



## Propelling Healthcare in India towards Viksit Bharat

A Cutting-Edge CXO Healthcare conclave organized by NATHEALTH to propel the sector forward

19th March 2025 Shangri-la Eros, New Delhi

www.arogyabharat.net



## Souvenir

### 11th NATHEALTH

### Annual Summit Arogya Bharat 2025

Healthcare Federation of India (NATHEALTH)

www.arogyabharat.net





Annual Summit Report 2021 ↓



Annual Summit Report 2022







Annual Summit Report 2024 ↓





# Table of CONTENTS

<b>PLENARY SESSIONS</b> A glance at the summit sessions	06
WHITEPAPER EXTRACTS Preview of the whitepapers being launched at the Summit	13
LEADERS SPEAK Words from NATHEALTH Leaders & Members	19
FROM THE DESK OF	
Authored articles by NATHEALTH Leaders & Members	27
	(
SPONSORS & PARTNERS	70

### **11th NATHEALTH Arogya Bharat Annual Summit 2025**

#### **Propelling Healthcare in India towards Viksit Bharat**

#### Background

India's healthcare industry has been growing at a Compound Annual Growth Rate (CAGR) of around 22% since 2016. At this rate, it was expected to reach USD 372 billion in 2022. Healthcare has become one of the largest sectors of the Indian economy in terms of both revenue and employment. The recent pandemic has shown that healthcare is a foundational element, much like infrastructure, which can either have a multiplier or a fractional effect on the overall economy. It is important to assess the health of the healthcare sector, which can be extrapolated to the health of the overall economy.

#### Several factors are contributing to this surge in demand for the healthcare sector:

**Population Growth:** India's population continues to grow, leading to a greater need for healthcare services. The country is projected to add around 140 million middle-income and 21 million high-income households by 2030.

**Aging Population:** With an increase in life expectancy, the elderly population requires more medical attention. By 2030, the median age of the population is expected to be 31, making India the largest working-age population in the world.

**Rising NCDs:** Lifestyle changes have led to a higher incidence of diseases like diabetes and hypertension, necessitating specialized care and newer models of care delivery.

**Technological Advancements:** The integration of technology in healthcare, such as telemedicine and AI, has created new roles and increased demand for tech-savvy professionals.

**Health Insurance Penetration:** With more people getting health insurance, there is an increased demand for healthcare services across the board. The health insurance market in India was growing at a CAGR of 24% but rose to about 34% during the pandemic period.

**Government Initiatives:** Schemes like the Ayushman Bharat Digital Mission and investments in infrastructure have expanded access to healthcare, thereby increasing workforce requirements.

**Provider Landscape, Innovative Delivery Models & Supporting Supply Chain Enablers:** India's delivery landscape is a mix of public and private healthcare providers, which is rapidly consolidating due to the merger of financing risk pools and rising hurdles for scale and efficiency in a hyper-competitive marketplace. This requires a careful balance between access, quality, equity, and affordability at an unprecedented scale.

#### Deep diving into critical solutions

At NATHEALTH, we believe there is a compelling need to create a unique platform conducive to meaningful dialogue that paves the way for collaboration among various stakeholders. With this objective, the forthcoming **NATHEALTH Summit 2025** will deep-dive into critical roadblocks and solutions that need to be unlocked to accelerate our trajectory, like:

- Viksit Bharat Catalyzing Stronger Partnerships between Public and Private Sector Accelerating the momentum to build new capacity & efficiency in healthcare
- Sectorial momentum by simplifying Healthcare Compliance Bottlenecks
- Realizing the full potential of MedTech Industry in India 2.0
- Role of (National Health Claim Exchange (NHCX) in healthcare digitization
- Ignite Medical Value Travel (MVT) and build the Heal in India Brand
- Fostering Digital Adoption, Startup-driven Innovations, and Patient Safety to Transform Healthcare Landscape

NATHEALTH will convene the top decision makers who are architects of the national healthcare agenda, and bring in new ideas for deliberating a path where we can shift our current trajectory towards the national aspirations of a **Viksit Bharat by 2047**.

