Indian Healthcare Sector

The healthcare industry includes medical care providers, physicians, specialist clinics, nursing homes, hospitals, medical diagnostic centers and pathology laboratories. In terms of revenue and employment, healthcare is one of India's largest service-sector industries. During the 1990s, Indian healthcare grew at a compound annual rate of 16%. Today the total value of the sector is more than $34 billion. This translates to $34 per capita, or roughly 6% of GDP. By 2012, India's healthcare sector is projected to grow to nearly $40 billion.

The Indian healthcare sector constitutes of the following:

- Medical care providers: physicians, specialist clinics, nursing homes and hospitals;
- Diagnostic service centers and pathology laboratories;
- Medical equipment manufacturers;
- Contract research organizations (CRO's), pharmaceutical manufacturers;
- Third party support service providers (catering, laundry).

Hospitals serve an important function in India's healthcare system. They provide in-patient and out-patient services and also support the training of health workers and research. Indian hospitals can be broadly classified as public hospitals, private and not-for-profit hospitals. Corporate hospital chains that provide tertiary healthcare services in large towns and cities have also been established. The public healthcare system consists of healthcare facilities run by the central and state government which provide services free of cost or at subsidized rates to low income group in rural and urban areas.

Healthcare spending in India accounts for over 5 per cent of the country's GDP. Out of this, the public spending in percentage is around 1 per cent of GDP. The presence of public health care is not only weak but also under-utilized and inefficient. Meanwhile, private sector is quite dominant in the healthcare sector. Around 80 percent of total spending on healthcare in India comes from the private sector. Inadequate public investment in health infrastructure has given an opportunity to private hospitals to capture a larger share of the market. In addition the demand for hospital services has been increasing due to the rise in lifestyle related diseases.

Initially the government imposed high custom duty on imported medical equipment making it difficult for private entrepreneurs to set up hospitals. But in post liberalization the duties have come down and some life saving medicines and equipments can be imported duty free. Moreover, the introduction of product patents in India is expected to boost the industry by encouraging multinational companies to launch specialized life-saving drugs.

Market Drivers of Health Care Sector:

- Rising Health awareness;
- Shift to lifestyle related diseases;
- Increasing government expenditure on health care sector;
- Health insurance sector is also on the rise;
- Private sector companies are growing fast in terms of owning and managing hospitals;
- Growth in medical tourism;
- Cost effective surgical services. According to report, the cost of surgery in India is just about 10% of that in USA;
- Gradual corporatization of the Healthcare sector.

Market Trends:

India's healthcare sector has been growing rapidly and estimated to be worth US$ 40 billion by 2012. Revenues from the healthcare sector account for 5.2 per cent of the GDP, making it the third largest growth segment in India.

The Indian healthcare market is currently estimated at US$ 34.2 billion. The market has grown from US$ 22.8 billion in the year 2005, at a CAGR of 16% and is expected to grow to US$ 50.2 billion and US$ 78.6 billion by 2011 and 2016 respectively.

Healthcare delivery and pharmaceuticals account for nearly 75% of the total healthcare market.

India has only 0.7 beds per 1,000 people, far below the global average of 2.6. India needs to add 2 million beds to the existing 1.1 million by 2027, and requires immediate investments of $82 billion to make up for its infrastructure deficit.

The country needs $50 billion annually for the next 20 years to meet the healthcare needs of its rapidly expanding population.

The Indian healthcare industry is poised to grow at a compounded annual growth rate of 15 per cent. Nearly 90 per cent of this growth will come from the private sector. Further, private hospitals in the country are expected to rake in $35.9 billion (Rs 147,154.1 crore) in 2012 compared to $15.5 billion (Rs 63,534.5 crore) in 2006.

Funds in the Indian healthcare sector have been largely private. The private sector provides 60 per cent of all outpatient care in India and as much as 40 per cent of all in-patient care. It is estimated that nearly 70 per cent of all hospitals and 40 per cent of hospital beds in the country are in the private sector.

The Indian health insurance business is fast growing at 50 per cent and is projected to grow to US$ 5.75 billion by 2010.

