

A Study on Healthcare Industry in India – Opportunities, Challenges and its Emerging Trends

Prof.D.Chennappa¹, A.Dayakar²

¹Dept.of Commerce, UCC & BM, OU.

²Research Scholar, Dept. of Commerce

Abstract

Healthcare has become one of India's largest sectors both in terms of revenue and employment. The Indian healthcare sector is rising at a brisk pace due to its strengthening coverage, services and growing expenditure by public as well private players. It is the one of the most dynamic and multifaceted industry in the world, which in turn has driven the demand for leaders with both business insight and exceptional understanding of intricacies of this industry. The healthcare scenarios are in a state of continuous change because of the economic liberalization and a paradigm shift from a more collectivized pattern to a combination of public and private enterprises. Making healthcare affordable and accessible for all its citizens is one of the key focus areas of the country today. The challenge is immense, as more that 70% of the country's population lives in rural areas and 26.1% is below poverty level. On the other hand, India absences strong healthcare infrastructure, and has several inherent weaknesses in its healthcare system. Though the overall level of funding allocated for healthcare nationally is comparatively high and, the government's funding is low. This paper studies the opportunities, challenges and emerging trends in Indian healthcare sector.

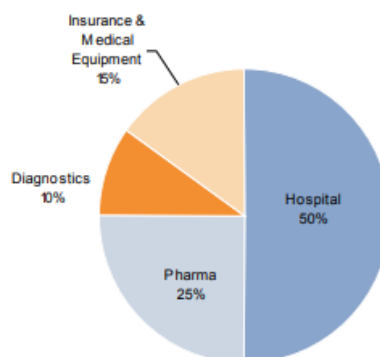
1.1. Introduction

Indian healthcare has become one of the major sectors in terms of both employment and revenue. People in India have become health conscious off late and spending on getting promoted by healthcare services available. Indian Economy growing at 8% despite global economic collapse. Size of the Indian Healthcare Industry is US\$ 40 billion, contributes over 5% of GDP and offers employment to over 4% population. Indian Healthcare Industry is growing at rapid pace of 18% fastest in the world. about 280 million strong upper middle and middle-class population, with 10 – 12 million high income group which could afford the lifestyle of their western counterparts. By 2012 industry size is expected to increase to \$60 billion. India spends 5.1% of GDP on health sector. Per capita expenditure on health is US\$80 in year 2001. Two thirds of healthcare spending is out of pocket, i.e. about US\$20 billion is private spending. Indian healthcare is divided into public and private sectors. Government runs (public) secondary and tertiary hospitals provide

services in cities and primary healthcare centers in rural regions whereas private players provide secondary, tertiary & quaternary services in metros, tier-I and II cities. The satisfaction of the highest achievable standard of health is one of the fundamental rights of every human being without the distinction of race, religion, political belief, economic or social condition (Olani, 2004). The healthcare industry is a segment inside the economy which offers drugs, medicines and other services for patients with preventive, healing, rehabilitative, and soothing care. The sector is considered as social sector which is governed at state level with the assistance of central government. Government owned hospitals are confronted with unique challenges that threaten their existence. The current industry is divided into many subdivisions and governed with various interdisciplinary teams of skilled professionals and paraprofessionals to cater the health needs of individuals.

The Healthcare sector in India, is at a modulation point and is composed for rapid growth in the medium term. However, Indian healthcare expenditure is still amongst the lowest globally and there are significant challenges to be addressed both in terms of accessibility of healthcare service and quality of patient care. While this represents significant opportunity for the private sector, the Government can also play an important role in facilitating this evolution. The private sector has been allowed to invest in certain medical institutions on a partnership basis in which the government steps aside from the direct management of the institutions letting private hands to handle it while retaining partnership of the medical institutions (Curry, 2002). Provision of health care to such a vast population needs comprehensive planning and implementation of health policies by the government with the support of the private sector, local and regional bodies, NGOs and self-help groups. Nearly 70-72% of the country's population lives in rural areas. While substantial progress has been made in the provision of healthcare services in the urban areas, there is a need to improve the availability of services and enhance the quality of care in many rural areas.