#### **Objectives of the Summit**

Today, we stand at a crossroads, ready for change. The path to achieve this holistic goal hinges on collaboration, where all health industry stakeholders come together, deliberate, cooperate, and work in tandem to bridge vital gaps in service delivery. Both public and private stakeholders need to rethink how we will address systemic issues in India, invest in, and rebuild healthcare infrastructure as a strategic asset.

As a nation, we must look at planning for the next 5 years in the first phase and perhaps decades ahead, putting the pieces back together and adding elements to enable all of us to live the new normal. The private sector is an important and legitimate stakeholder in this journey ahead.

#### Specific target areas where this Summit will galvanize actions

Supporting the national agenda & harnessing the true potential of the private sector implies:

- Effectively collaborating on the national UHC agenda: Successfully integrating into the ecosystem envisioned as "Arogya Bharat," where both the public and private sectors deliver their responsibilities while fulfilling their key obligations to stakeholders.
- Enabling stronger momentum to build new capacity & efficiency in healthcare.
- Accelerating the sectorial momentum by simplifying Healthcare Compliance Bottlenecks.
- Gathering industry recommendations for the MedTech Sector by way of convening, collaborating, and partnering for R&D, Innovations, Value-based Procurements, Export Markets (Make in India as a sourcing hub), Leasing MedTech Model, and more.
- Reinforcing Regulatory Clarity and shaping an effective architecture tied to a long-term vision, building quality technical capacity for enforcement.
- Igniting Medical Value Travel (MVT) and Building the Heal in India Brand.

## PLENARY SESSIONS

A glance at the summit sessions



## Catalyzing stronger partnerships between Public and Private Sector - Accelerating the momentum to build new capacity & efficiency in healthcare

#### Overview

Today, Indian healthcare stands at a crossroads, ready for change. The path to achieve this holistic goal hinges on collaboration, where all health industry stakeholders come together, deliberate, cooperate, and work in tandem to bridge vital gaps in service delivery. Both public and private stakeholders need to rethink how to address systemic issues, invest, and rebuild healthcare infrastructure as a strategic asset.

As a nation, we must look at planning for the next 5 years in the first phase and perhaps decades ahead, putting the pieces back together and adding elements to enable all of us to live the new normal. The private sector is an important and legitimate stakeholder in this journey ahead.

#### Challenges

- Building a Resilient Patient-Centered System
- Ensuring affordable & accessible healthcare
- Building Robust Domestic Supply Chains
- Facilitating and attracting investments
- Advancing Health policies, regulations
- Healthcare workforce training & development

- Debottleneck 6,500+ compliances at Central, State & local levels
- Implement Digital Health program for HER/EMR & smaller providers
- Develop strategic partnership models with stakeholders
- Explore new models of care through relevant NATHEALTH programs
- Spread benefits far & wide through insurance access
- Methods to drive Exports and Medical Value Travel

## Accelerating the sectorial momentum by simplifying Healthcare Compliance Bottlenecks

#### **Overview**

The Indian healthcare industry is complex, with a wide range of organizations like hospitals, diagnostic centers, and medical technology companies. The industry is required to adhere to multiple compliance standards set by both the central and state governments, such as the Central Drugs Standard Control Organisation (CDSCO), the Atomic Energy Regulatory Board (AERB), and State Ministries.

Although there have been efforts to make the rules simpler and more business-friendly, the healthcare industry still faces challenges with increased compliance burden that limit how it can grow and improve.

At the least, a single healthcare facility is required to obtain around 150 - 200 registrations or licenses and comply with over 6500+ compliance tasks in a year. These compliance burdens or bottlenecks often involve time-consuming and resource-intensive tasks, which slow down operations, increase costs and distract from the primary goal of providing quality patient care. By simplifying these requirements, not only can the industry focus on improved service delivery, but this would also encourage innovation and attract investors, leading to increased funding and growth opportunities for the healthcare sector.

#### Challenges

- Fragmented regulatory environment Limited transition time
- Large number of licenses and approvals Uncertainty of application responses Multiplicity of regulators
- Severe penalties
- Lack of digitilisation

- Understand compliance challenges
- Deliberate on recommendations
- