NATHEALTH™
Healthcare Federation of India

Financing and Funding Indian Healthcare: Navigating the Turbulent Tide

pwc

www.pwc.in

Executive summary

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?

Financing and funding Indian healthcare

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.

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

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)[1] accredited hospitals and* **513** *National Accreditation Board for Hospitals & Healthcare Providers (NABH)[2] accredited hospital*

Cost of treatment is less than **1/10th** *in comparison to the USA[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 countr

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 : Ministry of Tourism, Government of India

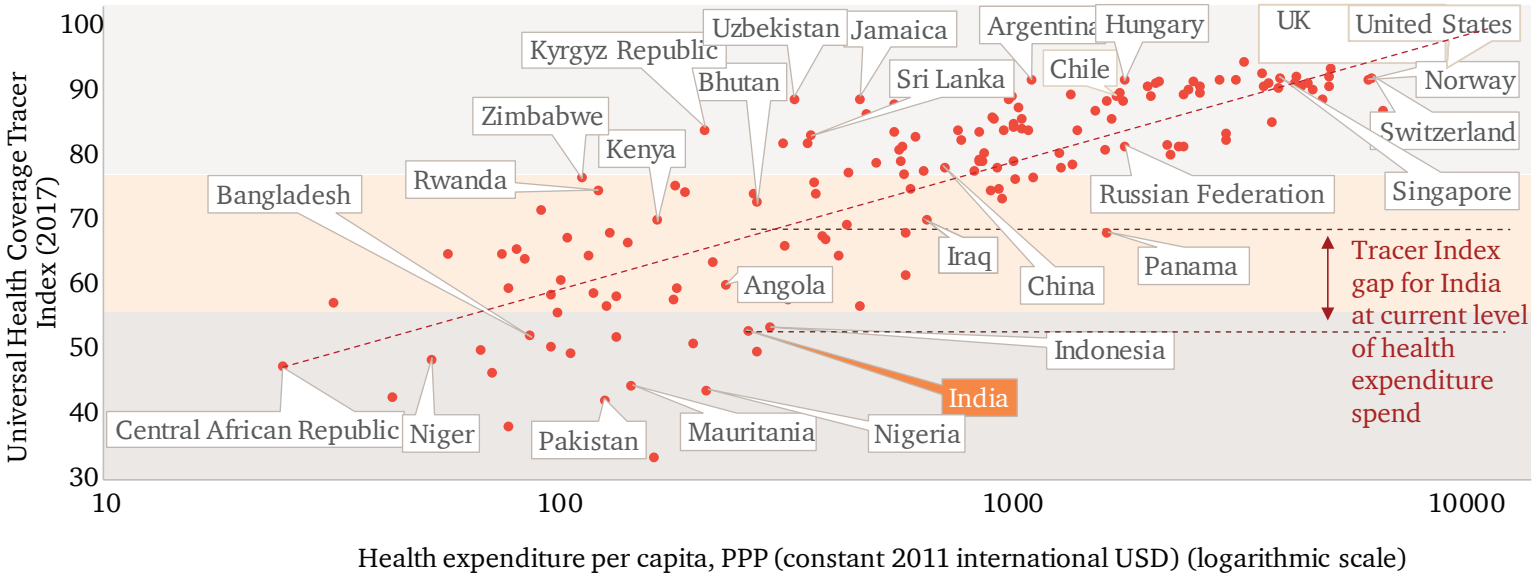
A strong quality focus and clinical outcomes at a low cost, coupled with credibility in alternative medicine, have resulted in growing medical tourism in the country.

Focus specialties for MVT in India

Cardiac sciences | Orthopaedics | Organ transplants | Neurosciences | Oncology | Bariatrics

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.