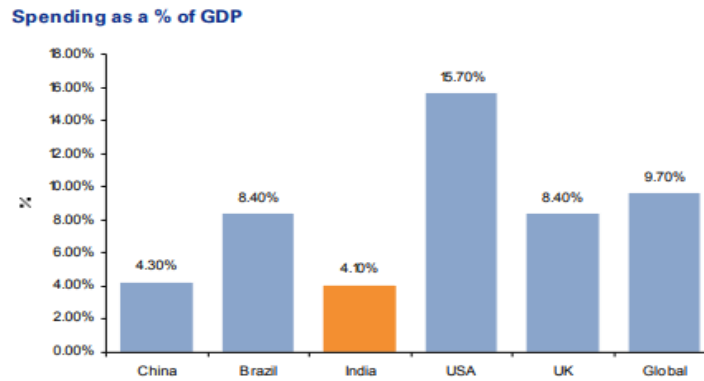
The Indian Healthcare sector presently signifies a US \$40 Billion industry. A break-up of the sector as of 2009 is provided as shown below:



Source: IDEF Report 2010 (Figure:1)

Position of Indian Healthcare in the globe:

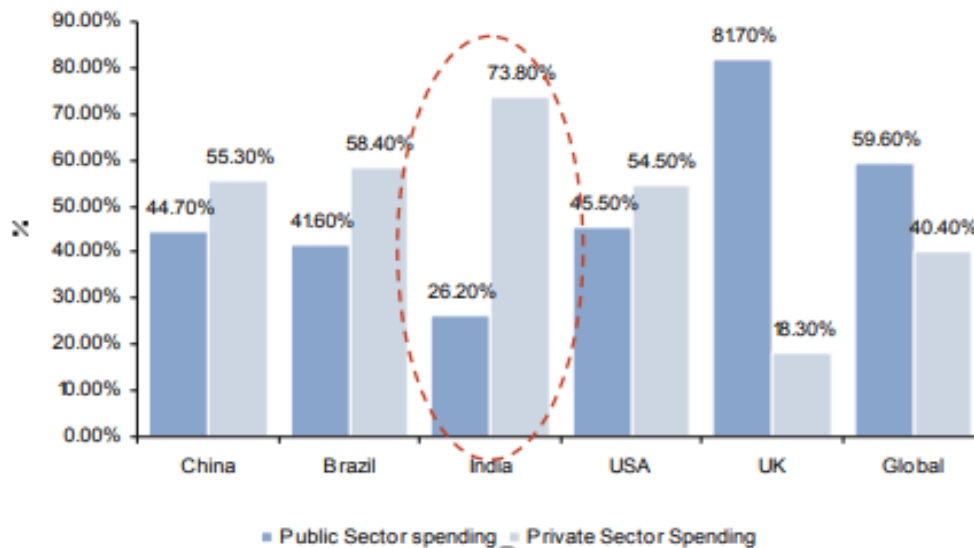
India’s healthcare employ is expressively low when compared to the world, developed and other similar developing economies. The study has acknowledged more in terms of other statistical way of details. The Indian healthcare spend is less than half the global average in percentage terms when compared on a “percent of GDP” basis. Government is not putting more concerns in the area of health industry.