Investments into the medical and surgical instruments segment amount to US$ 115.29 million over the period August 1991 to April 2007. A recent study has predicted 15-20 per cent growth for the Indian medical equipment market and estimated market size to be about US$ 5 billion by 2012.

India has the fastest growing healthcare IT market in Asia, with an expected growth rate of 22 per cent, followed closely by China and Vietnam. In fact, the Indian healthcare technology market is poised to be worth more than US$ 254 million by 2012.

In 2006, imports of medical equipment and supplies were valued at US$1,125.8 million, an increase of 21.7% over 2005.

The healthcare sector attracted US$ 379 million in 2007 which is 6.8 percent of the total private equity (PE) investment of US$ 5.93 billion.

Regulatory Framework:

Ministry of Health and Family Welfare (MoHFW): The Union Ministry of Health and Family Welfare (MoHFW) is responsible for implementation of national programmes, sponsored schemes and technical assistance relating to the Indian healthcare industry. The following departments come under the Ministry:

i) Department of Health: It looks after the following activities:

- Health related activities, including various immunization campaigns;

- Control over various health bodies including National Aids Control Organization (NACO), National Health Programme, Medical Education & Training, and International Cooperation in relation to health;
- Administers the Hospital Services Consultancy Corporation

ii) Department of Family & Welfare: This department offers the following services:

- Maternal and Child Health Services; Information, Education and Communication;
- Rural Health Services, Non-Governmental Organisations and Technical Operations.
- Policy Formulation, Statistics, Planning, Autonomous Bodies and Subordinate Offices;
- Supply of Contraceptives; International Assistance for Family Welfare and Urban Health Services;
- Administration and Finance for the Departments of Health, Family Welfare

iii) Department of AYUSH: This department undertakes the following activities:

- Upgrade the educational standards in the Indian Systems of Medicines and Homoeopathy colleges in the country;
- Strengthen existing research institutions and ensure a time-bound research programme on identified diseases for which these systems have an effective treatment;
- Draw up schemes for promotion, cultivation and regeneration of medicinal plants used in these systems;
- Evolve Pharmacopoeial standards for Indian Systems of Medicine and Homoeopathy drugs

Autonomous Institutions conducting Research and Development:

The following autonomous institutions under the Ministry of Health and Family Welfare conduct research in various specific areas:

- Indian Council of Medical Research (ICMR)
- Indian Medical Association (IMA)

- Central Drug Research Institute (CDRI)

National Programmes and Schemes:

National Rural Health Mission: This mission was launched in April 2005 by the Government of India to fulfill the Government's commitment to meet people's aspirations for better health and access to healthcare services. NRHM's goals include the training of 250,000 women volunteers designated as Accredited Social Health Activists (ASHAs) over the next three years across 18 states with weak rural health infrastructure.

National Health Policy-2002: The National Health Policy 2002 focuses on the need for enhanced funding and organizational restructuring of the national public health initiatives in order to facilitate more equitable access to health facilities. The following are the other areas of its focus:

- Gradual convergence of health under a single field administration and emphasis on implementation of programmes through local self-government institutions;
- Identification of specific programmes targeted at women's health and strengthening of food and drug administration, in terms of both laboratory facilities and technical expertise;
- Focus on those diseases that are principally contributing to the disease burden - TB, Malaria and Blindness from the category of historical diseases and HIV/AIDS from the category of newly emerging diseases;
- Greater contribution from the Central Budget for the delivery of public health services at the state level.

Other National Health Programmes:

- National Vector Borne Disease Control Programme (NVBDCP)
- National Filaria Control Programme
- National Leprosy Eradication Programme
- Revised National TB Control Programme
- National Programme for Control of Blindness
- National Iodine Deficiency Disorders Control Programme
- National Mental Health Programme
- National Aids Control Programme
- National Cancer Control Programme
- Universal Immuization Programme

- National Programme for Prevention and Control of Deafness
- Pilot Programme on Prevention and Control of Diabetes, CVD and Stroke
- National Tobacco Control Programme

Accreditation Schemes:

Quality Council of India: In India, QCI (Quality Council of India) operates the national accreditation structure and obtains international recognition for its accreditation schemes in order to guarantee quality healthcare to all.

