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Sustainable and inclusive growth

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Healthcare Committee Report

Vision, Key Challenges, Opportunities

Unlocks – 7 Imperatives for India’s Healthcare

India's century vision for India's Healthcare sector

From Pharmacy of the world to Hospital of the World, with Universal Healthcare for All

XX – To FY2030

XX – To FY2047

200-250[1]

2200-2300[1]

From $60-652 Bn in 2022

Nominal GDP ($ Bn) for India's Healthcare Sector

~15,000-20,000

~20-000-25,000

From 37,000 - 38,000 in 2022[3]

Disease Adjusted Life Years (per 10,000 Population

~40-45[4]

From 5-6[5] in 2020

Hospital Beds Per 10,000 population

50-60[6]

15-20

From 7-8[7] in 2020

Number of qualified MBBS doctors per 10,000 population

180-190[8]

35-40

From 17-18[9] in 2021

Number of qualified Nursing & Midwifery Personnel per 10,000 population

10-15%[10]

From ~48.2%[11] in 2021

Out-of-pocket-expenditure (OOPE) as % of India's Healthcare spend

100%

From ~50-70% in 2020[11]

Percentage of population with Health Care coverage

20-25[6]

5-10

From 3-4 in 2020[12]

Number of qualified Allied Health professionals per 10,000 population

1. GDP aspirations calculated by benchmarking against healthcare spend:GDP ratios of Per Capita Income peer economies, scaling against India's overall GDP aspirations for 2030 and 2047; 2. Source: Government of India; 3. Source: IHME Global Burden of Disease, OECD Benchmarks; 4. Benchmark: OECD average (47-50 beds per 10,000); 5. Source: UNDP Human Development Report, 2020; 6. Benchmark: OECD Best in Class; 7. Source: Human Development Report, 2020; 8. Benchmark – OECD Best in Class; 9. WHO SDG Target 3.c data; 10. Range across global Best-in-class (basis World Bank data); 11. National Health Accounts Estimates (2022); 12. WHO India & PHFI – Health Workforce in India, 2021

Key Challenges in India's Healthcare Sector

Challenge

Double burden of diseases: Continued spread of communicable diseases together with increasing prevalence of non-communicable diseases drives up demand for healthcare services; Rising prevalence of **chronic and lifestyle related diseases such as diabetes** (~7% diabetes prevalence, 2019, ~98mn Indians with diabetes by 2030[1])

Financial sustainability of payors: Fragmented risk-pooling results in high incurred claims ratio across the industry (~88%), particularly for public sector insurers (>100%), with challenges around fraud and abuse[2]

Fragmented provider landscape: 98% of healthcare facilities employ ten or less people, leading to challenges in continuity of care / cross-sharing; Selected provider concentration in big cities, with largely low penetration in rural areas / tier 2/3-cities (market misallocation)

Rural healthcare infrastructure: Shortage on care infrastructure (Primary Healthcare Centres and Community Healthcare Centres), especially in rural areas

Varying quality among providers: India ranks 145th in global healthcare access and quality (HAQ) Index, below average in key health indicators (e.g., mortality from nutritional diseases); No mandatory quality standards in place; Provider quality mostly challenging with some highlights among the top 2% (private corporate hospitals)

Shortage of HCPs[3]: Under-supply (highly concentrated in big cities) and under-utilization of HCPs in some areas/ facilities – India is far behind best-in-class benchmarks for doctors, nurses and paramedical professionals

Under-diagnosis: Disease often diagnosed in advanced stages as patients delay seeking treatment to delay OOP cost; Mental health prevalence severely underdiagnosed (e.g., dementia)

Health insurance protection gap: more than 50% of India's population may not have health insurance coverage basis estimates; ~63% OOP share places large financial burden on households[4]

Limited access to innovative healthcare products: No price cap on innovative therapeutics below a certain volume threshold (e.g., CAR-T) creating access for a small wealthy population group only

1. Source: International Diabetes Federation & Lancet - Global Burden of Disease
2. IRDAI Annual Report (2020)
3. Healthcare Professionals
4. Source: NITI Aayog

