Financing and Funding Indian Healthcare: Navigating the Turbulent Tide
The cost of healthcare or, more appropriately, the cost a nation has to bear to provide healthcare to its citizens has been one of the most hotly debated issues globally. How one defines this paradigm is important: Is healthcare a right that citizens can demand from the state, or is the individual responsible for his/her own health? However, there is a general consensus that unless some form of universal health coverage care is available, the growth of the most robust economies can be derailed. The coverage should include access to preventive, promotive and curative care of sufficient quality to be effective while ensuring people do not suffer financial ruin.

One of the tectonic shifts in Indian healthcare has been the launch of ‘Ayushman Bharat’, which addresses both pillars of universal healthcare coverage—the role of primary care and financial access. Under the National Health Protection Scheme, the government plans to cover over 500 million population, making it one of the largest schemes on the planet. Traditionally, the public and private sectors have not worked together. International experience shows that the most efficient public healthcare systems use private capital and expertise to induce efficiency and innovation. The scheme gives a fresh impetus for both to work together towards achieving the nation’s goal of achieving universal healthcare.

A host of factors—ranging from price control to regulatory overreach and safety of the caregivers in hospitals—have threatened to derail the robust growth of the sector. However, we see this as an opportunity to relook at financing and funding, the regulatory framework and reimbursement mechanisms to build a new healthcare ecosystem.

The ‘New Indian Healthcare Eosystem’ will redefine the healthcare delivery and products space with low-cost hospitals, speciality clinics, medical devices which cost a fraction of imported devices, mobile technologies which address primary healthcare needs and quality healthcare which is affordable. Besides addressing India’s needs, these innovations have the potential to be replicated in the developing world, where most issues mirror those in our country. Rising patient consumerism, expansion of the continuum of care, a shift towards quality-based care, increasing patient participation, the use of technology in delivering care, and increasing insurance penetration are some of the disruptive trends which the Indian health economy is currently witnessing. These trends and turbulent events, along with the implementation of NHPS, present an opportunity for the relevant stakeholders to redefine and reorganise themselves and adopt new components of people, process and technology in their business models, in order to emerge successful in the ‘New Indian Health Economy’.
Section 1
Is India moving towards an equitable healthcare system?

Section 2
What were the effects of the turbulent events that hit the Indian healthcare industry last year?

Section 3
Can the National Health Protection Scheme (NHPS) be the inflexion point for the industry?

Section 4
Can the Indian healthcare industry continue to attract investors given its long-term potential?

Section 5
Are we now seeing the birth of a "New Indian Health Economy"?
Section 1 — Is India moving towards an optimal healthcare system?

India is a microcosm of all the healthcare systems in the world.

<table>
<thead>
<tr>
<th>Healthcare models</th>
<th>Bismarck</th>
<th>Beveridge</th>
<th>Douglas model</th>
<th>Out of pocket</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Classic</td>
<td>Neoclassic</td>
<td>Classic</td>
<td>Neoclassic</td>
</tr>
<tr>
<td>Payer</td>
<td>Private insurance</td>
<td>Private and public insurance</td>
<td>Government insurance</td>
<td>Government-run insurance</td>
</tr>
<tr>
<td>Financing</td>
<td>Citizen and employer premium</td>
<td>Citizen tax payments</td>
<td>Citizen premium</td>
<td>Citizen</td>
</tr>
<tr>
<td>Provider</td>
<td>Mostly private</td>
<td>Public</td>
<td>Mostly private</td>
<td>Mostly private</td>
</tr>
<tr>
<td>Government’s role</td>
<td>Regulation</td>
<td>Regulation and part-payment</td>
<td>Payment and delivery</td>
<td>Regulation</td>
</tr>
<tr>
<td>Price control</td>
<td>Government manages prices through regulation</td>
<td>As the sole payer, govt. has strong control over prices</td>
<td>Government has limited control</td>
<td></td>
</tr>
<tr>
<td>Examples</td>
<td>Germany</td>
<td>Netherlands</td>
<td>Britain</td>
<td>Denmark</td>
</tr>
<tr>
<td></td>
<td>Austria</td>
<td>Switzerland</td>
<td>Cuba</td>
<td>New Zealand</td>
</tr>
<tr>
<td></td>
<td>USA (mixed)</td>
<td>Spain</td>
<td>Spain</td>
<td>Spain</td>
</tr>
<tr>
<td>Indian examples</td>
<td>Individual/group insurance (private)</td>
<td>Public sector undertakings</td>
<td>State-run hospitals, armed forces</td>
<td>CGHS, PPPs</td>
</tr>
</tbody>
</table>

PwC Analysis
High-quality clinical outcomes at an affordable cost have helped project India as a medical hub.