QCI was set up in 1997 as an autonomous body by the Government of India jointly with the India industry to establish and operate the National Accreditation Structure for conformity assessment bodies.

National Accreditation Board for Hospitals & Healthcare Providers (NABH): This is a constituent board of Quality Council of India, set up by the Ministry of Health to establish and operate the accreditation programme for healthcare organizations in India.

NABH has standards specific to the Indian healthcare setting, major aspects being the assurance of uniform access, assessment, care of patients and protection of patient's rights.

The following are some of the NABH accredited hospitals in India:

- B.M.Birla Heart Research Centre, Kolkata
- MIMS Hospital, Calicut
- Max Super- Speciality Hospital, New Delhi
- Max Devki Devi Heart and Vascular Institute, New Delhi
- Kerala Institute of Medical Sciences, Thiruvananthapuram
- Moolchand Hospital, New Delhi
- Fortis Hospital, Noida, Jaipur and Mohali
- Manipal Hospital, Bangalore
- Escorts Heart Institute & Research Centre, New Delhi

International Accreditation Body Present in India:

Joint Commission International (JCI): JCI is the largest accreditor of health care organizations in the United States which surveys nearly 20,000 health care programs through a voluntary accreditation process. The following are some of the JCI Accreditated Organizations in India:

- Indraprastha Apollo Hospital, Delhi
- Apollo Hospital, Bangalore, Chennai, Hyderabad
- Asian Heart Institute, Mumbai
- Shroff Eye Hospital, Mumbai
- Wockhardt Hospital, Mumbai and Bangalore
- Fortis Healthcare, Mohali

BUDGET 2008-09:

The following initiatives were taken for the healthcare industry:

- Rs.16, 534 crore allocated for the healthcare sector marking an increase of 15% over 2007-08.

- National Rural Health Mission (NRHM): 462,000 Associated Social Health Activitists have been trained, 177,924 villages have sanitation committees functional and 323 district Hospitals have been taken up for upgradation. Allocation to NRHM has been increased to Rs. 12,050 crore.

- HIV/AIDS: The National Aids Control Programme provided Rs.993 crore.

- Polio: Drive to eradicate polio continues with revised strategy and focus on the high risk districts in Uttar Pradesh and Bihar. Rs. 1,042 crore allocated in 2008-09.

- A five year tax holiday to hospitals located in any place outside the urban agglomerations especially in tier-2 and tier-3 towns.

- A reduction in excise duty from 16 per cent to 8 per cent.

- Amounts spent on Research and Development eligible for a 125 per cent weighted deduction.

- A reduction in customs duty from 10 to 5 per cent and a total exemption of excise duty on certain specified life-saving drugs and bulk drugs.

FDI Policy:

100% FDI is permitted for hospitals and all health-related services under the automatic route.

Other Government Initiatives:

- The government encourages foreign / private investment in the healthcare sector.
- It defines and enforces minimum quality standards for healthcare facilities.
- It stimulates the growth of private, social and community insurance.
- The National Health Policy, 2002, makes it clear that government policy supports medical tourism. The policy encourages the supply of services to patients of foreign origin on payment. The rendering of such services on payment in foreign exchange is treated as 'deemed exports' and is made eligible for all fiscal incentives extended to export earnings.
- A new category of visa "Medical Visa" ('M'-Visa) has been introduced which can be given for a specific purpose to foreign tourists coming into India.
- In order to allay suspicions regarding the quality of care in a developing country, Indian corporate hospitals are getting certified by international accreditation schemes.
- The government has identified healthcare as a priority section and hence have taken some measures to promote one of its most important segment "Medical Device Market". The conditions for exporting to India have significantly improved since the economic reforms started in the middle of the nineties. Import license requirements have been cancelled, majority-owned subsidiaries are possible, and dividends can be paid out abroad.

  Some other measures are:

  i) Reduction in import duty on medical equipment from 25 per cent to 5 per cent.

ii) Depreciation limit on such equipment rose to 40 per cent from 25 per cent, to encourage medical equipment imports.

iii) Customs duty reduced to 8 per cent from 16 per cent for medical, surgical, dental and veterinary furniture.

iv) Customs duty on as many as 24 medical equipments, which include X-ray, goniometry and teletherapy stimulator machines, has been reduced to 5 per cent.

- To further make India a competitive player in the medical equipment manufacturing space, the government encourages setting up of Special Economic Zones (SEZs).

Special Economic Zones:

Special Economic Zones (SEZ) were introduced in 2000 to achieve three-fold objectives of attracting Foreign Direct Investment (FDI), increasing exports and accelerating the economic growth in India. To provide an impetus to economic activities outside the urban areas the Government of India is actively promoting SEZs.

The SEZs require hospitals to be set up in these zones. For a sector specific zone a hospital with minimum bed strength of 25 is stipulated and this goes up to 100 beds for a multi product Special Economic Zone.

Benefits of Special Economic Zones:

- 100 % foreign equity ownership in numerous industries;
- 100 % exemption from income for the first five years;
- No licenses required for imports;
- Import of capital goods, raw materials, consumables and spares are exempted from customs duty;
- Exemption on Central Excise Duty for domestically procured raw materials, working capital, consumable spare parts;
- Exemption from Service Tax and Central Sales Tax;
- Import and export duty exemptions.

Key Players in the Healthcare Segment:

The government's share in the healthcare delivery market is 20 percent while 80 percent is with the private sector. Private players have made significant investments in setting up state-of-the-art private hospitals in cities like Mumbai, New Delhi, Chennai and Hyderabad. The following are the major domestic private healthcare providers in India:

Apollo Hospitals: Apollo Hospitals has emerged as the single largest private hospital group in South Asia. It operates hospitals, dispensaries, clinics and laboratories. It manages a network of approximately 41 specialty hospitals and clinics with a bed capacity of over 9,000 across the country and abroad. It has tied up with insurers like BUPA (UK), Vanbreda (Belgium) and Mondial (France) to direct inflow of foreign patients to India. It has a joint venture with Singapore-based Parkway
Group Healthcare PTE Ltd. It has tied up with Indian Oil Corporation
(IOC) to set up its pharmacies at the latter's petrol stations.

The Escorts Group: This has a presence in specialized cardiac treatment and multi-specialty care hospitals providing a whole gamut of specialized medical services. Escorts operates ten hospitals across India. The group is also reputed for tertiary care services such as neurology, neurosurgery, plastic surgery and urology. Escorts Heart Institute and Research Centre (EHIRC) has a 325 bed tertiary care institute, with 9 operation theatres, 5 cath labs, 2 heart command centres and world class facilities. It has carried out over 80,000 angiographies and 43,000 cardiac surgeries over the past fifteen years – which is a world record.

Fortis Healthcare: This is a company founded by the promoters of the Indian pharmaceutical major, Ranbaxy Laboratories, started operations in 2001. It has approximately 12 hospitals with 1,900 beds.It has operations across North India in the cities of Delhi, Noida, Mohali, Amritsar, Faridabad, Raipur and Srinagar. It has a joint venture with Real Estate player DLF to set up hospitals across the country with an investment of about US$ 1.5 billion

Max Healthcare: This is a fully owned subsidiary of the highly diversified Max Group, with a chain of clinics and hospitals with a bed capacity of 1200. On an average, Max Healthcare treats 30,000 patients every month, with 200 new patients visiting the facilities every day. It has collaborated with Singapore General Hospital in the areas of medical practices, nursing, paramedical research and training.

Wockhardt: This is among India's leading pharmaceutical and healthcare companies. Since inception in 1989, the Wockhardt Hospital & Heart Institute has become a renowned tertiary level heart centre providing cardiac care to patients of all age groups. It is the first recognized hospital in South Asia on the worldwide panel of Blue Cross blue Shield, the largest provider of health insurance in USA. It has approximately 10 hospitals with 1,500 beds. It has entered into Public-Private Partnership with the Government of Gujarat to manage the 275-bed Palanpur Civil General Hospital in Gujarat.

Manipal Health Systems: Its chain consists of approximately 9 primary centres at 7 rural locations, 8 secondary hospitals at urban and semi-urban locations and 3 tertiary hospitals at urban and semi-urban locations. It has a joint venture with Pantaloon Retail for comprehensive retail healthcare foray.