Opportunities for India's Healthcare Sector

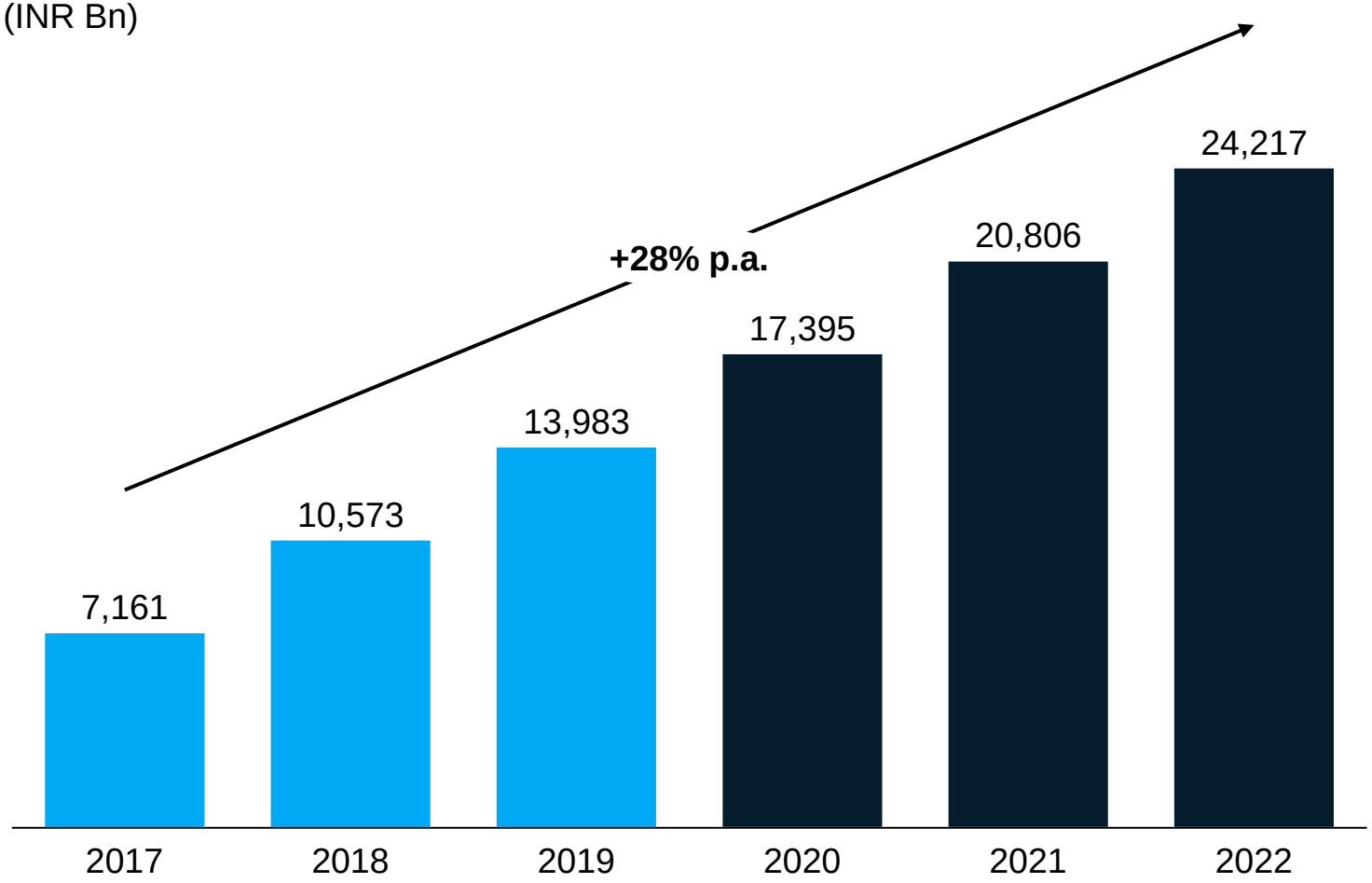
Trends	Description
Digital Health Boom	Digital healthcare driven **by 2500+ Indian health-tech startups**; COVID-19 has accelerated digital healthcare adoption (e.g., Telemedicine experienced **500% growth**, with **80% first-time-users** in the in last 12-18 months)[1]
Expanding access to Universal Health Coverage	**Ayushman Bharat (AB) scheme** providing access to insurance (via PM-JAY) for lower-income segments, and creating 150,000 health & wellness centres with digital and telehealth capabilities (e.g., e-sanjeevani); Over 28,000 hospitals empaneled – private sector payors and providers to play key role in building infrastructure and funding healthcare provision through partnerships with governments[2]
Growing private insurance market	**High growth in overall health insurance market** (~15% CAGR over the past 5 years), with varying levels of profitability across players; **Strong growth in individual** (e.g., outpatient treatment product innovation) **and group health insurance**;
Primary and preventive care access	Increasing efforts on **prevention / early detection** of NCDs, starting from a very small base; increasingly digital offerings (telehealth) by public and private providers for greater access
Rising demand for quality healthcare	**Consuming class will triple** (31 million households to 90 million by 2025), increasing overall demand for high-quality healthcare and wellness offerings
Strengthening hospital capacity	**Significant increase in hospital capacity** in both public and private providers; public encouragement to strengthen hospital presence in tier 2/3-cities (SME hospitals)
Growing health awareness	**Rising** focus on wellness (e.g., conscious nutrition, physical exercise), identifying solutions for increased **prevalence of chronic disease** (e.g., India titled as "diabetes capital")
Regulatory reform in private insurance market	**IRDAI continues to launch PHI regulatory changes** in order to provider access to private health insurance to the population (e.g., foreign ownership cap lifted from 49% to 74%; mandatory to include mental health inpatient care in products; design of base-product each insurer needs to offer for comparability)
Healthcare ecosystem building	**Further expansion and emergence of integrated healthcare ecosystems** through provider partnerships across the value chain, incl. non-traditional players (e.g., big tech) – e.g., Apollo 24/7; Tata investments in 1Mg, Amazon & Apollo partnership
Growth of local pharma/med-tech companies	Indian pharma / medtech companies increasingly stepping into innovation / R&D, slowly moving away from sole manufacturing (e.g., Premas Biotech develop COVID-19 vaccine as pill; Meril Lifesciences, SMT, Healthium)

1. Source: Practo
2. Other Sources: MoHFW

Healthcare sector in India is valued at ~ INR 14,000 Bn

Healthcare industry market size

(INR Bn)



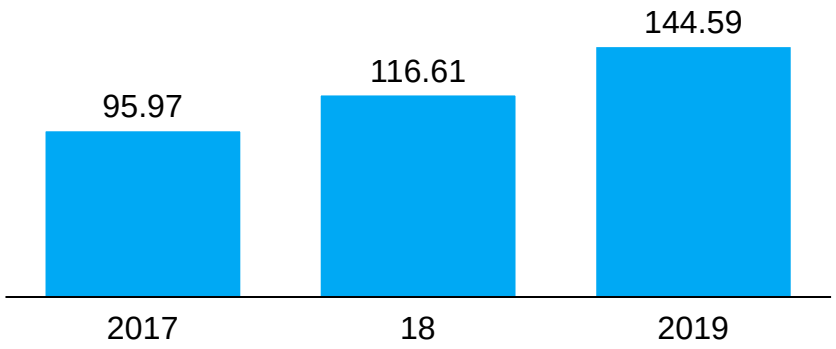
Source: India Brand Equity Foundation Report; Digital Healthcare Market in India report

