

**Q1. What are the Global or India specific trends driving health business / new opportunities ?**

Healthcare has become one of India’s largest sectors - both in terms of revenue and employment. Healthcare comprises hospitals, medical devices, clinical trials, outsourcing, medical tourism and medical equipment.

1. Globalisation and integration of supply chains :

Trade scale has expanded exponentially across borders. Hunger for growth and fast revenue generation practices causes sourcing from low cost suppliers around the world which helps in eradicating quality risks. Supply chains are constantly improved and integrated to enhance safety and traceability.

**1.1 Market Size :**

Healthcare delivery, which includes hospitals, nursing homes and diagnostics centres, and pharmaceuticals, constitutes 65 % of the overall market.

* Deloitte Touche Tohmatsu India has predicted that with increased digital adoption, the Indian healthcare market, which is worth US$ 100 billion, will likely to grow at a CAGR of 23 per cent to US$ 280 billion by 2020.

**1.2 Investments :**

The hospital and diagnostic centers attracted Foreign Direct Investment (FDI) worth

US$ 3.41 billion between April 2000 and December 2015, according to data released by the Department of Industrial Policy and Promotion (DIPP).

Few Major Investments :

* Versante Software Technologies, an Indian subsidiary of US-based IT consulting and software engineering services company Versante Technologies LLC, is in the process of raising US$ 1 million in its first round of external funding by March 2016.
* Abraaj Group, a Dubai based Private Equity (PE) investor, has planned to buy a majority stake in an Indian firm Quality CARE India Ltd, which runs CARE Hospitals.
* Apollo Hospitals Enterprise (AHEL) plans to add another 2,000 beds over the next two financial years, at a cost of around Rs 1,500 crore (US$ 220.08 million).

**1.3 Future**

India has a lot of opportunities for players in medical industry. The country has also become one of the leading destinations for high-end diagnostic services with tremendous capital investment. Besides, Indian medical service consumers have become more conscious towards their health care upkeep.

1. Rising Standard and Increasing Scrutiny :

Further categorising “rising standard” we could say Technology has played a great role in changing the trends being followed and the new trends that have emerged in the healthcare industry/business. The technological support in today’s healthcare industry is widespread, in fact we could even say omnipresent in the industry.

What is the most important part of technological advancements is the handling of the information, whether it be of the doctors, hospitals, staff or the patients themselves. This is where the term Big Data comes into being.



**Q.2 What are the India specific opportunities in the Health Technology sector?**

India is currently undergoing a dynamic shift in demographics and per capita incomes.

With investments surging in private sector, the healthcare services delivery is picking pace by the second.

Statistics :

1. The Indian medical tourism industry is estimated at $1 billion per annum, growing at around 18 per cent, and is expected to touch $2 billion by 2015.
2. The healthcare sector in India is slated to grow at a CAGR of 15 per cent to touch $158.2 billion in 2017 from $78.6 billion in 2012, according to a report by Equentis Capital.

Opportunities :

1. India requires 600,000 to 700,000 additional beds over the next five to six years, indicative of an investment opportunity of US$ 25-30 billion.
2. The average investment size by private equity funds in healthcare chains has already increased to US$ 20-30 million from US$ 5-15 million, as per PriceWaterHouseCoopers.

[Detailed source](http://indiainbusiness.nic.in/newdesign/index.php?param=industryservices_landing/373/2)

Technology Advancement :

In revolutionizing the healthcare system and propelling its next phase of growth, technology and mobility will play a crucial role. Below we discuss some of the latest technology trends shaping the future of healthcare.

1. **BYOD Prevalence : (Bring your own Device)**

It has become a mainstream trend with increasing number of personal devices entering hospitals. It is imperative that BYOD demands should not overshadow the importance of having proven and tested security.

1. **Big Data :**

With use of digital platforms organisations are privy to a goldmine of data. Big data is being analysed to gain valuable insights into ways to become more cost effective, and accelerate patient care.

1. **Data Security :**

Personal devices have highly confidential information and organisations need to identify mobile device risk management strategy, including privacy and security safeguards. It is important to conduct mobile device privacy and provide training for employees.

1. **Mobile Applications :**

Medical professionals are increasingly relying on their mobile devices for efficient and productive work life. Mobile apps can provide medical practitioners with real-time access to information. Patients can also use apps to monitor many aspects of health, like calories, heart rate etc.



**Q.3 Identify top 2 sub-sectors within the Health Tech domain and for each of them, please do the following:**

**a) What is the opportunity?**

**b) What's the approx market size?**

**c) Name a few Indian startups in this sub-sector**

**d) Name a few Indian investors investing in this sub-sector**

1. **Opportunity :**
2. Digital Healthcare :

Digital health, which represents the convergence of connected health, quantified self, and core healthcare IT trends, is among the key phenomena driving the next

cycle of transformation in the healthcare industry. Beyond its impact in shaping delivery and payment model innovation in healthcare, it has been the primary catalyst for accelerated innovation cycles in both consumer and enterprise.

* Changing role of the consumer
* Accelerating pace of technology innovation
* Changing healthcare landscape

1. Health Informatics :

Health Informatics, which represent better management of medical information. It involves collection, handling, and processing of healthcare information. It is a domain of Information and communication technology.

* Advanced ICT implementation
* Effective case study

1. **Market size :**
2. Digital Healthcare :

In 2017, the mobile health market is expected to reach 24.2 billion U.S dollars worldwide. Expected to grow up to 233.3 billion U.S dollars by 2020.

1. Health Informatics :

The number of hospitals adopting the electronic health record (EHR) systems for monitoring and recording the health related data of patients is growing day by day.

The US market for EMRs was estimated at $2.18 billion in 2009 which is forecasted to rise to $6.05 billion by the year 2015 at the compounded annual growth rate of 18.1% during the forecast period from 2010 to 2015.

1. **Few startups :**
2. eKincare
3. Medibox Technologies
4. Mediaka Bazaar
5. **Few Investors :**
6. Health Catalyst (nearly Rs 465.7 crore)
7. InviCRO (nearly Rs 306.03 crore)
8. Higi (nearly Rs 266.11 crore)



**Q.4 Please mention the main sources of your data.**

1. <http://www.pwccn.com/home/eng/food_supply_and_integrity_trends.html>
2. <http://www.businessinsider.in/Technology-Trends-That-Are-Revolutionising-Indian-Healthcare/articleshow/45284705.cms>
3. <http://www.ibef.org/industry/healthcare-india.aspx>
4. <http://www.financialexpress.com/article/healthcare/it-healthcare/reforming-healthcare-in-india-through-technology/41537/>
5. <http://indiainbusiness.nic.in/newdesign/index.php?param=industryservices_landing/373/2>
6. <http://www.ibef.org/industry/healthcare-india.aspx>
7. <http://yourstory.com/2015/12/healthcare-startup-india-2015/>
8. <http://www.dnaindia.com/money/report-private-money-acquisitions-rule-digital-healthcare-sector-2202302>
9. <http://yourstory.com/2016/02/digital-healthcare-startups/>
10. <http://www.dnaindia.com/money/report-private-money-acquisitions-rule-digital-healthcare-sector-2202302>