Arvind Eye Hospital: This hospital in South India is the single largest provider of eye surgery in the world. In 1998, its hospitals saw 1.2 million outpatients and performed 183,000 cataract surgeries. It costs Arvind about US$ 10 to conduct a cataract operation. It costs hospitals in the United States about US$ 1,650 to perform the same operation.

Foreign collaboration in the Indian Healthcare sector:

Since liberalization in 1991, a growing number of Indian companies have formed alliances with foreign firms. The following are some of such alliances:

- Wockhardt collaborated with Harvard Medical International Inc. USA
- Fortis Healthcare collaborated with Partners Healthcare System, USA
- Birla Heart & Research Centre collaborated with Cleveland Clinic Foundation, USA
- Max Healthcare and Singapore General Hospital (SGH) have entered into collaboration for medical practice, research, training and education in healthcare services.
- Apollo-Gleneagles Hospitals Ltd. is a 50:50 joint venture between Apollo Hospitals Ltd and Parkway Group of Singapore. The joint venture is also looking at business opportunities overseas in West Asia and North Africa.
- Apollo Hospitals has also entered into a partnership with Yemen's Hayel Saeed Anam Group to provide advisory services to the latter's hospital project.

Foreign players in India:

- The US-based **Atlas Medical Software**, which specializes in developing software solutions for the healthcare industry, has set up its operations in India.
- **Bayer Diagnostics**, one of the largest diagnostic businesses in the world.
- **GE-BEL**, a joint venture between **General Electricals and Bharat Electronics Limited** is the only manufacturer of X-ray and CT tubes in South Asia.
- UK-based **Isoft Group plc (iSOFT),** one of the world's leading suppliers of application systems for hospitals and healthcare organizations.
- **Phillip** sells about US$ 43-49 million worth of medical systems in India.
- The US-based healthcare products major, **Proton Health Care** is making an entry into India with its range of digital health monitoring devices.
- **Siemens** is a leading manufacturer of medical equipment with a market share of more than 30 per cent in India.
- **Wipro GE Medical Systems**, a joint venture between GE Medical Systems and Wipro Corporation, is India's largest medical systems sales and service provider.

Private Equity players in healthcare:

The following PE firms have evinced interest in healthcare (hospitals, diagnostic sector and medical equipment):

- Carlyle
- Fidelity International
- UK-based CDC Group
- Blackstone
- IDFC
- HSBC
- JP Morgan Private Equity Fund
- American International Group Inc (AIG)

- Evolvence India Life Sciences Fund
- George Soros's fund Quantum
- Blue Ridge
- ICICI Venture
- Global Healthcare Investments and Solutions
- Bluewater International Investment
- Lightspeed Advisory
- Ajay Piramal Group
- Groupe Limagrain
- Singularity Ventures
- ePlanet Ventures
- Daninvest
- Barings Private Equity Partners India
- Reliance Life Sciences

Key Areas of Opportunity in the Healthcare Segment:

The following are the key areas of opportunity within the Indian Healthcare Segment:

Medical Tourism:

Indian hospitals are fast becoming the first choice for an increasing number of foreign tourists. The medical tourism market in India is worth US$ 333 million, with about 100,000 foreign patients coming in every year. It is estimated that revenues from this segment could touch US$ 2.2 billion by 2012, from the current figure of US$ 333 million.

Over 272,000 tourists traveled for medical treatment in 2007 contributing USD 656 million in 2007.

Moreover, Patents are expected to save 60% - 95% of the total treatment costs in India. Government has created special visas for medical tourism.

India's capability to provide quality healthcare at a greatly reduced cost is acknowledged worldwide. The following is a rough comparison of treatment charges in the United States and India:

- A liver transplant costs US$ 500,000 in the US : in India it costs US$ 40,000.

- An MRI of the wrist costs just US$ 155 in India while the same can cost US$ 1600 in Hong Kong.
- An open-hear procedure at a top hospital in the country would cost a patient around US$ 5000-7000 as against US$ 50,000 abroad.
- Neurosurgery in the country costs around US$ 8,000 as compared with US$ 29,000 in the US.
- A root canal procedure by a dentist in India would cost about US$ 20 as against US$ 100 in the US.