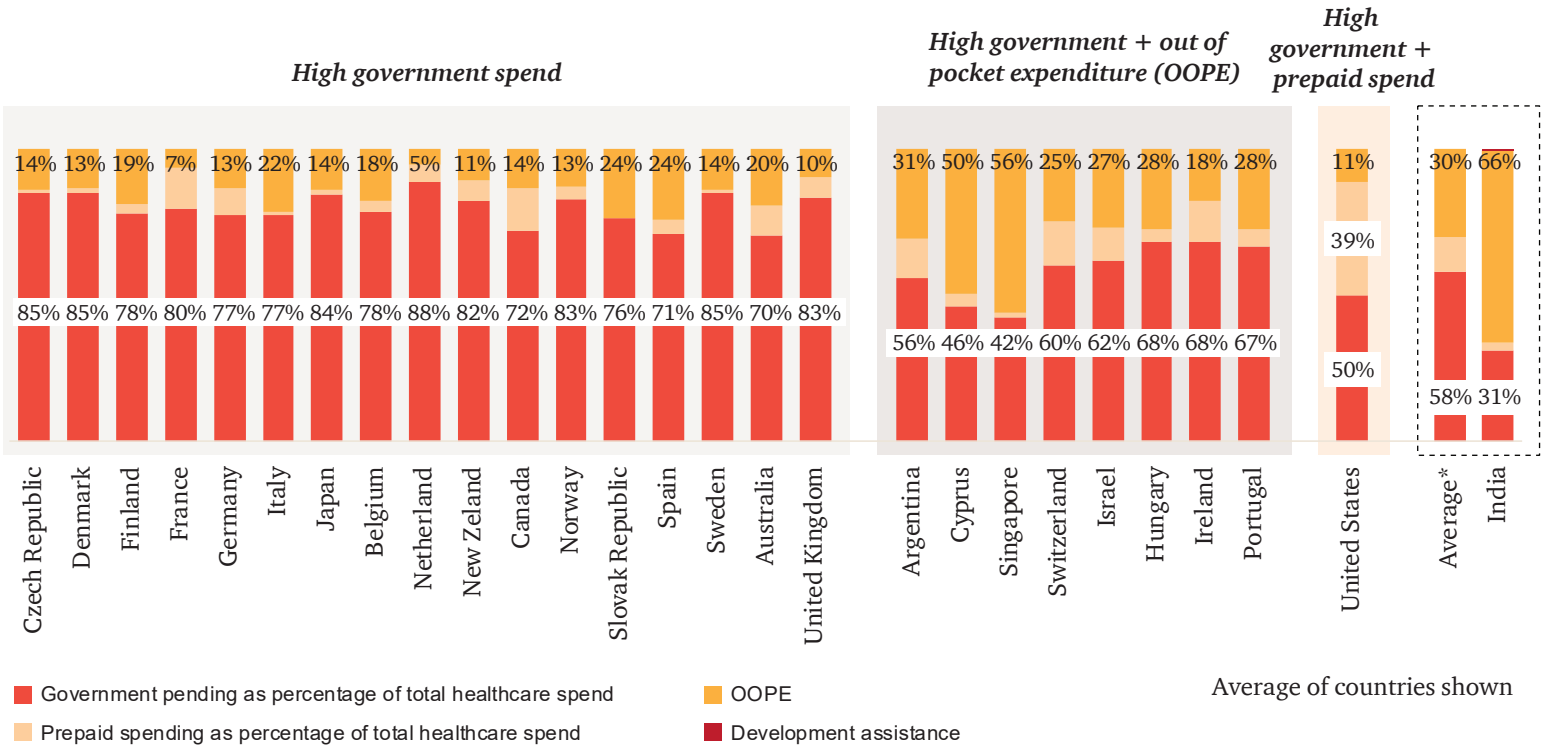


Source: World Bank estimates, SDG Index and Dashboards Report 2017

OOPE : Out of Pocket Expenditure

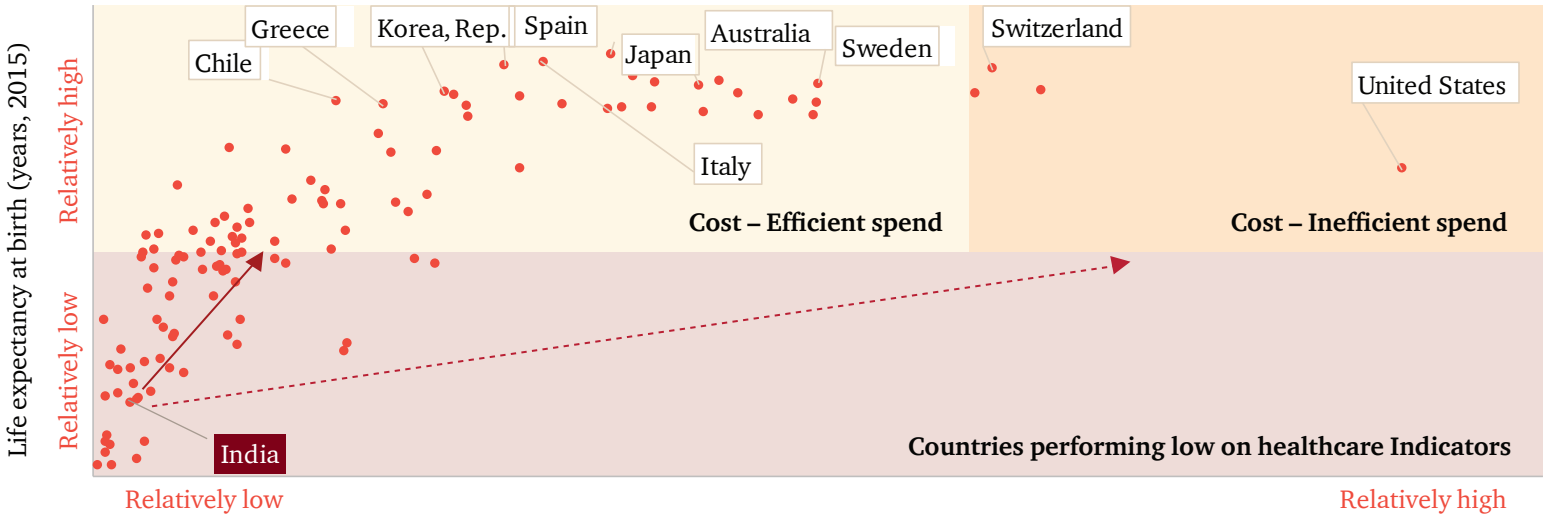
UHC tracer definition : UHC Tracer Index: Summary measure of coverage of essential health services, computed for each country by averaging service-coverage values across 16 tracer indicators on (i) reproductive, maternal, newborn and child health; (ii) infectious diseases; (iii) non-communicable diseases; 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