Source: WHO World Health Statistics 2010 (Figure: 2)

Comparison between Public and Private spends in healthcare

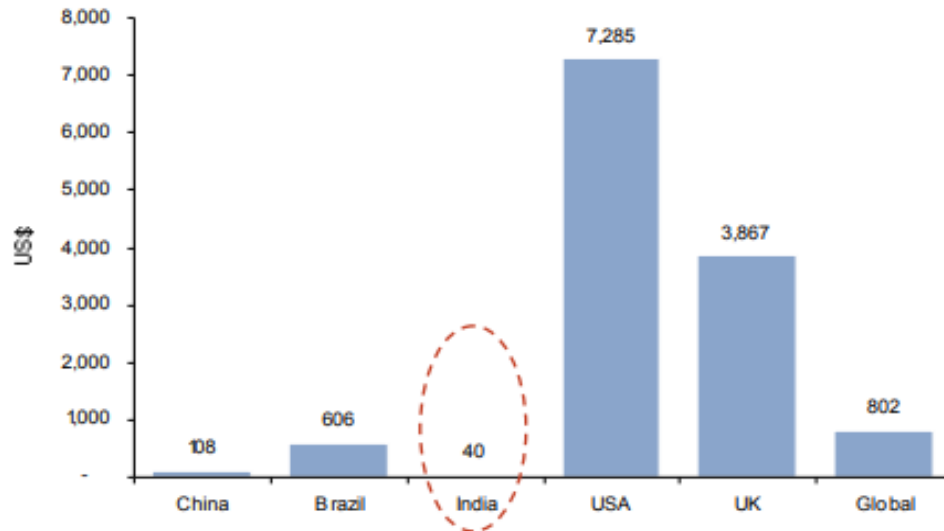
The healthcare spends, when compared on the basis of public-private contribution, also represents a skewed picture. As its noted from the comparison below, Private sector contribution to the healthcare sector at 75 percent is amongst the highest in the world in percentage terms. Public spending, on the other hand, is amongst the lowest in the world and is 23 percentage points lower than the global average.



Source: WHO World Health Statistics 2010 (IBEF) (Figure: 3)

Per Capita Spending (US\$)

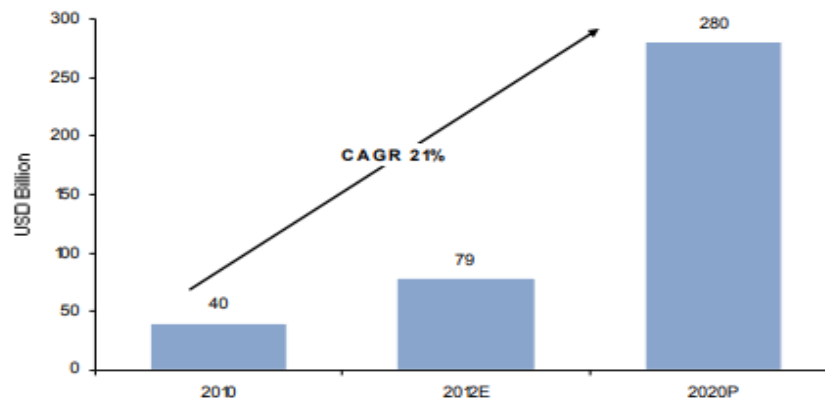
The details of healthcare spend examined on a per capita basis, both in terms of USD (at average exchange rate conversion) and in terms of Purchasing Power Parity (PPP), is among the lowest globally. Further, when compared to the global average, the per capita Indian healthcare spend is 95 percent lower on an average exchange rate basis and 87 percent lower on a PPP basis.



Source: WHO World Health Statistics 2010 (Figure: 4)

Growth in the Healthcare Industry

India's healthcare spending is, however, growing at a healthy CAGR of 14 percent from 5.5 percent of the GDP in 2009 to 8 percent in 2012 expecting. As stated previous, the Indian Healthcare Industry is presently estimated at USD 40 Billion. The industry is expected to grow to USD 79 Billion by 2012 and USD 280 Billion by 2020. The average CAGR for the next 10 years, therefore, the growth has been estimated at 21 percent.



Source: IBEF (Figure: 5)

Demand and supply analysis

Inter-state difference India is a diverse country with 28 states and seven union territories, each receiving different densities of rainfall, and experiencing different weather conditions. There is also a difference in the socio-economic status of people, literacy levels, living conditions and political situations. These factors play a significant role in the difference in the healthcare status and resources across states. For instance, female life anticipation in Kerala is the highest and approximately 16 years more than that in states such as Uttar Pradesh and Bihar. The female infant mortality rate in Madhya Pradesh is approximately 7.2 times more than that in Kerala. Similarly, the maternal mortality rate in Rajasthan is almost thrice that in Maharashtra, as telling in the table. States such as Uttar Pradesh, Bihar, Orissa, and Madhya Pradesh rank poorly when compared with Kerala, Maharashtra, Tamil Nadu, Gujarat, and Andhra Pradesh.

States	Life expectancy (Years)		Infant mortality rates (per 1000 live births)		Maternal mortality ratio (per 100,000 live births) mortality
	2002-06		2008		
	Male	Female	Male	Female	2004-06
Punjab	68.4	70.4	39	43	192
Bihar	62.2	60.4	53	58	312
Uttar Pradesh	60.3	59.5	64	70	440
Rajasthan	61.5	62.3	60	65	388
Gujarat	62.9	65.2	49	51	160
Maharashtra	66	68.4	33	33	130
West Bengal	64.1	65.8	34	37	141
Karnataka	63.6	67.1	44	46	213
Madhya Pradesh	58.1	57.9	68	72	335
Orissa	59.5	59.6	68	70	303
Kerala	71.4	76.3	10	13	95

Source: National Health Profile 2009 (Table: 1)

Details of State and Union Territory wise number of government hospitals and beds in rural and urban areas (including CHCs) in India

State/UT	Rural Hospitals		Urban Hospitals		Total Hospitals		Projected Population as on reference period (In thousand)	Average Population Served Per Govt. Hospital	Average Population Served Per Govt. Hospital Bed	Reference Period
	Number	Beds	Number	Beds	Number	Beds				
Punjab	72	2180	159	8440	231	10620	26391	114247	2485	01.01.2008
Bihar	NA	NA	NA	NA	1717	22494	93633	54533	4163	01.09.2008
Uttar Pradesh	397	11910	528	20550	925	32460	183282	198143	5646	01.01.2007
Rajasthan	347	11850	128	20217	475	32067	63408	133491	1977	01.01.2008
Gujarat	282	9619	91	19339	373	28958	57434	153979	1983	01.01.2010
Maharashtra	376	11280	389	38299	765	49579	109553	143207	2210	01.01.2010
West Bengal	14	2399	280	52360	294	54759	87839	298772	1604	01.01.2010
Karnataka	468	8010	451	55731	919	63741	58181	63309	913	01.01.2010
Kerala	281	13756	105	17529	386	31285	34063	88246	1089	01.01.2010

Source: National Health Profile 2009 (Table:2)

1.2. Segments of Healthcare industry

- Hospitals are of utmost important among them:** Hospitals deliver complete medical care facilities, begins with diagnoses to surgical treatments, or to continuous nursing facilities. Clinical Lab Diagnostics of US\$2 billion growing at 30% and Imaging Diagnostics US\$1 billion growing at 30%. Several hospitals are there having specialization in treating and handling mentally sick patients or in cancer patients or some are in treating children. These facilities are provided either on an outpatient or inpatient basis. The combination of professionals required by hospitals varies according to geographical locations, size or capital structure of the organizations or based on values, goals and management philosophies. As soon as organization strives towards efficiencies, facilities starts to move towards outpatient basis from inpatient basis.
- Nursing and residential Care:** It is an essential segment which work along with hospitals is the facility of nursing and residential care. These services comprise “rehabilitation, inpatient nursing and health-related personal care” to the people required it on continuous basis, and not having the need of hospital services. The other facilities of recovering is related to assist those, who required minimum support. In addition, the facilities related to residential care offers 24 hours personal and social care to old age people, to children and to those who are unable to care themselves.