Medical infrastructure:

As per the current statistics (2006) bed per thousand population ratio for India stands at 1.03 as against an average 4.3 of comparable countries like China, Korea and Thailand.

In spite of the phenomenal growth in the healthcare infrastructure, India is likely to reach a bed to thousand-population ratio of 1.85 and in a best-case scenario, a ratio of 2 by 2012.

Telemedicine:

This is another opportunity which allows even the interiors to access quality healthcare and at the same time significantly improve the productivity of medical personnel. It is one such innovative technology, if used effectively can double utilization of scarce human resources.

Only 25% of India's specialist physicians reside in semi-urban areas, and a mere 3 % live in rural areas. As a result, rural areas, with a population approaching 700 million, continue to be deprived of proper healthcare facilities.
Telemedicine provides a solution in such a scenario by offering remote diagnosis, monitoring and treatment of patients via videoconferencing or the Internet. It is a fast-emerging trend in India, supported by exponential growth in the country's information and communications technology (ICT) sector, and plummeting telecom costs. Several major private hospitals have adopted telemedicine services, and a number of hospitals have developed public-private partnerships.

Today there are approximately 120 telemedicine centers throughout India. The government has also made a major commitment to the growth of telemedicine. The Indian Space Research Organization (ISRO) plans to establish 100 telemedicine centers across the country. The government also is reducing import tariffs on infrastructure equipment. And while India has yet to pass legislation on telemedicine related issues, the Ministry of Information Technology has developed "Recommended Guidelines & Standards for Practice of Telemedicine in India," with the goal of standardizing digital communication in telemedicine.

Medical equipment and IT:

Medical equipment forms another promising opportunity within healthcare. Currently over 65% of the medical equipments are imported. Engineering excellence, cost-effective labor, increasing emphasis on intellectual property rights and most importantly a fast growing domestic market makes India an ideal manufacturing base.

Investments into the medical and surgical instruments segment amounted to US$ 115.29 million over the period August 1991 to April 2007. A recent study has predicted 15-20 per cent growth for the Indian medical equipment market and estimated market size to be about US$ 5 billion by 2012.
Hospitals have realised that information technology (IT) can be an effective tool towards efficient systems. India has the fastest growing healthcare IT market in Asia, with an expected growth rate of 22 per cent, followed closely by China and Vietnam.

The Indian healthcare technology market is poised to be worth more than US$ 254 million by 2012.

Health insurance:

With less than 10 per cent of the Indian population having some sort of health insurance, the potential market for health insurance is huge. The Indian health insurance business is fast growing at 50 per cent and is expected to continue growing at this pace. The sector is projected to grow to US$ 5.75 billion by 2010.

The Insurance Regulatory and Development Authority (IRDA) has eliminated tariffs on general insurance as of January 1, 2007. This move is expected to drive additional growth of private insurance products.

Clinical trials:

In recent years, India has become an attractive market for clinical testing. One reason is that in November 2004, the federal government amended Schedule Y of the Drugs and Cosmetics Act to make the rules on clinical trials more consistent with international practice. In addition, in January 2005 India became compliant with the Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement and formally recognized product patents. This triggered growth in Indian clinical trial activity by contract research organizations and by multinational corporations.

Government taxation incentives are further boosting R&D in India. As a market for clinical testing, India holds other attractions as well. According to a study the huge patient population offers vast genetic diversity, making the country "an ideal site for clinical trials."

The Indian clinical trials market, currently estimated at $120 million, is expected to reach $1 billion by 2010. To achieve that level of growth, India will have to address a lack of skilled workers, high wage inflation, and inadequate infrastructure.

Clinical trials account for over 40% of the costs of developing a new drug, and as per estimates a standard drug could be tested in India for as little as $90 million—60% of the cost of testing in the US.

Current Demand:

- India needs USD 50 billion annually for the next 20 years.
- India needs to add 2 million beds to the existing 1.1 million by 2027, and requires immediate investments of USD 82 billion
- PE has definitely become the preferred mode of investment. When earlier debt to equity ratio was 2:1 for a healthcare company, now the trend is to have 1:1.