Key insights

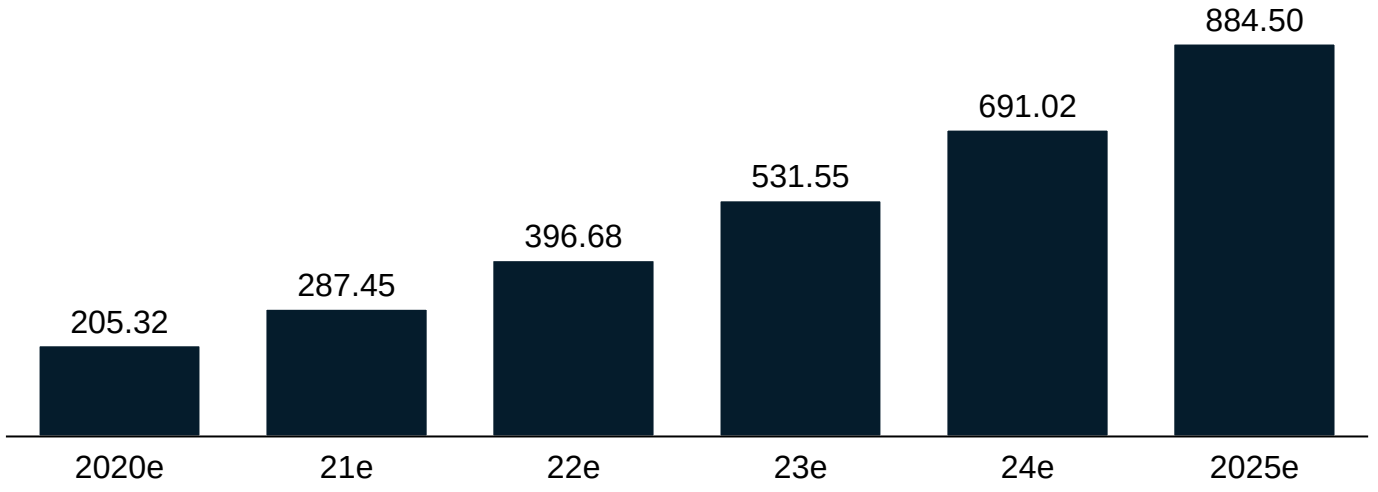
- Indian healthcare sector is currently valued at ~ INR 14,000 Bn and is expected to reach ~ INR 24,000 by 2022
- Rising income level, greater health awareness, increased precedence of lifestyle diseases and improved access to insurance are key contributors to growth
- Primary industry stakeholders include government and private hospitals, pharmaceuticals, diagnostics (imaging and pathology), medical equipment and supplies, and insurance providers
- Health insurance is gaining momentum - Health segment has a 29.5% share in the total gross written premiums earned in the country
- The Government of India is planning to increase public health spending to 2.5% of the country's GDP by 2025

Digital healthcare sector in India is expected to grow at ~ 34% CAGR during 2020 - 25

Historical market size (2017-20189), INR Bn



Forecasted market size (2020-2025), INR Bn

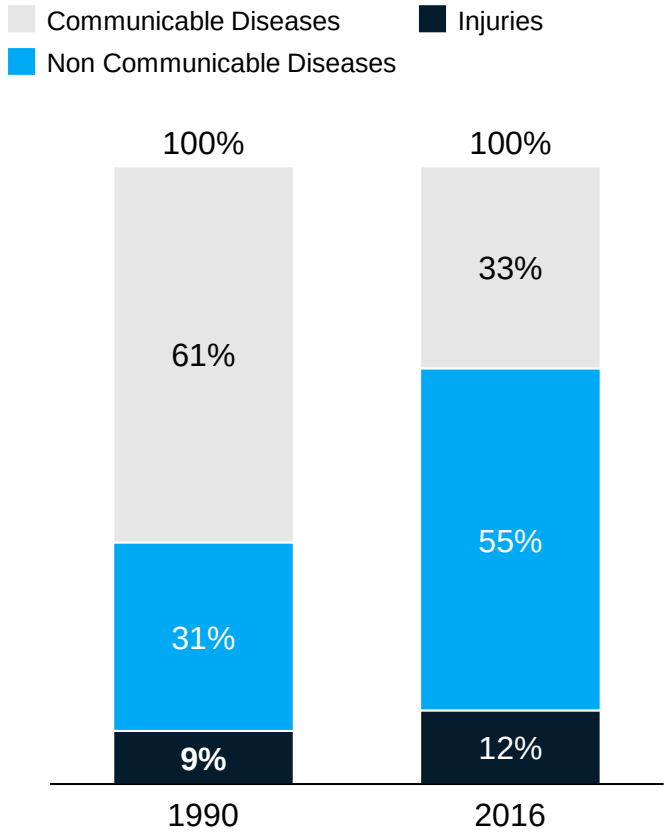


- The Digital Healthcare market in India is poised to grow at a CAGR of ~ 34% during the 2020 – 25 period owing to strong digital transformation
- Hospitals such as Apollo, AIIMS, Fortis, Manipal and Artemis are primary adopters of digital healthcare in India
- The Digital India program, initiated in 2015, has strengthened the digital infrastructure required in the healthcare industry, specially the digital biometric identification program (Aadhaar)
- As of February 2021, 420 e-Hospitals were established across India as part of the central government's ‘Digital India’ initiative
- However, high investments and low penetration of technology in rural areas still pose a challenge

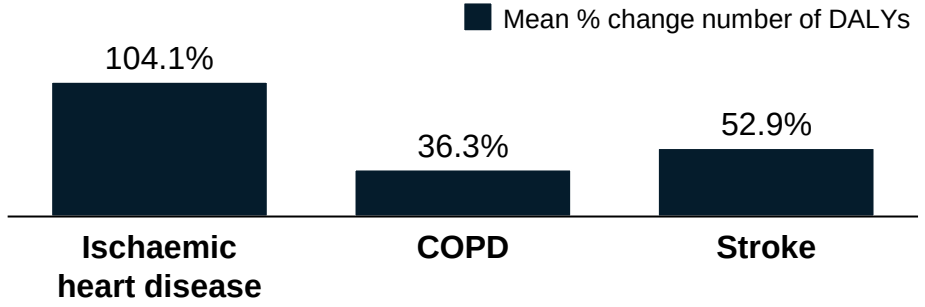
Source: India Brand Equity Foundation Report; Digital Healthcare Market in India report

India is undergoing a major epidemiological transition shifting towards NCD burden