The Indian healthcare system is moving towards quality healthcare at an affordable cost.

37 Joint Commission International (JCI)\textsuperscript{1} accredited hospitals and 513 National Accreditation Board for Hospitals & Healthcare Providers (NABH)\textsuperscript{2} accredited hospital

Cost of treatment is less than 1/10th in comparison to the USA\textsuperscript{3}

Clinical outcomes in leading hospitals are comparable to those of internationally recognised facilities

A strong brand of alternative medicine and rejuvenation therapies, along with an emphasis on wellness and prevention, has drawn patients from across the globe to the country.

Source: 1 - JCI website, 2 - NABH website, 3 – IBEF website, PwC analysis
A strong quality focus and clinical outcomes at a low cost, coupled with credibility in alternative medicine, have resulted in growing medical tourism in the country.

source: Ministry of Tourism, Government of India

Around Over half a million medical visas were issued in 2016. The number has increased at a CAGR of ~52% from 2014 to 2016.

Source: PwC analysis MVT Medical Value Travel
India has a commitment to achieve Universal Health Coverage (UHC) [as part of Sustainable Development Goals]. However, its total healthcare expenditure is less than 5% of its GDP, which has resulted in sub optimal outcomes.

Source: World Bank estimates, SDG Index and Dashboards Report 2017

OOPE: Out of Pocket Expenditure

UHC tracer definition: UHC Tracer Index: Summary measure of coverage of essential health services, computed for each country by averaging service-coverage values across 16 tracer indicators on (i) reproductive, maternal, newborn and child health; (ii) infectious diseases; (iii) non-communicable diseases; and (iv) service capacity and access, and health security. A higher score reflects a higher access to these services.
High performing countries have used different methods for healthcare financing to achieve UHC.

The Nature of increased healthcare spend is important for better cost-efficient health outcomes.

Health expenditure per capita, PPP (constant 2011 international USD)

Source: World Bank estimates
In summary

• India is a microcosm of all the healthcare systems in the world given its multiple attributes, be it those of provider, payor or the role of the private sector and the government.

• The country is able to provide best quality outcomes at affordable price points, thus leading to a more than 50% annual growth in the issuance of medical visas for the last two years.

• However, significant challenges remain, especially related to healthcare expenditure, which is less than 5% of the GDP as compared to the world average of ~10%.

• This has impacted India’s stride towards UHC, with OOPE being above 60%.

• Countries which have performed relatively well on UHC generally have high government spending on healthcare.
Section 2

What were the effects of the turbulent events that hit the Indian healthcare industry last year?
# Impact of these events

<table>
<thead>
<tr>
<th>Event</th>
<th>What happened?</th>
<th>What was the impact?</th>
</tr>
</thead>
</table>
| Price cap (stent and implant)* | The National Pharmaceutical Pricing Authority (NPPA) fixed a price ceiling for stents in February 2017 (amendment in Feb 2018) and for knee implants in August 2017 | • **Significant reduction in stent and implant prices** along with reduction in trade margins (capped at 8%) for the entire distribution value chain (including hospital)  
• Companies **withdrew premium stents** from the Indian market.  
• Companies have **less inclination to launch new products** given the uncertainty in the regulatory scenario.  
• **Reverse medical tourism** with patients from India travelling to neighbouring countries for availing medical services. |
| Demonetisation              | Circulation of high-denomination currency (500 and 1,000) was stopped in November 2016. | • **Given the high OOPE expenditure,** there were **liquidity issues** for cash paying patients. This made it difficult for patients to pay for acute procedures/surgeries and also led to **postponement of elective surgeries.**  
• Hospitals and diagnostic centres saw reduction in revenue growth for a few months. |
| Attempts for fixing procedure rates | Some states (West Bengal** and Karnataka**) have attempted to regulate and fix procedure rates. | • **Cap on procedure rates** could make it difficult for hospitals to **provide quality services.**  
• Lower profitability due to this capping can impact **new hospital investments.**  
• **Possibility of other states also bringing in similar bills** with an aim to cater to populist sentiments. |
| Other regulatory issues     | Hospitals were penalised and licences were cancelled on account of 1-2 unfortunate incidents. | • A few hospitals were **forced to curtail operations** *(hospital licence cancelled, removal from government empanelment, suspension of operations for a few departments)* for a brief period. This resulted in revenue loss and negatively impacted the hospital’s image.  
• **Patients could not avail/had to postpone treatment or look for alternative options.**  
• **Anxiety and job security concern** for employees  
• **Question of propriety** – should the patients, employees and the organisation suffer due to an individual’s mistake or error? |

Source: *NPPA, **West Bengal Clinical Establishment Regulatory Commission, the West Bengal Clinical Establishments Registration, Regulation and Transparency Bill, 2017, and the Karnataka Private Medical Establishments (Amendment) Bill, 2017, Newspaper articles  
UHC – Universal Health Coverage
What needs to be done?