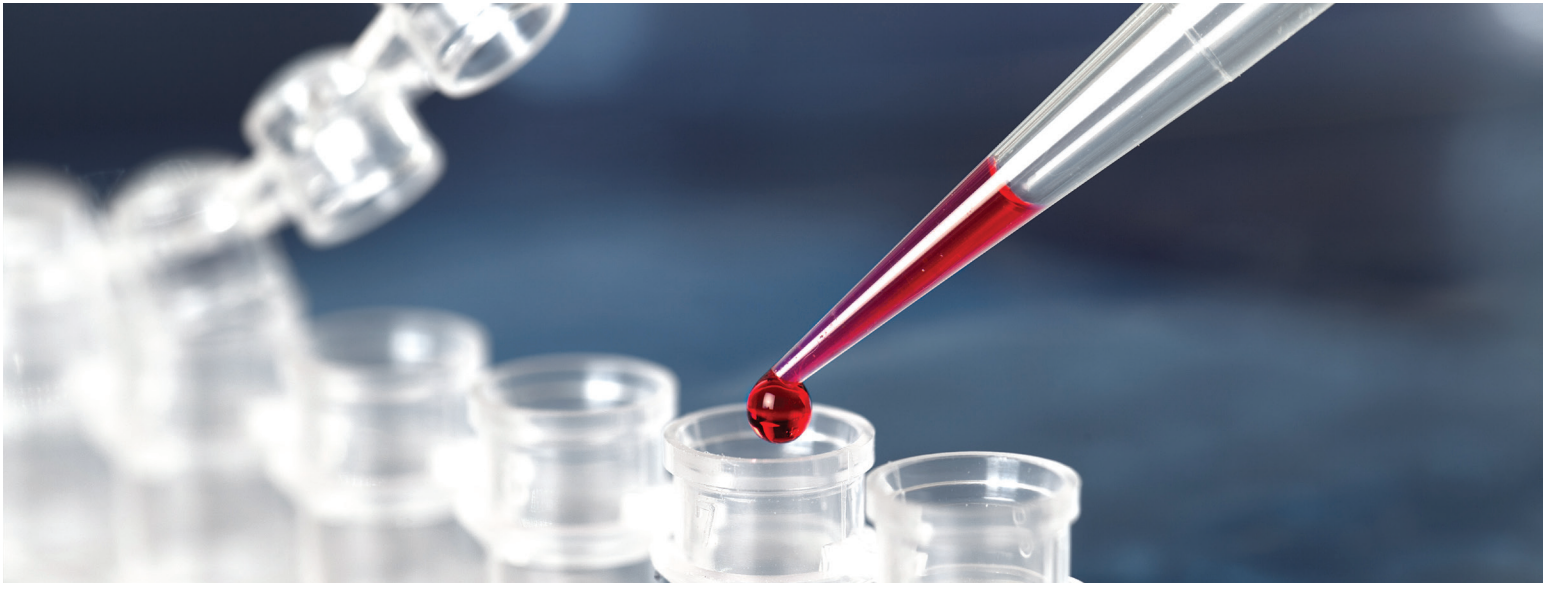


Source: Future and potential spending on health 2015-40: Development assistance for health, and government, prepaid private and out of pocket health spending in 184 countries.
Lancet 2017; 389:2005-30.

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

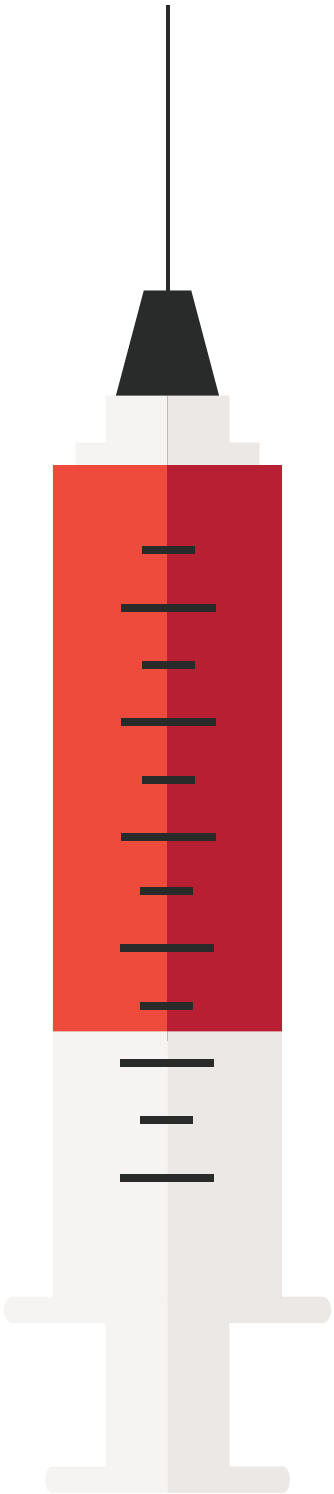


Source: World Bank estimates



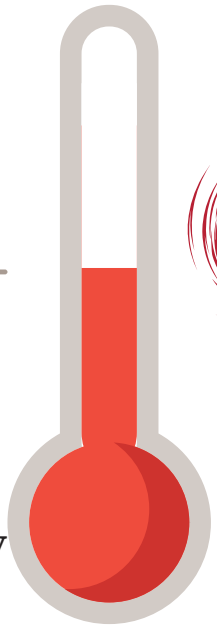
In summary

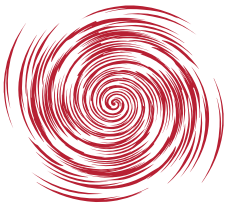
- India is a microcosm of all the healthcare systems in the world given its multiple attributes, be it those of provider, payor or the role of the private sector and the government.
- The country is able to provide best quality outcomes at affordable price points, thus leading to a more than 50% annual 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.

