

AN EMPIRICAL ANALYSIS OF TRENDS AND OPPORTUNITIES IN THE HEALTHCARE SERVICES: A CASE STUDY OF INDIA

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The present research paper has been based on the healthcare services in India. Though the country is full of natural and human resources, poor healthcare services is one of the drawbacks of the country. Indian healthcare sector, one of the fastest growing industries, is expected to reach \$ 280 billion. The paper has focused on the Advantages of healthcare services in India. The functioning of Indian health services market and healthcare expenditure over the years has also studied. Appropriate expenses on the healthcare services in India will certainly bring an increase in the Gross Domestic Product (GDP).

In the present paper Private sector and health services in India and the growth of Per Capita healthcare expenditure has been elaborated. The researcher has also gone through key companies in the Indian healthcare market. There are various trends in the Indian healthcare sector. The study has also focused on growth drivers of Indian healthcare sector and medical tourism at the same time 12th Five-Year Plan (2012–17) and health Services in India. And finally the paper has studied Indian healthcare sector and policy support, opportunities in the Indian healthcare sector. The paper concluded with the certain suggestions and recommendations.

Keywords: Medical tourism, Growth Drivers, Five-Year Plan

INTRODUCTION

Good health is an integral part of wellbeing and determines economic growth of the country. India is a developing nation with abundant natural and human resources. But inappropriate use of the resources results in the socio-economic backwardness of the country. Indian health services includes public and private healthcare. But the country with the world's second largest population after China has inappropriate healthcare services. The present research paper synthesizes an evaluation of public and private healthcare services in India.

As per Indian constitution, health services to be provided by the States, rather than the central government. The National Health Policy was recommended by the Parliament of India in 1983 and updated in 2002. The National Health Policy is being worked upon further in 2017 and a draft for public consultation has been released. There are great inequalities in health between states. India is the sixth largest country in the world in healthcare.

Indian healthcare sector, one of the fastest growing industries, is expected to advance at a CAGR of 22.87 % during 2015–2020 to reach \$280 billion. There is immense scope for enhancing healthcare services penetration in India, this presents ample opportunity for development of the healthcare industry. The rising income levels, ageing population, growing health awareness and changing attitude towards preventive healthcare is expected to boost healthcare services demand in future.

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The low cost of medical services has caused an increase in the country's medical tourism, drawing patients from across the world. India has arisen as a hub for R&D undertakings for international companies because of its comparatively low cost of clinical research. Encouraging policies for cheering FDI (Foreign Direct Investment), tax benefits, promising government policies joined with auspicious growth projections have helped the industry attract private equity, venture capitals and foreign players.

The doctor-patient ratio for rural India, as per the Health Ministry statistics, is 1:30,000, well below the WHO recommended 1:1,000. The Indian healthcare Market Size is \$100 Billion. There is only one hospital bed for every 1,050 patients in 2015. The number of hospitals in India are 1, 96,312. Whereas 3601 AYUSH (The Department of Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy) Hospitals and 1, 56,926 Sub-centers. India has 404 Medical Colleges for MBBS with 189 Government medical Colleges and 215 Private medical Colleges till 2015 and 2760 Blood Bank till February, 2015.

OBJECTIVES OF THE STUDY

The present study has been based on certain objectives, are as follows;

1. To study healthcare services in India.
2. To evaluate public and private healthcare services in India.
3. To enumerate advantages of healthcare services in India.

HEALTHCARE SERVICES IN INDIA

Healthcare revenue in India is set to reach \$280 billion by 2020; expenditure is likely to expand at a CAGR (Compound annual growth rate) of 17 % over 2011–20, the rising incomes, greater health awareness, lifestyle diseases and increasing access to insurance will contribute to growth. Investment in healthcare infrastructure is set to rise, benefiting both 'hard' (hospitals) and 'soft' (R&D, education) infrastructure. India is the largest exporter of formulations with 14 % market share and ranks 12th in the world in terms of export value. Double-digit growth is expected over the next five years. Availability of a large pool of well-trained medical professionals in the country. India has an advantage over its peers in the West and Asia in terms of cost of high-quality medical services offered. The government aims to develop India as a global healthcare hub. The Policy support in the form of reduced excise and customs duty, and exemption in service tax. Creation of new drug testing laboratories and further strengthening of the 31 existing state laboratories. A group has been formed for constituting the "Mental Health Policy"

The Functioning of Indian Health Services Market

1. **Hospitals: Government hospitals** – It includes healthcare centers, district hospitals and general hospitals. **Private hospitals** – It includes nursing homes, and mid-tier and top-tier private hospitals.
2. **Pharmaceutical:** It includes manufacturing, extraction, processing, purification and packaging of chemical materials for use as medications for humans or animals.
3. **Diagnostics:** It comprises businesses and laboratories that offer analytical or diagnostic services, including body fluid analysis
4. **Medical Equipment and Supplies:** It includes establishment's primarily manufacturing medical equipment and supplies, e.g. surgical, dental, orthopedic, ophthalmologic, laboratory instruments, etc.