- **Workplaces of Health Practitioners:** The segment comprises “the offices of optometrists, podiatrists, chiropractors, occupational and physical therapists, psychologists, speech-language pathologists, audiologists, dietitians, and other health practitioners”. The demand of these services is somewhere related to the capability of payment of healthcare consumer either directly or through insurance. The segment also covers the “offices of practitioners of alternate medicine, such as homeopaths, hypnotherapists, acupuncturists and naturopaths”.
- **Offices of Physicians:** The segment of Physicians and surgeons covers around 37 % of industry. They either practice privately or in groups having specializations either in similar or different fields. Though various practitioners are willing to work in groups so that they will be able to reduce the overhead expenses and also get consultation with their colleagues. Nowadays Surgeons and physicians showing interest in working on salary basis for big groups, for other medical clinics, or for integrated health systems.
- **Offices of Dentists:** This is one of the important segments which occupied around 20% of the industry. Dentist provide “preventative, cosmetic, or emergency care” to the patients required them. Some institutions having specialization only in particular branch of Dentistry like Orthodontics or Periodontics.
- **Outpatient Care Center:** Other diversified formations in this group comprise health maintenance organization, medical centers, Kidney dialysis centers, substance abuse centers, outpatient mental health and freestanding surgical and emergency centers.
- **Ambulance Services:** This segment is comparatively small in comparison to other segments of the industry. It covers “ambulance and helicopter transport services, blood and organ banks, and other ambulatory health care services, such as pacemaker monitoring services and smoking cessation programs”.
- **Diagnostic Laboratories -** These laboratories assistance the physicians by providing diagnosing and analytical services to them or they provide these facilities to patients also on the prescription of Doctors. These organizations conduct blood tests, ultrasounds, tomography scans, X-rays and other clinical investigations. These laboratories accounts for provide lesser employment in the industry.

1.3. Opportunities of Healthcare industry in India

- **Enhanced Urbanization:** The Middle-class segment of the population tends to have the maximum share of wallet on healthcare expenditure. The growing middle-class population in India is supporting the growth in the healthcare share. India's population above 45 years of age is expected to increase from 22% of total population in 2012 to 26% by 2021E. This segment of population is expected to have greater requirement for healthcare services. Increased incidences of lifestyle diseases contributing to rising healthcare spending by individuals.
- **Improved penetration of healthcare insurance:** The health insurance industry expanded at a CAGR Indian health insurance market size (US\$ bn) of 23% from FY09–13. Over the next 5 years the Healthcare Insurance market is expected to grow at a CAGR of c.19%, to be a US\$ 6.5bn market by FY18. Awareness and rising healthcare cost are expected to increase penetration within the retail segment. Increase in organized labor force is expected to result in the growth of the corporate segment.
- **Growing tendency of medical tourism:** India is emerging as a destination for elective and critical treatment for citizens of other nations. Due to Lower cost, availability of skilled doctors/nursing staff, World class hospitals, Sophisticated medical technology and Excellent patient care, High influx of patients from Africa, CIS countries, Gulf and SAARC nations, Pakistan, Bangladesh and Myanmar witnessed currently visit India for medical treatment.

1.4. Challenges in Indian healthcare system

While the Indian Healthcare sector is poised for growth in the next decade, it is still overwhelmed by various issues and challenges:

- **Dual Disease Burden:** Changes in the lifestyle of the people are resulting in a dual disease burden. This emanates from the complexity of infectious and noncommunicable diseases in the rural and urban regions of the country. The occurrence of these disease patterns has squeezed the healthcare infrastructure requirements and has resulted in infrastructural challenges for the government and the private players. India's urban population has witnessed an increase of 4.5 times over 1951-2001 compared to 3 times increase in the total population over the same period. With increasing urbanization and the problems associated with modern-day living in urban settings, the disease profiles are shifting from infectious to lifestyle-related. It is estimated that by 2012, 50% of the spending on inpatient beds would be for lifestyle-related diseases.
- Urban India is now on the edge of becoming the disease capital of the world and facing an increased incidence of Lifestyle related diseases such as cardiovascular diseases, diabetes, cancer, COPD etc. At the same time, the Urban Poor and Rural India are struggling with Communicable Diseases such as

tuberculosis, typhoid, dysentery etc. Rural India is also seeing a higher occurrence of Non-Communicable Life-style related diseases. This represents a serious challenge that the Indian Healthcare system would need to address.

- **Challenges in disease control**

- a) Tackling maternal and infant mortality as well as communicable diseases such as Tuberculosis, vector-borne diseases of malaria, kala-azar and filaria, water-borne diseases such as cholera, diarrheal diseases, leptospirosis, and the vaccine-preventable measles and tetanus.
- b) Tackling rising occurrence of non-communicable diseases (NCDs) including cancers, diabetes, cardiovascular diseases, chronic obstructive pulmonary diseases and injuries.
- c) Developing systems to cope with the category of the new and re-emerging infectious diseases like HIV, avian influenza, SARS, and H1N1 influenza

- **Lack of Infrastructure and Manpower:** The healthcare infrastructure in India is inadequate compared with the global standards. It lags behind the global average in terms of healthcare infrastructure and manpower. India has an average 0.6 doctors per 1000 population against the global average of 1.23 17 which suggests an apparent manpower gap. In 2009, the number of beds available per 1000 people in India was only 1.27, which is less than half the global average of 2.6. There are 369,351 government beds in urban areas and a mere 143,069 beds in rural areas. At six doctors per 10,000 people, the number of qualified doctors in the country is not sufficient for the growing requirements of Indian healthcare. Moreover, rural “doctors to population” ratio is lower by 6 times as compared to urban areas. Lack of sufficient medical colleges and nursing institutions is a major challenge for Indian healthcare Industry. Further, there is a severe lack of trained doctors and nurses to service the needs of the large Indian populous.

- **Funding of healthcare projects:** Healthcare projects are capital exhaustive and have at times slower returns specially in smaller towns and rural area. There are not many funding mechanisms available for these projects. This has been one of the biggest hurdles for this sector to grow and reach to masses. Mostly the hospitals in tier II towns and rural areas are getting funded by bank loans which are at high interest rates of 13-14%. It is very difficult to make such projects viable. This phenomenon is highly prevalent in eastern states and has been one of the reasons for slower growth of healthcare there. Many sovereign funds and social funds (foreign pension funds) are interested in funding these kinds of project but are not able to connect.

- **Operations of Facilities:** Prices of services in the private sector is influenced by the source of capital and interest rates and prices of other inputs such as labour, rental, technology etc. However, the competitive edge is determined by three factors - the experience of the practicing physicians, effective use of technology and proximity of service location for the intended customer-base, which also act as barriers to entry. At times due to low bed occupancy at private hospitals, unqualified nurses and AYUSH doctors are appointed at far lower wages to stay competitive.
- **Affordability of Care:** There are worries in the mind of the private service providers regarding the affordability of population for secondary and tertiary care as majority of the patients earn a basic daily wage. The lack of enough public spending is substantially increasing the burden of private out-of-pocket expenditures on health.
- **Availability of Healthcare Staff:** The key concerns expressed by the private healthcare providers for not creation some of the Indian states (for example Bihar) as their preferred destination for setting up healthcare facilities are Non-availability of medical, nursing and paramedical staff, Scarcity of Nursing Schools and paramedical colleges, Reluctance of qualified professionals to settle in those states, Lack of urban amenities required to attract qualified staffs like malls, multiplexes etc. Inadequate budgets, limited avenues and incentives for the teaching faculty to undertake research or introduce innovative teaching methods, etc. have had a demoralizing effect that creates a negative impact on the quality of education and commitment of the faculty.
- **Access to essential drugs and medicines:** Drugs are one of the main cost drivers of the health care system. It is essential on the demand side, drugs and medicines form a considerable portion of the out-of-pocket (OOP) spending on health by Indian households. In rural India, the share of drugs in the total OOP is estimated to account for nearly 83%, while in urban India, it is 77%. The share of drugs in the total inpatient treatment in rural and urban India is around 56% and 47% respectively. On the other hand, the component of drugs and medicines accounts for a mere 10% of the overall budget of both the Central and the State Governments. At present, only 76 drugs, accounting for one-fourth of the total drug market in terms of value are price controlled.
- **Challenges of healthcare PPPs:** Lack of direction from the State Governments in finding areas where partnership is possible as well as coming up with area exact partnering models (in terms of sharing of risks, resources and costs). No policy to include to private sector participation in the PPP governing body, which is negatively impacting the equitable representation of both private and public sector interests. Insignificant involvement of the people at the grass root level in the decision-making process