While one of the events (demonetisation) was a one-off event, they nevertheless signal a need for change:

- There is a strong need for increasing transparency, improving hospital and patient connect, and dispelling the negative perception of the industry.
- With the aim of balancing the need for returns for investors and affordability for patients, there is a need for hospitals to look at their cost structure and work on operational efficiency programmes.
- Technology advancements elements such as AI, wearables and other mobile technologies, along with IoT, can play a big role in delivering quality and affordable care.
- The government also needs to use this opportunity to create a robust regulatory framework keeping in mind the interest of all stakeholders.
- There is a need for all the stakeholders to join hands and create standard treatment protocols and SOPs which will help improve transparency and trust.
- While all the above measures will help, the major issue remains the high OOPE. Effective implementation of NHPS and UHC could solve this problem.
Section 3 — Can NHPS be the inflexion point for the industry?

World’s largest non-contributory government-sponsored health insurance scheme

**Features of scheme**

- **0.5 billion** beneficiaries
- Beneficiary identification as per *Socio Economic Census 2011*
- Proposed Aadhaar linkage
- **5,00,000 INR** family floater cap
- Premium to be borne **60:40** by Centre and state
- Additional source of funding for government: **1% cess**
- New institutional structures proposed – *National Health Agency* and *State Health Agency*
- Both public and private hospitals to be empanelled
- Focused on the most vulnerable population

**Paradigm shifts**

- Shift towards output-based strategic purchasing of services from private sector
- Merger of different government insurance schemes
- Government shifts from being a provider to a payer also
How will the NHPS evolve?

**Short-term steps**
- Set up governance mechanism
- Increase hospital empanelment
- Define the benefits under the scheme

**Medium-term steps**
- Price discovery and financing
- Right targeting of beneficiaries
- Expand scheme coverage
- Merge different schemes

**Long-term steps**
- Benefits under the scheme to include OPD and Primary care
- Build in system efficiencies

Stakeholder Implications

**Hospitals**
- Push for package rates
- Focus on quality
- Focus on accreditation

**Pharmaceuticals and diagnostic companies**
- Focus on low-cost drugs and quality
- Focus on centralised procurement
- Focus on supply-side shortages

**Insurance companies**
- Build capacities to handle large claims and identify frauds, abuse and misuse
- Empanel hospitals in tier 2 and 3 areas
- Negotiate package rates
- Improve system automation
- Build actuarial capacities, clinical audit capacity and hospital scrutiny

**Digital and IT service providers**
- Develop IT architecture to link patient data, hospital data and insurance company data with Socio Economic Classification (SEC) and Aadhaar data

**Central and state government and sector regulators**
- Identify sources of financing
- Build in system automation for monitoring and grievance redressal
- Ensure fair competition
Current ecosystem

- **Hospital empanelment:** <35,000 hospitals under ROHINI, majority in tier 1 and 2 cities
- **Package rate:** <150 procedures under GIPSA package
- **People insured:** 33.5 crore persons under government-sponsored health insurance, including RSBY
- **OOPE:** >60% of THE is OOPE. Limited coverage of pre-and post-hospitalisation expenses.
- **Hospital fraud:** ~15% of all claims are fraudulent claims
- **Hospital payment:** >25% of claims (in terms of value) are settled after one month
- **State government:** Different schemes like RSBY and other insurance schemes

**Source:**

**Abbreviations:**
ROHINI – Registry of Hospitals in Network on Insurance, GIPSA – General Insurers’ Public Sector Association (India), RSBY - Rashtriya Swasthya Bima Yojana, TPA – Third party administrator, THE – Total health expenditure
Future ecosystem

- Increase in number of hospitals empanelled especially in lower order cities and rural areas
- Increase in number of procedures under package rates
- Technology to act as a unifying force
- Increase in number of procedures under package rates
- Decrease in number of fraudulent cases for viability
- Merge different Schemes
- Improve system efficiencies and capacities
- Improve system efficiencies and capacities
- Increase in patient number and claim cases
- Benefit package to include multiple inpatient department (IPD) care procedures along with pre- and post-hospitalisation charges
- 50 crore people, instant claim settlement, empanel public hospitals, package rates, quality, hospitals empanelled
- Insurance companies to empanel public hospitals also
- Push for instant claim settlement driven by Aadhaar and use of technology
- Insurance companies/TPAs
Most of the leading hospital chains have shown steady revenue growth despite the recent headwinds.

<table>
<thead>
<tr>
<th>Hospital Chain</th>
<th>9M FY17 over 9M FY 16</th>
<th>9M FY18 over 9M FY 17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fortis Healthcare*</td>
<td>9%</td>
<td>1%</td>
</tr>
<tr>
<td>Apollo Hospitals*</td>
<td>12%</td>
<td>11%</td>
</tr>
<tr>
<td>Narayana Health</td>
<td>18%</td>
<td>17%</td>
</tr>
<tr>
<td>HCG</td>
<td>21%</td>
<td>18%</td>
</tr>
<tr>
<td>Max*</td>
<td>23%</td>
<td>9%</td>
</tr>
<tr>
<td>Shalby Hospitals</td>
<td>17%</td>
<td></td>
</tr>
</tbody>
</table>

*Only the hospital business revenue is accounted for in these cases. Source: Q3 Earning updates for FY17 and FY18 from company websites – Apollo, Fortis, Narayana Health, HCG, Max and Shalby Hospitals.
Healthcare Players continue to see listing as an attractive option for raising funds

<table>
<thead>
<tr>
<th>Year</th>
<th>Company</th>
<th>Amount raised (crore INR)</th>
<th>At an approx. valuation (crore INR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthcare IPOs</td>
<td>Shalby Hospitals</td>
<td>504.8</td>
<td>2,678</td>
</tr>
<tr>
<td></td>
<td>Aster DM Healthcare</td>
<td>725</td>
<td>9,600</td>
</tr>
<tr>
<td>FY17</td>
<td>Thyrocare</td>
<td>482</td>
<td>2,412</td>
</tr>
<tr>
<td>FY16</td>
<td>Narayana Health</td>
<td>613</td>
<td>5,109</td>
</tr>
<tr>
<td></td>
<td>HCG</td>
<td>650</td>
<td>1,854</td>
</tr>
<tr>
<td></td>
<td>Dr. Lal Pathlabs</td>
<td>670</td>
<td>4,500</td>
</tr>
</tbody>
</table>

Source: VCCircle and Livemint website

Like FY 16 and FY 17, FY 18 also witnessed continued investor interest in healthcare IPOs, with Shalby and Aster DM getting listed.
PE deals and FDI inflow in the last 12 months

<table>
<thead>
<tr>
<th>Areas</th>
<th>Key features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major private equity deals</td>
<td>The interest of the private equity fraternity continued in the year 2017 with multiple companies in the healthcare sector raising funds. This year also saw private equity interest in the home healthcare space</td>
</tr>
<tr>
<td>since the last report</td>
<td></td>
</tr>
<tr>
<td>(more than 10 million USD)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Company</th>
<th>Amount (million USD)</th>
<th>Sector</th>
<th>Investors</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radiant Life Care</td>
<td>200</td>
<td>Hospitals</td>
<td>KKR</td>
<td>July '17</td>
</tr>
<tr>
<td>Condis Healthcare</td>
<td>200</td>
<td>Hospitals</td>
<td>India Value Fund</td>
<td>Mar '17</td>
</tr>
<tr>
<td>Manipal Health Enterprises</td>
<td>171</td>
<td>Hospitals</td>
<td>Temasek</td>
<td>Mar '17</td>
</tr>
<tr>
<td>Max Healthcare Institute</td>
<td>75</td>
<td>Hospitals</td>
<td>IFC</td>
<td>May '17</td>
</tr>
<tr>
<td>Paras Healthcare</td>
<td>43</td>
<td>Hospitals</td>
<td>Creador Capital</td>
<td>July '17</td>
</tr>
<tr>
<td>Healthcare at Home</td>
<td>40</td>
<td>Home healthcare services</td>
<td>Quadria India</td>
<td>Apr '17</td>
</tr>
<tr>
<td>Portea Medical</td>
<td>26</td>
<td>Home healthcare services</td>
<td>IFC, Accel India, Sabre Capital, Qualcomm Ventures, CDC-MEMG</td>
<td>Nov '17</td>
</tr>
<tr>
<td>Asian Institute of Medical</td>
<td>21</td>
<td>Hospitals</td>
<td>CDC Group</td>
<td>Dec '17</td>
</tr>
<tr>
<td>Sciences</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nightingales Home Health</td>
<td>21</td>
<td>Home healthcare services</td>
<td>Eight Roads Ventures, Mahindra Partners</td>
<td>Apr '17</td>
</tr>
<tr>
<td>Services</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>iGenetic Diagnostics</td>
<td>20</td>
<td>Diagnostics</td>
<td>CDC-MEMG</td>
<td>Mar '17</td>
</tr>
<tr>
<td>Regency Hospital</td>
<td>14</td>
<td>Hospitals</td>
<td>IFC, Healthquad, Kois Invest</td>
<td>Feb '17</td>
</tr>
<tr>
<td>ASG Eye Hospitals</td>
<td>11.7</td>
<td>Eye Care</td>
<td>IDFC Alternatives</td>
<td>Sep '17</td>
</tr>
</tbody>
</table>

Source: Venture Intelligence
PwC analysis
Healthcare has seen a significant increase in FDI inflow over the last 4 years.

Healthcare FDI inflows (million USD)

<table>
<thead>
<tr>
<th>Year</th>
<th>FDI Inflows</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY11</td>
<td>240</td>
</tr>
<tr>
<td>FY12</td>
<td>318</td>
</tr>
<tr>
<td>FY13</td>
<td>257</td>
</tr>
<tr>
<td>FY14</td>
<td>685</td>
</tr>
<tr>
<td>FY15</td>
<td>663</td>
</tr>
<tr>
<td>FY16</td>
<td>647</td>
</tr>
<tr>
<td>FY17</td>
<td>747</td>
</tr>
</tbody>
</table>

Source: FDI Fact Sheets

In summary

- Most of the leading hospital chains have shown steady revenue growth despite the recent headwinds.
- FY18 continued to witness interest from the primary market in healthcare companies, with the listing of Shalby Hospital and Aster DM Healthcare.
- The interest of the PE fraternity continued in the year 2017, with investment taking place in multiple healthcare companies.
- FDI flow continued unabated with a flow of 747 million USD in FY17, the highest amount in the last 7 years.
Section 5 —

“Are we now seeing the birth of a “New Indian Health Economy”?”

To grow in this “New Indian Health Economy”, stakeholders need to focus on creating value in the ecosystem.
To grow in this ‘New Health Economy’, stakeholders need to align themselves with the accelerating trends.

**New Indian Health Economy**

- **Shift from volume to value**
  - Care delivery

- **Rise of consumerism**
  - From sick

- **Decentralisation**

- **Surge in interest in wellness**

- **Diagnostics and therapeutics**

- **Financing, payment and regulation**

- **Platform and support**

- **Wellness**

**Government**

- Focus on moving from provider to payor
- Effective implementation of NHPS
- Renewed focus on generics
- Facilitate ‘Make in India’

**Providers**

- Providers need to recalibrate their operating model
- Leverage the following:
  - Technology
  - Value-based care
  - Operational efficiency
  - Patient experience
About NATHEALTH

NATHEALTH has been created with the Vision to “Be the credible and unified voice in improving access and quality of healthcare”. Leading Healthcare Service Providers, Medical Technology Providers (Devices, Equipments & IT), Diagnostic Service Providers, Health Insurance companies, Health Education Institutions, Medical Journalism companies, Biotech/Lifesciences related companies, Healthcare Publishers, Healthcare Consultants, Home Healthcare companies, PE & VC companies and other stakeholders have come together to build NATHEALTH as a common platform to create the next level of momentum in Indian Healthcare. NATHEALTH is an inclusive Institution that has representation of small & medium hospitals and nursing homes as well as Healthcare Start-up companies. NATHEALTH is committed to work on its Mission to encourage innovation, help bridge the skill and capacity gap, help shape policy & regulations and enable the environment to fund long term growth. NATHEALTH aims to help build a better and healthier future for both rural and urban India.

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About PwC’s Healthcare practice

PwC India’s Healthcare team offers advisory services in the healthcare sector covering multiple domains such as strategy, business planning, market scan, commercial due diligence, feasibility study, operations improvement, cost reduction, health IT, digital and technology, internal audit and PPPs. Healthcare Advisory has a dedicated team with diverse operational experience in setting up and managing hospitals, and in healthcare consulting. This enables the team to deliver granular strategy and market and operational insights of the highest quality. The team works with leading healthcare providers, medical technology companies, central and state governments, diagnostic players, insurance companies and private equity players on projects both in India and overseas.

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