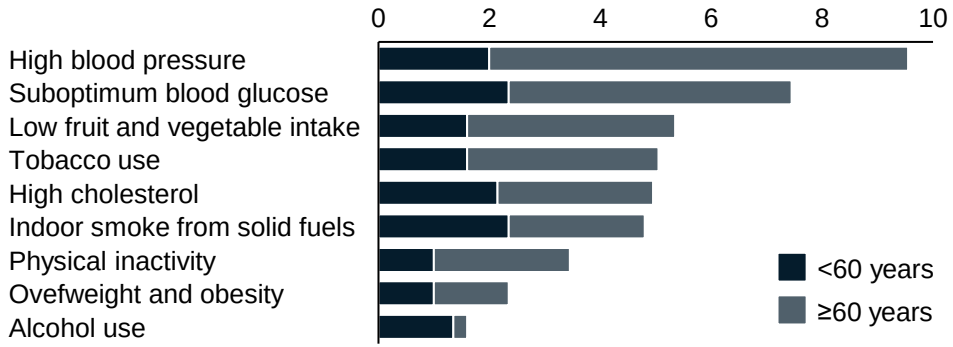
Contribution of major disease groups to total DALYs



Change in DALYs 1990-2016



Estimates of deaths attributable to 9 chronic disease factors, deaths as % of total



CMNNDs - communicable, maternal, neonatal, and nutritional diseases; NCDs - non-communicable diseases; DALYs - Disability-adjusted life years (DALYs) are a summary measure of the health loss burden caused by different conditions, and take into account both premature mortality and disability in one combined measure

India: Health of the Nation's States (ICMR), AIOCD MAT AUG 19

Key takeaways

India's disease patterns are shifting:

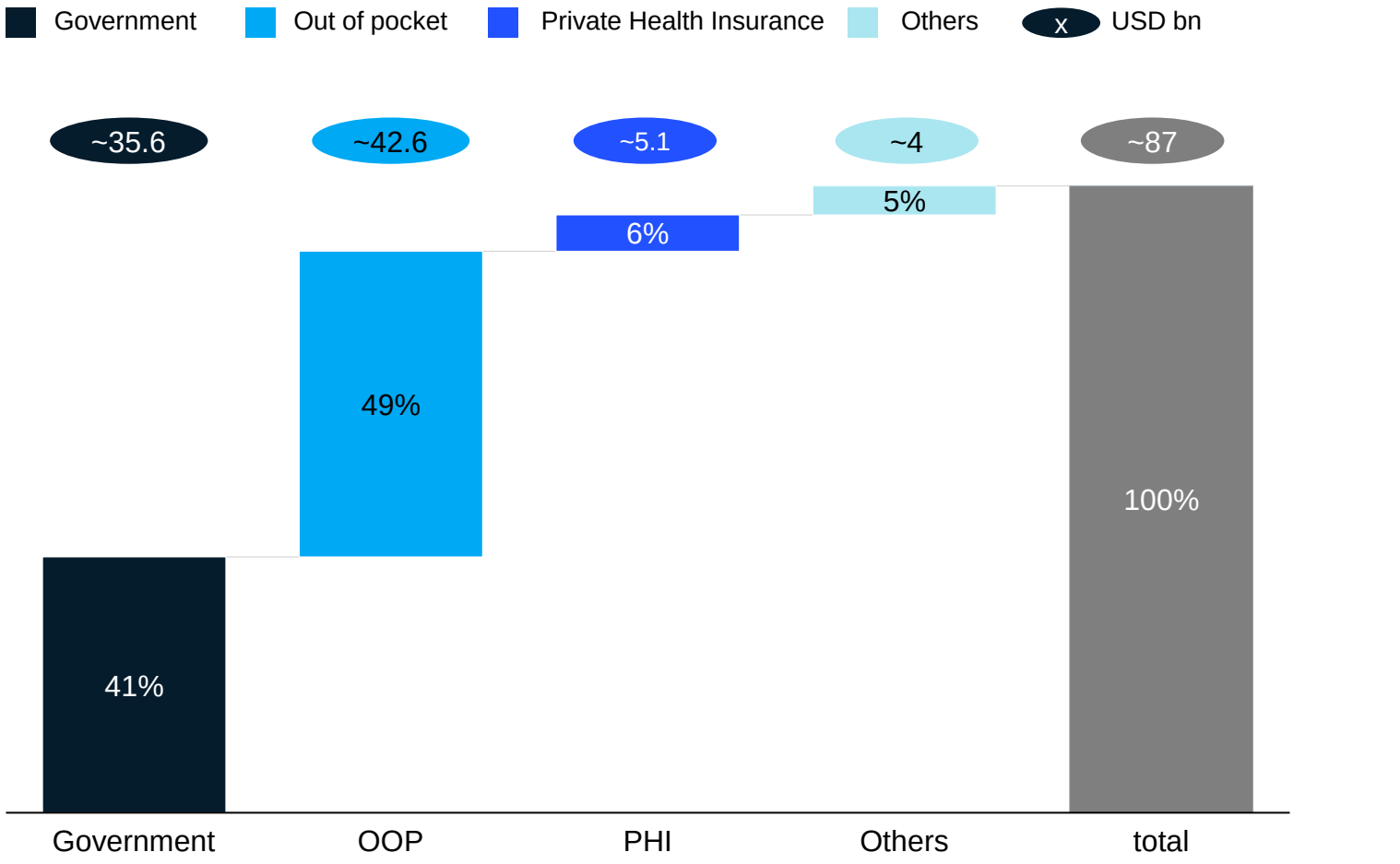
Mortality due to communicable diseases declined substantially however, still a significant share with >30% contribution to total DALYs

Non-communicable diseases are on the rise (e.g., DALYs from NCDs has increased from 31% to 55% in 1990-2016)

Younger populations are suffering from increasing prevalence of NCDs as well (prevalence of diabetes in adults aged 20 years or older increased from 5.5% to 7.7% in 2016)

Overall healthcare expenditures: OOP accounts for ~45-50% of healthcare spend; Private health insurance contributes ~5-10% only

Healthcare expenditure, 2018, in %



High OOP share of ~45-50% on overall health care spend, indicates a large protection gap

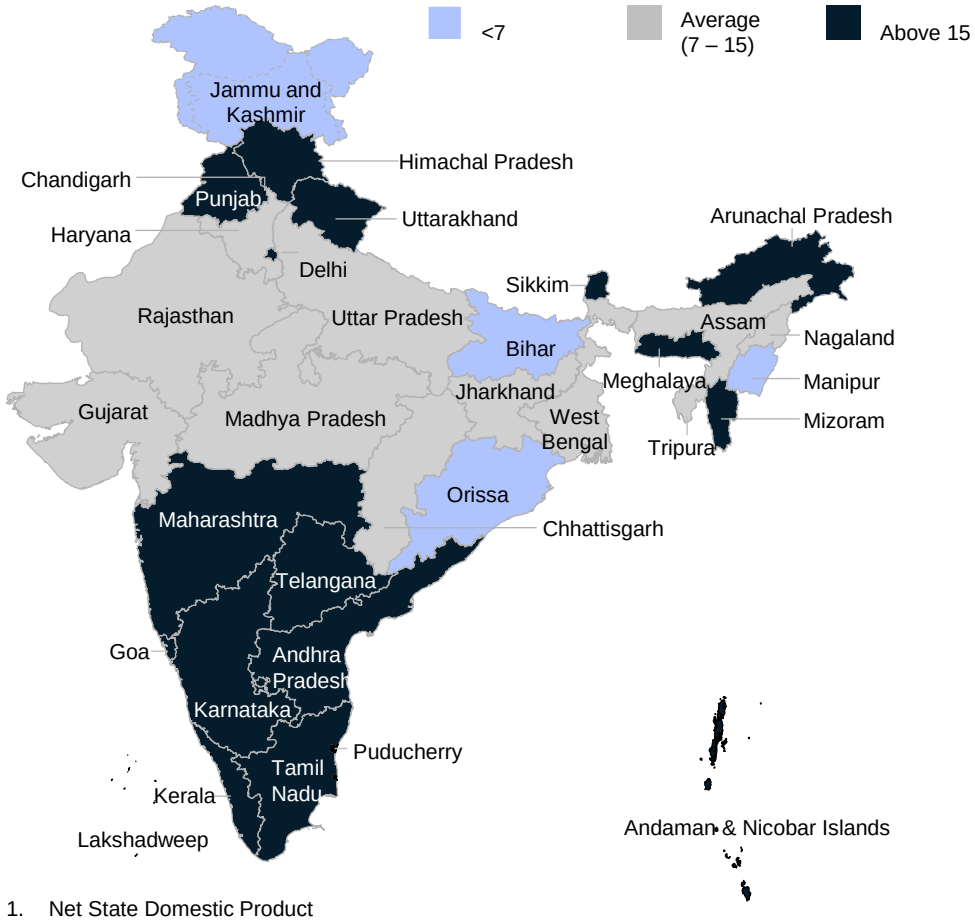
With **5-10% share, private health insurance** is a rather small item in the healthcare financing landscape, including 4 **insurers wholly owned by the Government of India**

- National Insurance Company
- Oriental Insurance Company
- The New India Assurance Pvt
- United India Insurance Company

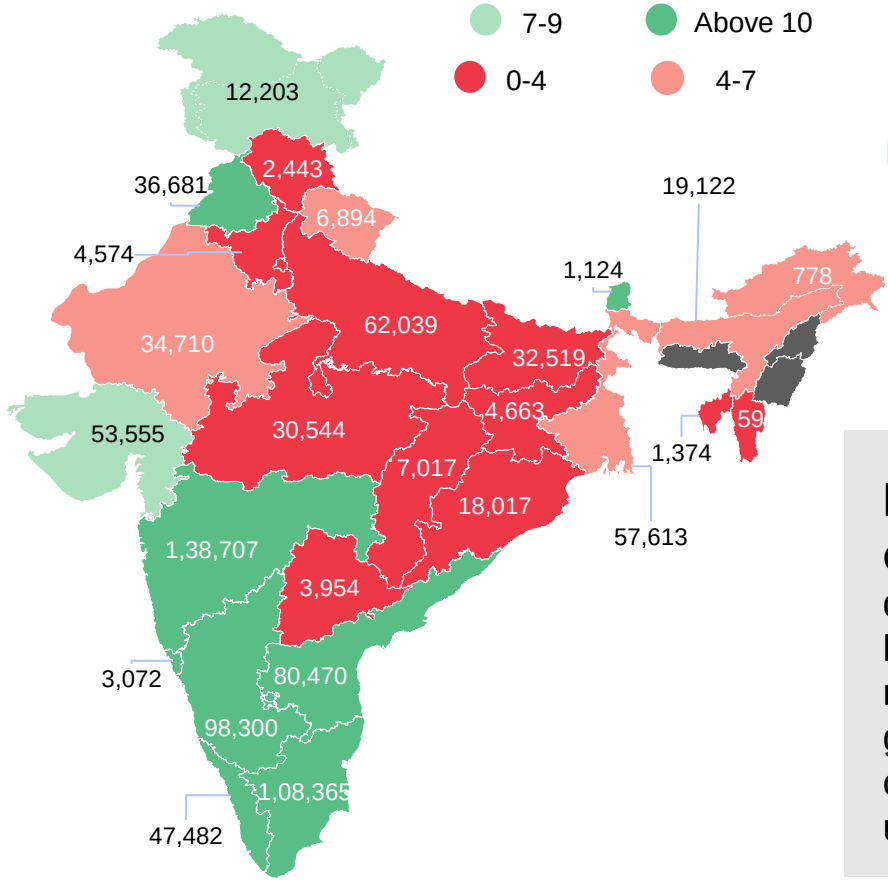
Source: National Health Accounts (MoHFW)

Medical professionals and infrastructure in India tend to be concentrated in states with higher rates of urbanization

Hospital beds per 10,000 population



Number of Doctors per 10,000 people



All India
9,27,447

~7 doctors per 10,000 people

Key Takeaway

Opportunity to develop digital-enabled healthcare delivery models to rapidly bridge gap in healthcare coverage for rural & underserved segments

1. Net State Domestic Product

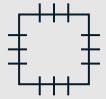
Source: Handbook of Statistics on India states

Vision, Key Challenges, Opportunities

Unlocks – 7 Imperatives for India’s Healthcare

Key imperatives for India in Healthcare

1.  **Expand pool of healthcare talent and empower allied healthcare professionals**
2. 

Leverage digital & analytics to deliver healthcare to more people, at lower prices, with better quality outcomes
3.  **Drive coverage and penetration of health insurance across key OPD and in-patient procedures**
4.  **Bridge healthcare infrastructure disparities by leveraging PPPs under Ayushman Bharat ambit**
5.  **Upgrade quality standards of healthcare delivered**
6.  **Foster & Export healthcare Innovation**
7.  **Manage rising chronic disease burden (cardiac, mental, musculoskeletal, neurological conditions)**

1. Expand pool of healthcare talent and empower allied healthcare professionals

Implementation Horizon **Now –** <18 months **Next –** 0-3 years **New –** 0-5 years

Actors **Pvt. Healthcare Ecosystem Players** **Industry Bodies** **Central Government** **State government**

Boost MBBS Graduates

(Now)

- National Medical Council could **boost the number of MBBS graduates in India, by**
  - **Developing a 2-year diploma-to-degree program in medical sciences** in collaboration with UGC, NCERT for 10th grade graduates with **direct transfer into 2nd year MBBS** to reduce cycle time for doctor training by upto 1.5 years (similar to existing programs for lateral entry into B.Tech 2nd year which are available for 3-year engg. diploma holders)
  - **Allowing all medical colleges older than 10 years, to double their intake of students** within the next 3 years and potentially boost total number of MBBS graduates

Boost Specialists (DNBs, MDs)

(Now)

- NMC could **increase the number of DNB (diplomate of national board) seats** to boost specialist numbers in India by
  - **Relaxing number of specialties:number of beds ratio requirements** to allow smaller hospitals to increase number of specialties for their DNB programs (e.g.,150-200 bed capacity hospitals could specialise in 5 rather than existing 3 specialities)
  - **Allowing hospital chains to club their total infrastructure**, facilities and faculty when applying for accreditation, rather than requiring them to apply for each individual hospital unit accreditation separately, to allow them to build common assets (e.g., centralized libraries) reduce costs, and offer more DNB seats through rapid approvals

Increase Specialist Instructors

(Now)

- Newly established medical colleges could **attract tenured doctors to teaching positions by providing them with honorary degrees** (e.g., honorary assistant professor) and stipends as incentives to increase doctor: student ratio for bedside and theory instruction; NMC could increase requirements for minimum doctor to student ratio to ensure high quality training.

Boost Nursing & Allied Healthcare Practitioners

(Now)

- Public and private medical colleges **could set up nurse and allied health professional / paramedical training programs** to qualify accredited, high-quality education for auxiliary healthcare professionals and help address shortage of nurses and paramedical staff
- MoHFW, Indian Nursing Council and private healthcare consortia could **develop nation-wide campaign to promote nursing** as an aspirational profession and publicise nursing qualification programs

2. Leverage digital & analytics to deliver healthcare to more people, at lower prices, with better quality outcomes (1/2)

Implementation Horizon **Now –** <18 months **Next –** 0-3 years **New –** 0-5 years

Actors **Pvt. Healthcare Ecosystem Players** **Industry Bodies** **Central Government** **State government**

Digitize Hospital Operations and upgrade Legacy Architecture

(Now)

- **Healthcare providers could modernize operations** by implementing process digitization solutions and investing in healthcare IT system modernization programs to reduce cost of healthcare and improve patient turnover, such as:
  - **Digital Patient Flow Management systems** - data-driven decision algorithms to assign new patients to appropriate wards, powered by electronic forms, feeding into dashboards for hospital administrators, to prevent incorrect ward assignment and ensure timely discharge, reducing avg. hospital stay length
  - **Dynamic Staff Allocation & Procedure scheduling** - digital tools to track personnel availability (e.g., nurses, paramedics) and automate procedure scheduling & staffing to improve employee experience & ensure adequate balancing of workload
  - **Centralized Inventory & Procurement Optimization Tools** - digital solutions for tracking and optimizing purchase, usage and maintenance of consumables and medical equipment to improve operating costs and reduce wastage, translating into lower costs of healthcare for consumers

Strengthen telemedicine platforms & deepen penetration

(Now)

- Govt. and private players could **deepen penetration of Ayushman Bharat Digital Mission to the last mile** (esp. low-connectivity / underpenetrated regions such as rural North-East India) by **addressing connectivity related challenges** (e.g., by introducing asynchronous modes of communication such as video/audio/text upload) and **boosting doctor availability** (e.g., incentivizing doctor empanelment and participation through stipends basis number of consultations) for telemedicine platforms such as **E-Sanjeevani,** while also working with rural Healthcare & Wellness Centres (HWCs) to establish digital infrastructure to connect them to urban healthcare hubs for e- consultations and diagnostics.

Equip primary care providers with Digital Applications & skills

(Now)

- State governments could **empower community healthcare workers** (e.g., ASHAs, MPHWs & Auxiliary Nurse Midwives (ANMs)) to deliver higher-quality primary care for underserved segments (e.g., maternal & neonatal care, disease screening, administration of injections etc.) under remote doctor supervision, **enabled by telemedicine platforms, point-of-care mobile testing solutions, and digital upskilling platforms** under the ambit of **Ayushman Bharat Digital Mission**.

Build end-to-end healthcare services ecosystems

(Now)

- Established medical services providers (e.g., hospitals, diagnostic labs, medical device manufacturers) to partner with digital services players (e.g., start-ups, IT & Big-Tech) to **create and scale one-stop digital platforms** to host end-to-end care ecosystems **across all stages of user/patient journey** (e.g., prescription fulfilment, OPD consultation, wearables and patient monitoring solutions, holistic wellness & nutrition etc.)

2. Leverage digital & analytics to deliver healthcare to more people, at lower prices, with better quality outcomes (2/2)

Implementation Horizon **Now –** <18 months **Next –** 0-3 years **New –** 0-5 years

Actors **Pvt. Healthcare Ecosystem Players** **Industry Bodies** **Central Government** **State government**

Accelerate adoption of FHIR[1] by healthcare ecosystem players to create National Health Stack under NDHM, and support next-gen healthcare use cases

(Now)

- Private healthcare services providers and payors could form a **Council for FHIR Adoption in India, similar to PCI SSC** (for payment cards) with the goal of establishing, maintaining and **promoting universal FHIR standards** within India.

- State governments could collaborate under the ambit of NeHA (National e-Health Authority) to **strengthen underlying data infrastructure and EHR adoption** by:
  - **Deploying ASHA/AHM workers for door-to-door ABHA registration campaigns** (Ayushman Bharat Health Account) and HFR registrations
  - **Developing standardized requirements for registering healthcare facilities** on HFR (Healthcare Facilities Registry) in consultation with state governments, to be adopted nation-wide, and specifying FHIR implementation guidelines for India-specific use cases (e.g., adoption of EHR by AYUSH providers)
  - **Creating training modules and programs** for doctors and healthcare administrators across India on transition from physical records maintenance to EHR systems, in addition to **certification programs for 3rd party independent EHR Support Providers** (e.g., IT Services companies)

- MoHFW and MeiTY could accelerate the **enactment of a statute for Healthcare Data Privacy and EHR interoperability standards** for India**, similar to HIPAA**, along with robust **Digital Patient Consent governance** systems, and enforce compliance by all parties in India with access to sensitive patient health information (PHI), to strengthen National Health Stack under NDHM.

1. Fast Healthcare Interoperability Resources

3. Expand coverage and penetration of health insurance for all, across key OPD and in-patient procedures

Implementation Horizon **Now –** <18 months **Next –** 0-3 years **New –** 0-5 years

Actors **Pvt. Healthcare Ecosystem Players** **Industry Bodies** **Central Government** **State government**

Improve Private sector participation in PM-JAY by streamlining reimbursement & procedure pricing to boost financial viability

(Now)

- MoHFW could **accelerate participation of private healthcare providers (large and mid-size players) in PM-JAY** to boost insurance coverage across India, by taking measures to **improve reimbursement rates and boost financial viability** for participation in the scheme, such as:
  - **Strengthening DRG (diagnosis related group)** based dynamic procedure pricing system by using existing data sets (e.g., bill of materials shared with insurance companies, normalized healthcare datasets from peer economies) in the interim period before nation-wide EHR data sets achieve scale through ABDM roll-out, to maximize efficiency of hospital resource utilization
  - **Including primary and OPD care** (e.g., high complexity oncology OPD) in insurance coverage packages, rather than just inpatient care
  - Adjusting base prices to **better reflect overhead costs and capex-related costs** for hospitals of different sizes and in different cities, in addition to cost of procedure (e.g., cost of power, rent, interest) through consultation with medical provider consortia
  - **Indexing inflation adjustment rates** of all base packages **to broad based indices** (e.g., CPI, PPI), rather than current rate of 4.2% to accurately reflect costs of inflation

Leverage EHR & National Health Stack to improve underwriting efficiency and cost of insurance

(Next)

- Private insurance / insur-tech players can leverage PM JAY & EMR adoption-driven EMR data regime and national health stack to **build actuarial databases for high-efficiency risk-premium pricing**, for improved identification & underwriting, along with faster and more accurate claims processing and billing to accelerate PHI market by reducing cost of insurance and boosting profitability for payors

4. Bridge healthcare infrastructure disparities by leveraging PPPs under ambit of Ayushman Bharat

Implementation Horizon **Now –** <18 months **Next –** 0-3 years **New –** 0-5 years

Actors Pvt. Healthcare Ecosystem Players | Industry Bodies | Central Government | State government

Strengthen state-level governance mechanisms for Healthcare Infrastructure PPPs *(Now)*	• State government health departments could **strengthen PPP contract management** to ensure success by
	  • **Establishing PPP Cells to design, govern, and monitor PPPs** in healthcare sector for increased accountability & improved adherence to timelines
	  • **Curating capability building programs for officials in charge of PPP activities** to establish best practices for writing RFPs and contracts to prevent delays / disputes in tendering, implementation and project operations
	  • **Outlining separate "line item" in state healthcare budget** for PPP projects and schemes to prevent need for budgetary adjustments and auditory objections which can delay payments release and reduce financial attractiveness

Leverage Digital Monitoring & Payment mechanisms to drive high-quality service delivery via PPPs *(New)*	• State Governments could establish **Digital Control Towers to monitor patient statistics, drug and equipment inventories**, **accounts, and personnel utilization via electronic records** maintained by healthcare facilities empaneled under Ayushman Bharat schemes, to ensure compliance with SLAs in public-private-partnerships for healthcare infrastructure • State governments could institute **IT-enabled automated payments linked to digital KPI monitoring systems** measuring service delivery conditions outlined in PPPs to prevent delays in payment and incentivize operational excellence e.g., through smart contracts
Formulate standardized MCAs for Healthcare Infrastructure PPPs *(Now)*	• NITI Aayog, MoHFW and state governments could **collaboratively create uniform MCAs (model concession agreements)** to be adopted nation-wide for healthcare infrastructure PPPs, outlining specific guidelines for conception, design, implementation and management of health sector PPPs.
Allow REITs for Healthcare Infrastructure *(Next)*	• Central government could allow **Real Estate Investment Trusts (REITs) for Healthcare infrastructure** projects to allow private healthcare players to access greater capital

5. Upgrade quality standards of healthcare delivered in India

Implementation Horizon **Now –** <18 months **Next –** 0-3 years **New –** 0-5 years

Actors **Pvt. Healthcare Ecosystem Players** **Industry Bodies** **Central Government** **State government**