with lack of patient-centric approach. Lack of public sector initiative to structure the PPP through equity participation or debt infusion at subsidized cost of borrowing and to make provision for an extended tax holiday. Unavailability of qualitative and quantitative benchmarks as well as key success factors for performance evaluation and monitoring of PPP projects, post-implementation, on a continued basis; and lack of specific plan to utilize the Unspent Budget of the Ministry of Health in the subsequent year to facilitate any large-scale capital investment.

1.5. Emerging Trends

In the last decade, private participation in the healthcare sector has risen significantly on the back of increased interest by investors and rising Private Equity and Mergers and Acquisitions activity. Further, the sector has also evolved through improved investment in R&D and the introduction of specialized delivery models.

- **Investment Trends:** Driven by increase domestic demand for high end investment services as well as medical tourism, the health care sector has attracted huge investments lately. Moreover, large scale investments in infrastructure are required to make healthcare facilities on par with developed countries.
- **Foreign Direct Investment (FDI):** The FDI inflows in the hospital sector have not been significantly high despite government incentives to attract FDI investments. There are currently limited number of 100% foreign owned healthcare players in the Indian market.
- **Merger & Acquisition:** Pharma, biotech and health sector has seen substantial traction over the four years with deal values ranging from USD 1.5 billion in 2007 to USD 6.2 billion in 2010. Healthcare services accounted for 14% of the total M&A deal value in 2009.
- **Private equity investment:** There has been an increase in the PE and VC activity over the past couple of years. these investments have been made across the healthcare delivery chain. However, these investments are typically in tertiary care hospitals in metros, tier II cities, chains of hospitals, diagnostic labs etc.
- **Developments in Research:** Healthcare research is a core focus within the healthcare sector. In the Union budget 2010/11, the expenditure budget of the Ministry of Health and Family Welfare for health research increased by 25 percent corresponding to USD 110 million in absolute terms. Notable research efforts in the last few years include Wellquest's research center in Hyderabad and Biocon India's and Bristol-Myers Squibb's joint R&D centre at Biocon's SEZ in Bangalore create great development in research.

- **Developments in Private Healthcare:** Functionalities like Day care Centers, Single Specialty Hospitals, Ayurvedic and Wellness Care and contribute more development in Indian healthcare industry.
- **Developments in Public Healthcare:** The Government has taken various initiatives to improve the Public Healthcare system in India. The Government launched the National Rural Health Mission (NRHM) in 2005 which aims to provide quality healthcare for all and increase the expenditure on healthcare from 0.9 per cent of GDP to 2-3 per cent of GDP by 2012.
- **Private-Public Partnerships:** The Indian Government is focused on developing the PPP model to cover the demand-supply gap dominant in the healthcare sector. Private sector expertise coupled with efficiencies in operation and maintenance would lead to improved healthcare services delivery to the masses. This model can act as a catalyst in the creation of new capacity and improvement of efficiency in the existing infrastructure established. The Government also embraced PPP model to counter epidemics like H1N1 swine flu, HIV, etc. However, it is evident that this model be far more beneficial.
- **Government insurance Schemes:** Indian health financing faces a number of challenges including increase in health care costs, high financial burden on poor effecting their incomes, need for long term and nursing care for senior citizens because of increasing nuclear family system, increasing burden of new diseases and health risks, limited government funding leading to negligence of preventive as well as primary care and public health functions. Health insurance is established in many countries, however, still remains largely untapped in India. Less than 15 percent of India's 1.1 billion people are covered through health insurance. It mostly covers government employees, share of public financing in total health care is just about 1 percent of GDP. Over 80 percent of health financing is private financing, much of which is out-of- pocket payments and not by any pre-payment schemes. Government initiatives like the Rashtriya Swasthya Bima Yojna (RSBY), Comprehensive Health Insurance Scheme (RSBY-CHIS), Kerala; Apka Swasthya Bima Trust (ASBT), Delhi; Niramya Health Insurance Scheme, Ludhiyana Arogya sri in Andhra Pradesh are now actively driving the health insurance market in India.

1.6. Conclusion

India healthcare industry is one of the crucial and booming Industry. Healthcare is at an arrival of paradigm shifts in terms of changing disease patterns, increasing dual disease burden for both rural and urban India. On the supply side there has been uneven distribution of healthcare infrastructure and resources posing various challenges to the sector. A multi-pronged approach from key stake holders is necessary to address the issue. Both the public and private sector need to work in tandem to make healthcare available, accessible and affordable. At present there is huge shortage of trained doctors, nurses, hospital infrastructure, healthcare & pharmaceutical marketing and sales executives, medical representatives and managers. There is a major shortage of quality professionals for hospital services, service professionals for bio medical equipment, diagnostics, pharma R&D professionals. To overcome these issues government should initiate long term and Short term strategies like setup hospitals, medical colleges, professional development programs, continued medical education for the clinicians, nurses and other healthcare staff in the clinical and non-clinical management areas.

Reference

- 1) Acharyulu, G.V.R.K. and B. Rajashekhar (2007), "Service Quality Measurement in Indian Healthcare Industry", *Journal of International Business and Economics*, 7(2), 151-155.
- 2) Amyx, D., & Bristow, N.D. (2001). An empirical investigation of customer satisfaction with health care services. *Marketing Intelligence & Planning*, 19(7), 515-525.
- 3) Babu S., and Rajalakshmi, K. (2009). *Marketing Mix for Hospital Services in the Globalized Era*. Retrieved from http://www.indianmba.com/Faculty_Column.
- 4) Gupta C.B. and Dr. Nair R.N. (2006) 'Marketing Management' Vol. 2, Issue, 4, pp. 31-42.
- 5) Health economics association of India
- 6) Kabene, M.S., Orchard, C., Howard, M.J., Soriano, A.M. & Leduc, R. (2006). The importance of human resources management in health care: a global context. *Human Resources for Health* 4:20
- 7) Otani, K. and Kurz, S. (2004), 'The impact of nursing care and another healthcare attributes on hospitalized patient satisfaction and behavioural intentions', *Journal of Healthcare Management*, Vol. 49, pp 181-97.
- 8) Robert Kohn and Kerr L. White, *Health Care: An International Study* (London: Oxford University Press, 1976), p.395.
- 9) Source: *Defining an Enterprise wide Patient Contact Strategy*, Forrester, Research, Inc., October 22, 2008.

Websites

- http://shodhganga.inflibnet.ac.in/bitstream/10603/37171/12/12_chapter%203.pdf
- <https://pdfs.semanticscholar.org/presentation/fd37/927ad8a390a3c4319ef6ee53032a940a8fdf.pdf>
- https://www.pwc.in/assets/pdfs/publications-2012/healthcare_financing_report_print.pdf
- http://indiainbusiness.nic.in/newdesign/upload/news/Emrging_trends_in_healthcare.pdf
- https://www.ibef.org/download/Healthcare_270111.pdf