- 5. Medical Insurance and Telemedicine:** It includes health insurance and medical reimbursement facility, covering an individual's hospitalization expenses incurred due to sickness. Telemedicine has enormous potential in meeting the challenges of healthcare delivery to rural and remote areas besides several other applications in education, training and management in health sector.

Healthcare Expenditure and Private Sector over the Years in India

Healthcare has become one of India's largest sectors both in terms of revenue and employment. The industry is growing at a tremendous pace owing to its strengthening coverage, services and increasing expenditure by public as well private players. During 2008-2020, the market is expected to record a CAGR of 16.5 per cent. The total industry size is expected to touch \$160 billion by 2017 and \$280 billion by 2020.

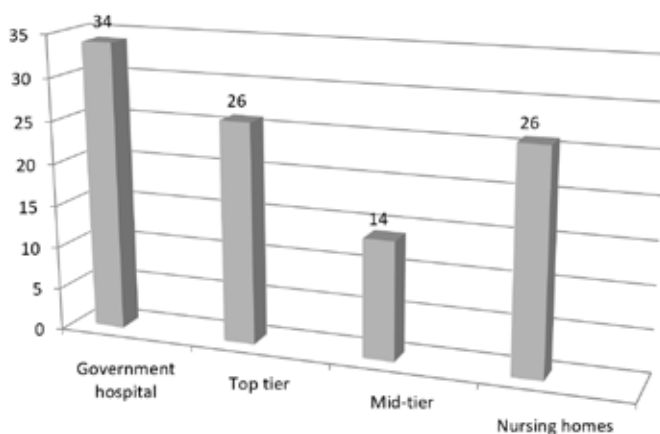
The private sector has emerged as a vibrant force in India's healthcare industry, lending it both national and international repute. Large investments by private sector players are likely to contribute significantly to the development of India's hospital industry, which comprises around 80 %of the total market. In India, private healthcare accounts for almost 74 %of the country's total healthcare expenditure. Private sector's share in hospitals and hospital beds is estimated at 74 % and 40 per cent, respectively. The main factor contributing to rising medical tourism in India is presence of a well-educated, English-speaking medical staff in state-of-the art private hospitals and diagnostic facilities.

Table 1 : Share in Health Care Spending comparison 2005 and 2015

Contents	Shares in healthcare spending in India 2005	Shares in healthcare spending in India, 2015
Government hospital	34	40
Top tier	26	11
Mid-tier	14	30
Nursing homes	26	19

Source: A report on 'Indian Hospital Services Market Outlook' by consultancy RNCOS, Grant Thornton, LSI Financial Services.

Graph: 1.1 Shares in healthcare spending in India 2005



Per Capita Healthcare

Per capita healthcare expenditure is estimated at a CAGR(Compound Annual Growth Rate) of 5 %during 2008–2015 to \$ 68.6 billion by 2015, because of rising incomes, easier access to high-quality healthcare facilities and greater awareness of personal health and hygiene. Greater penetration of health insurance aided the rise in healthcare spending, a trend likely to intensify in the coming decade. Economic prosperity is driving the improvement in affordability for generic drugs in the market.

Table 2 : Per Capita Healthcare Expenditure in India

Years	Per Capita Healthcare Expenditure (\$)
2010	54
2011	61
2012	58
2013	61
2014	61.9
2015	68.6

Source: The World Bank, 2015

According to the Pearson's Co relation Coefficient Method:

Co-relation coefficient=0.850

Standard error of the co-efficient is =0.114

T-test for the significance of the co-efficient=3.222

D.F.=4

Two-tailed probability=.03322

Indian Healthcare Market

Apollo Hospitals Enterprise Ltd: more than 9,215 beds to the patients, Aravind Eye Hospitals around 3,649 beds for the patients, CARE Hospitals: Has 2,100beds for the patients, Fortis Healthcare Ltd: having around 10,000beds for the patients, Max Hospitals: 2016 beds for the patients, Manipal Group of Hospitals 4,900 beds for the patients, Narayana Health: 7452beds for the patients.

Trends in the Indian Healthcare Sector

- Shift from Communicable to Lifestyle Diseases:** With increasing urbanization and problems related to modern-day living in urban settings, currently, about 50 %of spending on in-patient beds is for lifestyle diseases; this has increased the demand for specialized care. In India, lifestyle diseases have replaced traditional health problems. Most lifestyle disease is caused by high cholesterol, high blood pressure, obesity, poor diet and alcohol.
- Expansion to tier-II and tier-III cities:** Vaatsalya Healthcare is one of the first hospital chains to start focus on Tier 2 and Tier 3 for expansion. There is substantial demand for high-quality and specialist healthcare services in tier-II and tier-III cities. To encourage the private sector to

establish hospitals in these cities, the government has relaxed the taxes on these hospitals for the first five years.

3. **Management contracts:** Many healthcare players such as Fortis and Manipal Group are entering management contracts to provide an additional revenue stream to hospitals.
4. **Increasing Penetration of Health Insurance:** In FY16 (till November 2015), gross direct premium income from health insurance stood at 25.4 %of overall gross direct premium income for non-life insurance segment. Health insurance is gaining momentum in India; gross healthcare insurance premium was \$2.9 billion in 2013 expanding at a CAGR of 26 %over FY08-13. This trend is likely to continue, benefitting the country's healthcare industry.
5. **Mobile-based Health Delivery:** Strong mobile technology infrastructure and launch of 4G is expected to drive mobile health initiatives in the country. Cycle telHumsafar is a SMS based mobile service designed for women; it enables women to plan their family in a better way. Currently, there are over 20 mobile health service initiatives in the country for spreading awareness about family planning and other ailments. Mobile health industry in India is expected to reach \$0.6 billion by 2017.
6. **Technological Initiatives:** To standardize the quality of service delivery, control cost and enhance patient engagement, healthcare providers are focusing on the technological aspect of healthcare delivery. Digital Health Knowledge Resources, Electronic Medical Record, Mobile Healthcare, Electronic Health Record, Hospital Information System and PRACTO are some of the technologies gaining wide acceptance in the sector. Health Kart is an online portal started for delivering healthcare products in India.

Growth Drivers of Indian Healthcare Services

1. **Growing demand:** Rising incomes and affordability, growing elderly population, changing disease patterns, Rise in medical tourism, Better awareness of wellness, preventive care and diagnosis.
2. **Policy Support:** Encouraging policies for FDI and the private sector, Reduction in customs duty and other taxes on life-saving equipment, NRHM(National Rural Health Mission)allocated \$10 billion for healthcare facilities.
3. **Innovation:** Expanding research & development and distribution facilities in India, Use of modern technology, providing support to global projects from India.

Medical Tourism and the Growth of Private Hospitals in India

Presence of world-class hospitals and skilled medical professionals has strengthened India's position as a preferred destination for medical tourism. Superior quality healthcare, coupled with low treatment costs in comparison to other countries, is benefiting Indian medical tourism which has, in turn, enhanced the prospects of the Indian healthcare market. Treatment for major surgeries in India costs approximately 20 %of that in developed countries.

India also attracts medical tourists from developing nations due to lack of advanced medical facilities in many of these countries. Medical tourism market is estimated to be around \$3 billion in 2015 and is expected to reach \$8 billion in 2020. India medical tourism is growing at a CAGR of 20 per cent. Inflow of medical tourists is expected to cross 3.2 million by 2015 compared to 0.85 million in 2012. Yoga, meditation, ayurveda, allopathy and other traditional methods of treatment

are major service offerings that attract medical tourists from European nations and the Middle East to India.

A major portion of secondary, tertiary and quaternary healthcare institutions comes from private sector with a concentration in metros, tier II and tier I cities. Large investments by private sector players are likely to contribute significantly to the development of India's hospital industry and the sector is poised to grow to \$100 billion by 2015 and further to \$280 billion by 2020. The private hospital market in India is estimated at \$81.0 billion at the end-of 2015 during 2009–2015, the market size of private hospitals is estimated to have a CAGR of 24.2 per cent. Increase in number of hospitals in Tier-II and Tier-III cities has fuelled the growth of private sector.

Health Care Services Under Five Year Plan (2012-17)

The NITI Aayog has allocated \$55 billion under the 12th Five-Year Plan to the Ministry of Health and Family Welfare, which is about three times the actual expenditure under the 11th Five-Year Plan. The share of healthcare in total plan allocation is set to rise to 2.5 %of GDP in the 12th Plan from 0.9 %in the 11th Plan. The 12th plan focuses on providing universal healthcare, strengthening healthcare infrastructure, promoting R&D and enacting strong regulations for the healthcare sector. Establishing a system of Universal Health Coverage (UHC) in the country that means each individual would have assured access to a defined essential range of medicines and treatment at an affordable price, which should be entirely free for a large percentage of the population

