other countries to drive growth in the healthcare sector:

- In January 2014, the government signed three agreements with the Maldives government to promote healthy relations between the healthcare industries of the countries.
- According to the Director of Scottish Development International, Scotland is extending assistance to Indian pharmaceutical and biotech companies. The country intends to partner with India in stem cell research, clinical trials, regenerative medicine, and affordable healthcare.

**Establishment of facilities**

- Indian government has extended support for improving the quality of healthcare delivery. In line with this, the Union Cabinet approved USD333.61 million to set up the National Cancer Institute. The institute would be build in the Jhajjar campus of All India Institute of Medical Sciences, Haryana.