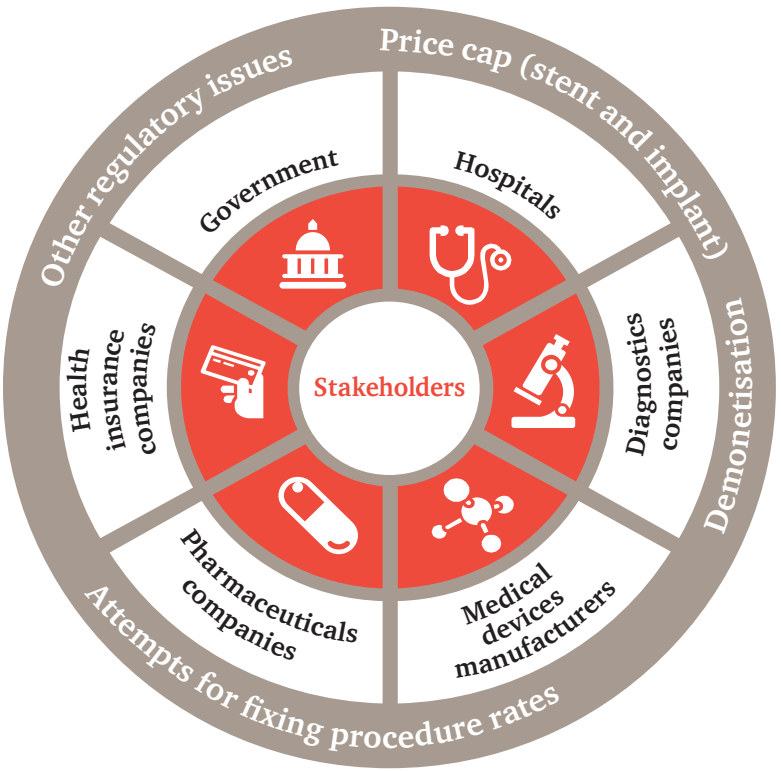


Section 2 —

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







Impact of these events

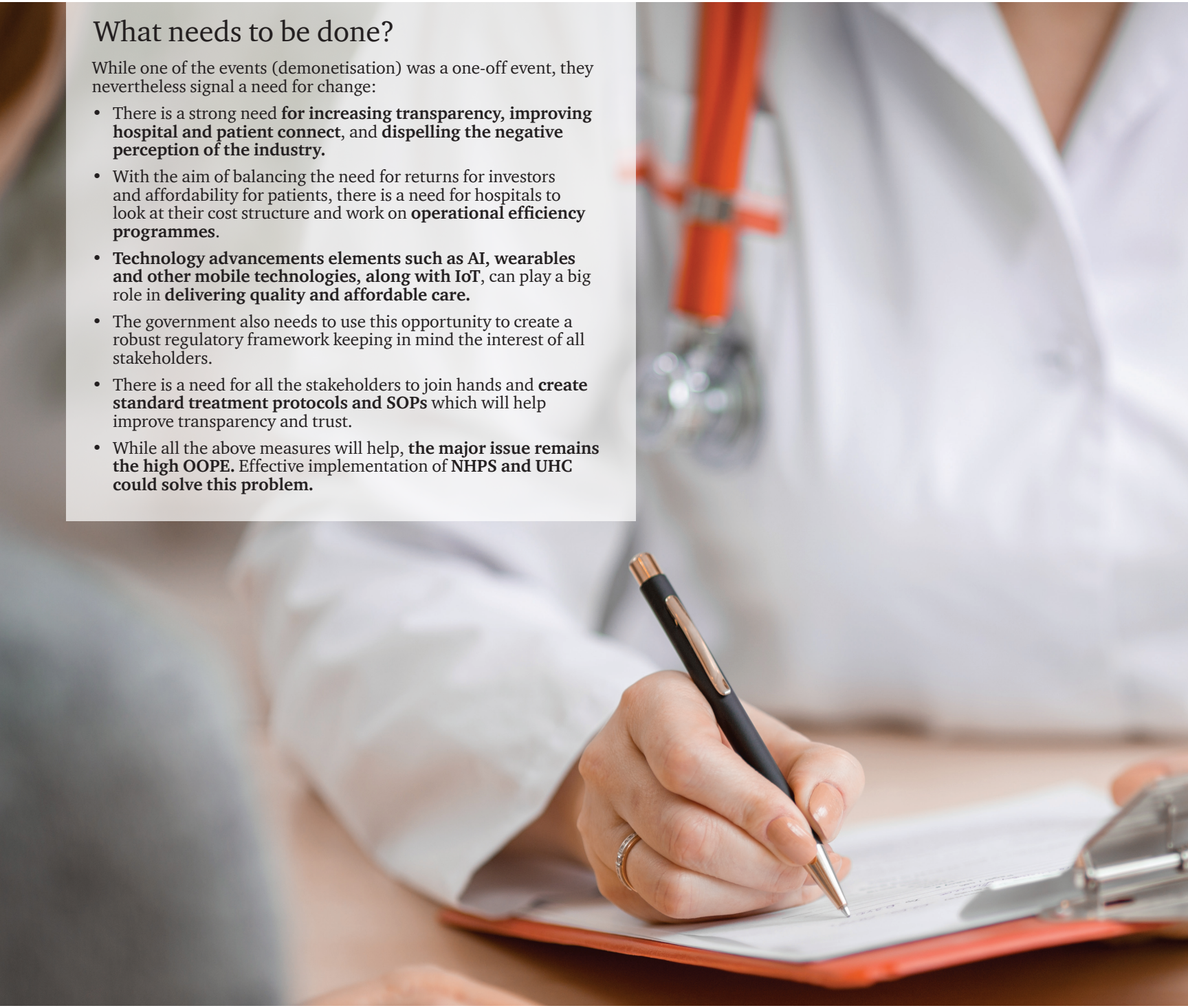
Event	What happened?	What was the impact?
Price cap (stent and implant)*	The National Pharmaceutical Pricing Authority (NPPA) fixed a price ceiling for stents in February 2017 (amendment in Feb 2018) and for knee implants in August 2017	• **Significant reduction in stent and implant prices** along with **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?

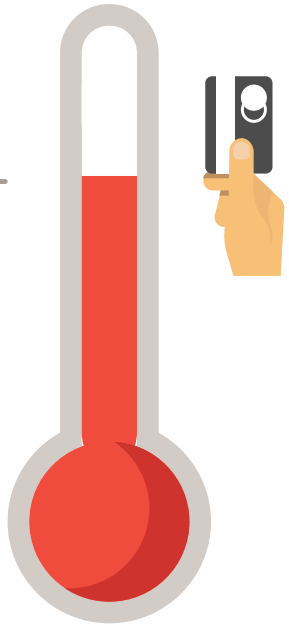
While one of the events (demonetisation) was a one-off event, they nevertheless signal a need for change:

- 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

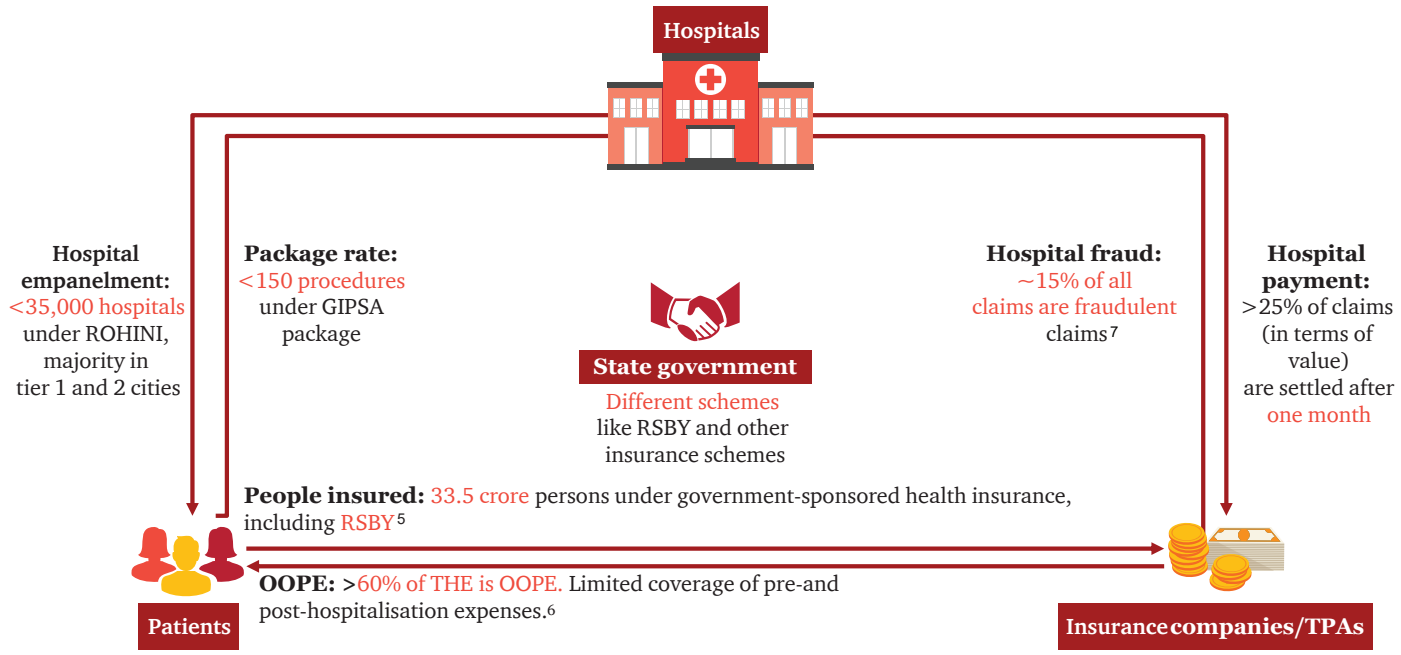
Long term steps

- 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

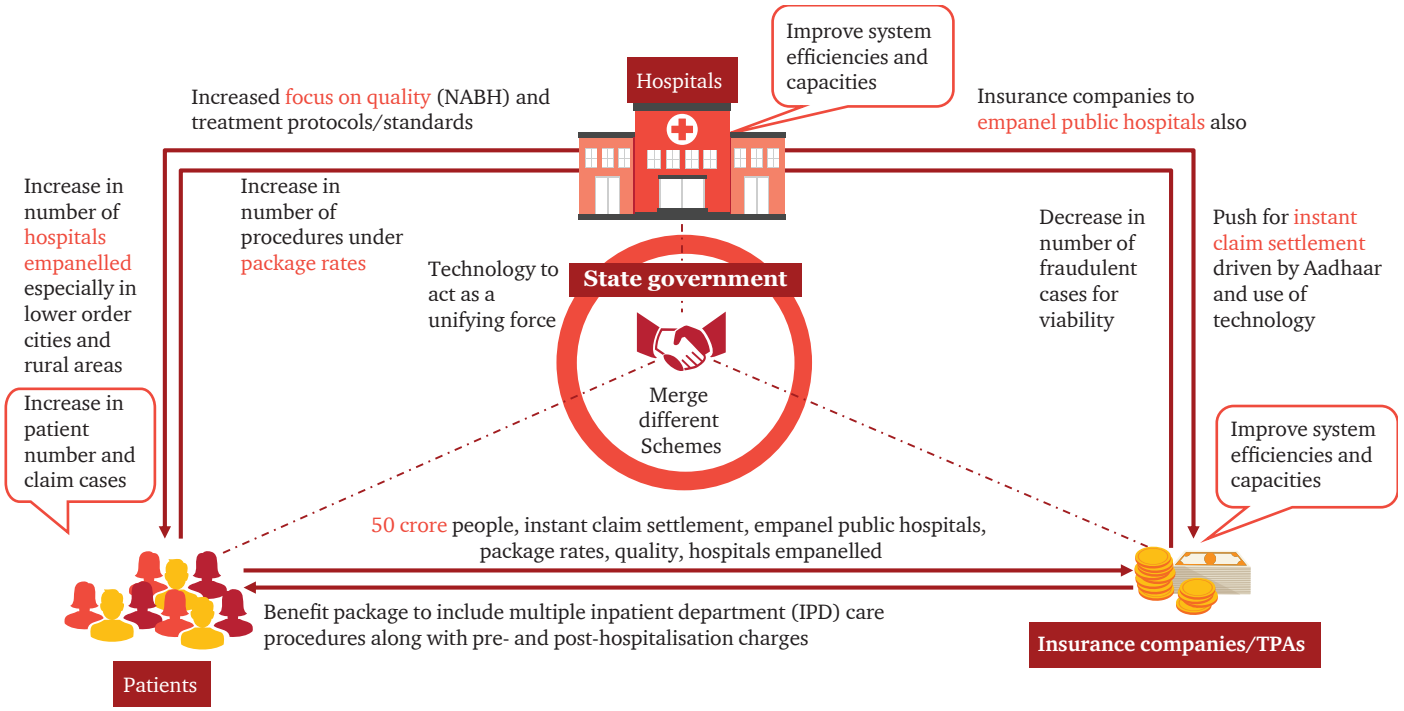
Current ecosystem



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

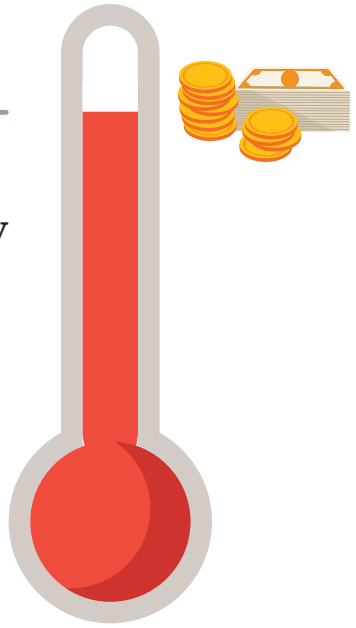
Source: 5. IRDA Annual Report 2016-17; 6. National Health Accounts 2013-14; 7. Industry reports

Future ecosystem



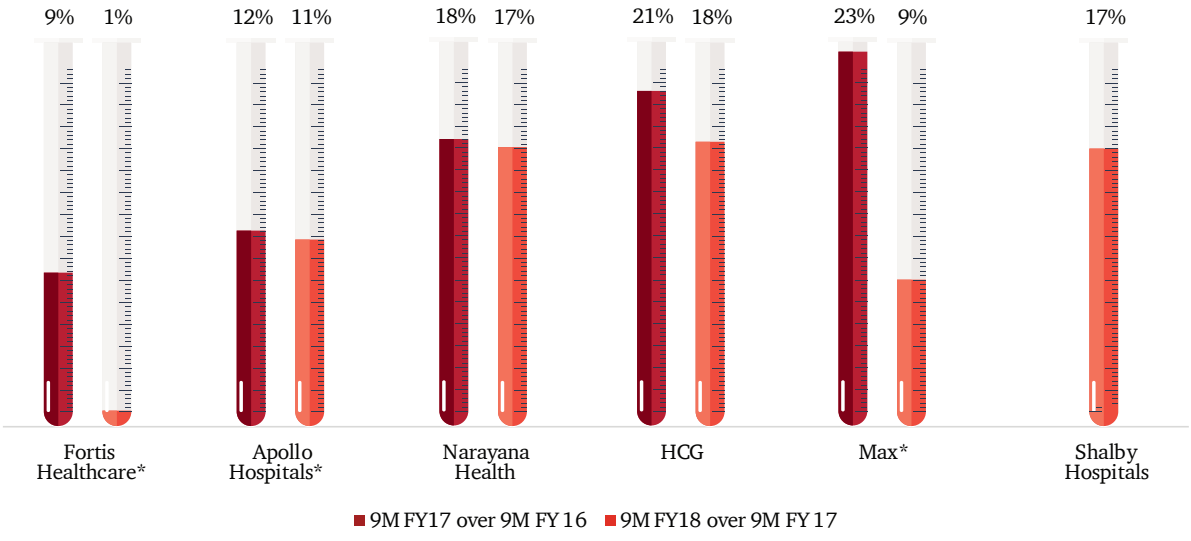
Section 4

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



Most of the leading hospital chains have shown steady revenue growth despite the recent headwinds.

Revenue growth of the leading hospital chains in the country



*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

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

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

Areas	Key features
Major private equity deals since the last report (more than 10 million USD)	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

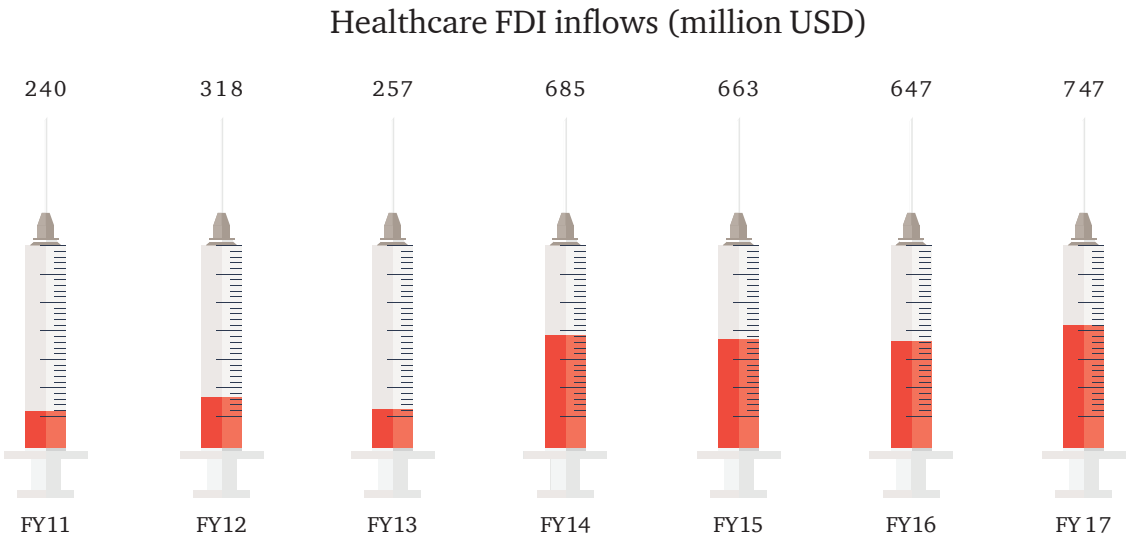
Company	Amount (million USD)	Sector	Investors	Date
Radiant Life Care	200	Hospitals	KKR	July '17
Condis Healthcare	200	Hospitals	India Value Fund	Mar '17
Manipal Health Enterprises	171	Hospitals	Temasek	Mar '17
Max Healthcare Institute	75	Hospitals	IFC	May '17
Paras Healthcare	43	Hospitals	Creador Capital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

Since January 2010, more than 110 private equity (PE) and venture capital (VC) investors have invested in Healthcare delivery space.