Digitize Medical Pedagogy to build digital capabilities among healthcare practitioners *(Next)*	• National Medical Council (NMC) could partner with big-tech / digital services and private healthcare education organizations to **strengthen medical training processes and facilitate widespread adoption of digital healthcare**, by
	  • **Upgrading curricula for doctors, nurses and paramedical professionals** to include modules on EHR, analytics-based healthcare delivery systems, and emerging digital tools for hospital operations and care delivery (e.g., AI-driven automated diagnostics)
	  • **Developing and adopting next-gen pedagogical tools to enhance quality of medical training** (e.g., AR/VR enabled surgery simulations to replace traditional cadavers)
	  • Establishing tie-ups between medical colleges with CHCs / PHCs to **offer modules for providing periodic, continuous digital** upskilling / re-skilling programs to qualified primary healthcare providers

Cultivate hospital administration capabilities and talent *(Now)*	• Bodies in the healthcare industry (e.g., NSDC Healthcare Sector Skill Council) could **create capacity building and specialized training courses / certifications for hospital administration**, particularly of large (500+ bed) establishments, supplemented by capability building programs for public health officials and doctors for efficient healthcare operations (including training modules on management, analytics etc.)
Incentivize high quality treatment & preventive healthcare *(Next)*	• **MoHFW could augment reimbursements system of PM-JAY to financially incentivize early diagnoses, minimal incidents, low cost of healthcare and improvement in lifestyle indicators** derived from treatments delivered by practitioners using EHR analytics to assign "star ratings" via independent auditor (e.g., NABH) to minimize follow-up hospital visits by patients and boost quality of care
Formulate National Health index to guide country-level healthcare quality aspirations *(Now)*	• **NITI Aayog could define a National Health Index,** comprising of both cost and quality of healthcare and publish the same on an annual basis to benchmark India's YoY healthcare performance

6. Foster & export healthcare innovation

Implementation Horizon **Now –** <18 months **Next –** 0-3 years **New –** 0-5 years

Actors **Pvt. Healthcare Ecosystem Players** **Industry Bodies** **Central Government** **State government**

Build innovative treatments & advanced healthcare solutions by leveraging next-gen technologies *(New)*	• Healthcare ecosystem players (including hospitals, research organizations, digital health startups, and big-tech) **could develop innovative treatments by utilizing next-gen digital technologies, such as:**
	  • **Personalized medicine offerings**, consisting of tailored treatment regimes and offerings for India's population through **genomics** to guide medical decisions with regards to prevention, diagnosis and treatment of diseases, by building databases of genomic, metabolomic, and epigenomic data and analytics engines on top of national health stack
	  • **Leverage AI/ML algorithms to identify advanced, alternative treatments** (e.g., Google researchers found correlation between retina scan data and heart disease to derive non-invasive cardiovascular disease diagnostics tool), and **robotics based automation** of routine diagnostics and surgical procedures
	  • Creating **IoT-based wearables and lifestyle / nutrition management platforms**, specialized basis Indian consumers' cultural, behavioural and dietary patterns

Establish National Healthcare Innovation Fund *(Now)*	• DPIIT (Department for Promotion of Industry & Internal Trade) could **set up a National Healthcare Innovation Fund & centers of excellence** aimed at identifying and funding entities developing novel treatments for specific diseases (e.g., COPD) or e-health / M-health solutions targeting India's rising chronic / lifestyle disease burden
Streamline user experience to attract medical tourists to key hubs *(Now)*	• MoHFW and Ministry of External Affairs could co-develop a **one-stop digital portal for medical tourists**, with information on available treatments and their locations/providers across multiple, specialized medicare hubs in India, healthcare professionals etc., in addition to simplifying medical visa approvals for medical tourists
Incentivize greater participation in ABDM Sandbox *(Now)*	• DPIIT could establish **mentorship programs / hackathons / contests for students and researchers across India to boost participation in ABDM sandbox** and widespread proficiency in using ABDM APIs to develop healthcare solutions

7. Manage rising chronic disease burden (cardiac, lung, mental, musculoskeletal, neurological conditions)

Implementation Horizon **Now –** <18 months **Next –** 0-3 years **New –** 0-5 years

Actors **Pvt. Healthcare Ecosystem Players** **Industry Bodies** **Central Government** **State government**

Build National Public Health Emergency Surveillance system *(New)*	• MoHFW could create **centralized dashboards to monitor public health trends on top of National Health Stack** through EHR records, and use the same to establish **National Surveillance Program** to monitor and proactively respond to public health emergencies to improve healthcare infrastructure resilience
Improve Healthcare literacy of India's Population *(Now)*	• State governments could create **user-guides and learning collateral, disseminated through ASHA workers,** for rural consumers on **navigating the digital healthcare system** (e.g., ABHA registrations), need for check ups at fixed intervals, nutrition and sanitation requirements to drive healthcare literacy and lead to reduced disease incidence
Drive better lifestyle decisions through rewards ecosystems *(Now)*	• Insurance players could partner with wearables / digital wellness platform providers to **create / scale rewards programs to incentivize better lifestyle habits** (e.g., tracking exercise patterns, nutrition etc.) through reduced cost of premiums / points tradeable for assortment of products
Destigmatize Mental Health issues & treatment *(Now)*	• MoHFW could drive **National Mental Health Awareness program, in collaboration with leading social influencers, healthcare providers, lifestyle companies** etc. to destigmatize mental health issues and generate awareness about ailments, available treatments, helplines and counselling services, along with capacity building programs for healthcare practitioner to recognize symptoms of illnesses (e.g., bipolar disorder, dementia) to reduce underdiagnosis

Drive decarbonization *(Now)*	• Healthcare industry bodies (e.g., FICCI Healthcare committee) could
	  • Engage healthcare practitioners in a nation-wide campaign to **promote decarbonization** initiatives and spread **greater awareness about climate-change induced public health hazards** (e.g., rising populations of disease carrying vectors)
	  • Set **Net Zero commitments for member hospitals / provider orgs.** and implement the same through decarbonization requirements within their supply chain (e.g, for consumables) and by transitioning to renewable energy for high-energy demand equipment such as CAT scanners, respirators, and dialysis machine