Indian Healthcare Sector and Policy Support

1. **Encouraging the private sector:** The benefit of section 10 (23 G) of the IT Act has been extended to financial institutions that provide long-term capital to hospitals with 100 beds or more, Government is encouraging the PPP model to improve availability of healthcare services and provide healthcare financing. Till 2015, five projects under PPP(*Public–Private Partnership*) have been completed and have become operational.
2. **Encouraging investments in rural areas:** The benefit of section 80-IB has been extended to new hospitals with 100 beds or more that are set up in rural areas; such hospitals are entitled to 100 %deduction on profits for five years
3. **Tax incentives:** All healthcare education and training services are exempted from service tax, Increase in tax holiday under section 80- IB for private healthcare providers in non-metros for minimum of 50 bedded hospitals, 250% deduction for approved expenditure incurred on operating technology enables healthcare services such as Tele-medicine , remote radiology, Excise duty on chassis for ambulance reduced from 24 %to 12.5 per cent, Artificial heart is exempted from basic custom duty of 5 per cent. Income tax exemption for 15 years for domestically manufactured medical technology products.
4. **National Health Policy 2015 Draft:** The primary aim is to inform, clarify, strengthen and priorities government's role in shaping the health systems, The policy envisage to address the need for improving health systems, An initiative taken by the Government to leverage economic growth so as to achieve better health outcomes which would contribute to improved productivity as well as equity. The policy framework ensures health assurance and universal access to affordable healthcare services in an assured mode.
5. **Incentives in the medical travel industry:** Incentives and tax holidays are being offered to hospitals and dispensaries providing health travel facilities. Senior citizens above 80 years of

age will be allowed deduction of \$ 491 towards medical expenditure if they are not covered under health insurance

6. **Fund allocation by government:** In Union Budget, 2015-16, Government has allocated \$5.4 billion for healthcare sector development. Government has raised health insurance premium amount from \$ 245 to \$409 and for senior citizens amount has been increased from \$327 to \$ 49.
7. **Medical institution and Laboratories:** Allocation of \$82.6 million to set up four more institutions of the stature of AIIMS in Andhra Pradesh, West Bengal, Maharashtra and Uttar Pradesh. Creation of new drug testing laboratories and further strengthening of the 31 existing state laboratories.
8. **Union Budget FY15-16:** Ministry of Health and Family Welfare allocated \$5.5 billion for FY16. Creation of new National Health Mission (NHM) for providing effective healthcare to both urban and rural population, with emphasis on states with weak health infrastructure and indicators. NHM extended to encompass Ayurveda, Unani, Siddha and Homeopathy to strengthen traditional medical forms. Scope of Rashtriya Swasthya Bima Yojana (RSBY) enhanced to include rickshaw pullers, taxi drivers, sanitation workers, rag pickers and mine workers. Fund allocation to provide accessible and affordable services to elderly under National Programme for the Health Care of Elderly. Allocation of \$ 875.4 million for improving medical education, training and research.

Opportunities in the Indian Healthcare Sector

1. **Healthcare infrastructure:** Additional 3 million beds needed for India to achieve the target of 3 beds per 1,000 people by 2025. Additional 1.54 million doctors and 2.4 million nurses required to meet the growing demand for healthcare. Investment of \$86 billion required to achieve these targets. Over \$200 billion is expected to be spent on medical infrastructure by 2024.
2. **Research:** Contract research is a fast growing segment in the Indian healthcare industry. Cost of developing new drugs is as low as 60 % of the testing cost in the US. About 60 % of global clinical trials are outsourced to developing countries. The Contract Research and Manufacturing Services industry (CRAMS) estimated at \$ 8 billion in 2015, up from \$3.8 billion in 2012. The market has more than 1000 players.
3. **Medical tourism:** The Indian medical tourism industry is expected to reach \$8 billion in 2020 from \$3 billion in 2015. In 2015, India is likely to see 3.2 million medical tourists annually. Cost of surgery in India is nearly one-tenth of the cost in developed countries.

CONCLUSION

On the basis of the empirical research on Indian healthcare sector the researcher has brought certain recommendations and suggestions for the growth of Indian healthcare sector, are as follows:

1. Indian healthcare sector has tremendous potential for creating employment opportunities and to solve the problem of Indian economy.
2. Abundant revenue can be generated through the health services provided to the foreigners and accordingly the problem of balance of payment difficulties can be easily tackled by availing foreign currency.
3. Indian healthcare sector by adopting medical tourism may come out from the problem of healthcare backwardness and an image of the country at the global level can be easily

improved by availing the world class facilities to the masses.

4. As the government of India is regularly providing the financial support to the healthcare sector, by which standard of living and life expectance of the people can be easily improved.

Thus, the present research paper has focused on the Indian health services. The paper has been divided and sub divided into various parts like advantages of healthcare services in India. The functioning of Indian health services market and healthcare expenditure over the years has also studied. In the present paper Private sector and health services in India and the growth of Per Capita healthcare expenditure has been elaborated. Various trends in the Indian healthcare sector also studied in an appropriate manner. And finally the paper has also studied Indian healthcare sector and policy support, opportunities in the Indian healthcare sector.

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