Source: Venture Intelligence
PwC analysis

Healthcare has seen a significant increase in FDI inflow over the last 4 years.

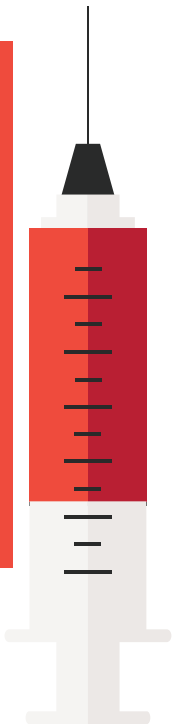
Healthcare FDI over the years.



Source: FDI Fact Sheets

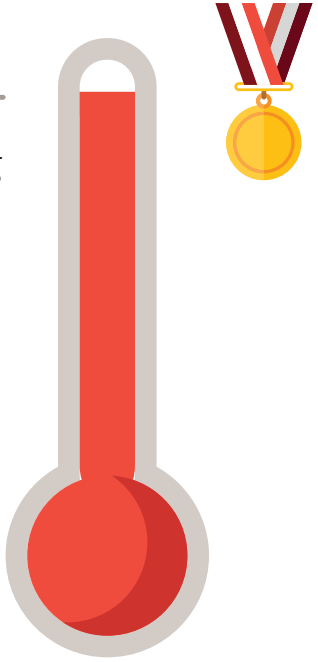
In summary

- 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.

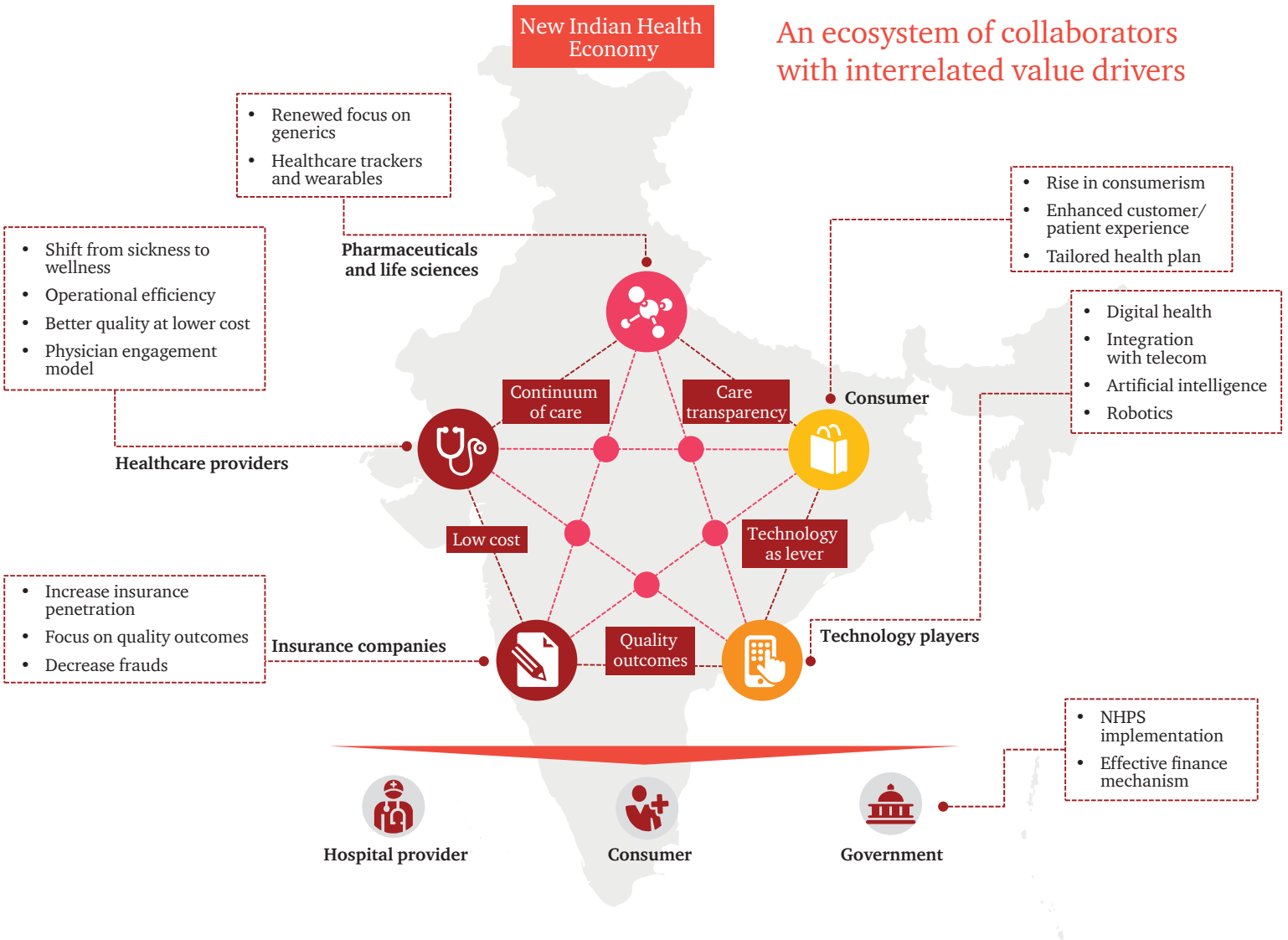


Section 5

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

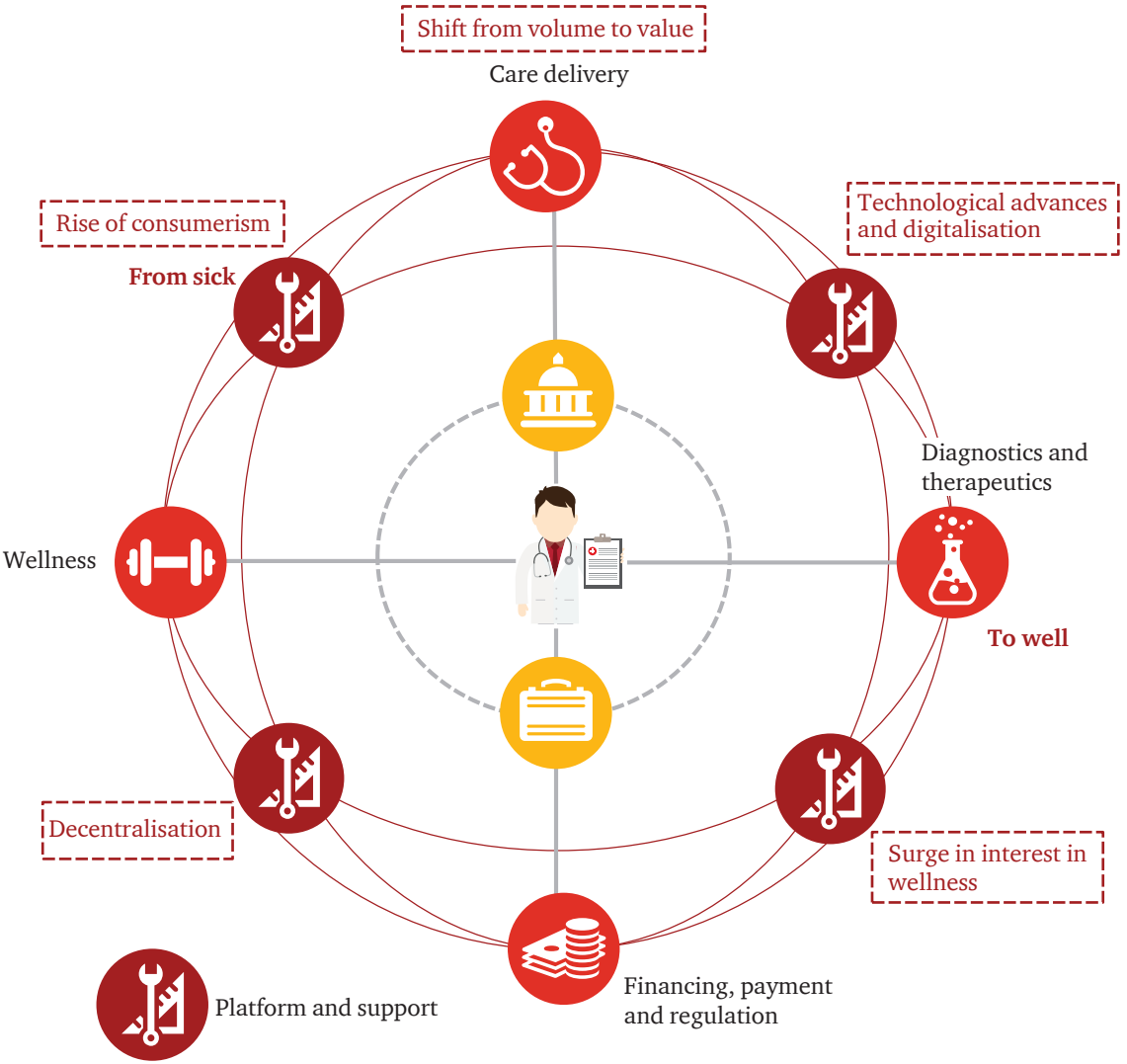


To grow in this "New Indian Health Economy", stakeholders need to focus on creating value in the ecosystem



To grow in this 'New Health Economy', stakeholders need to align themselves with the accelerating trends.

New Indian Health Economy



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.

Contact

Mr. Anjan Bose
Secretary General, Healthcare Federation of India (NATHEALTH)
Mb: +91-9999016000
anjan.bose@nathealth.co.in

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.

Contact

Dr. Rana Mehta
Partner and Leader, Healthcare
PricewaterhouseCoopers Private Limited
D: +91 124 6266710 | M: +91 9910511577
rana.mehta@pwc.com

About PwC

At PwC, our purpose is to build trust in society and solve important problems. We're a network of firms in 157 countries with more than 2,23,000 people who are committed to delivering quality in assurance, advisory and tax services. Find out more and tell us what matters to you by visiting us at www.pwc.com

In India, PwC has offices in these cities: Ahmedabad, Bengaluru, Chennai, Delhi NCR, Hyderabad, Kolkata, Mumbai and Pune. For more information about PwC India's service offerings, visit www.pwc.com/in

PwC refers to the PwC International network and/or one or more of its member firms, each of which is a separate, independent and distinct legal entity in separate lines of service. Please see www.pwc.com/structure for further details.

Acknowledgements

Healthcare Team

Dr. Preet Matani

Ashish Rampuria

Dr. Ashwani Aggarwal

Varun Karwa

Dr. Kuntal Mukherjee

Publishing and Online Team

Dion D'Souza

Corporate Communications Team

Kirtika Saxena

pwc.in

Data Classification: DC0

KS/March2018-12229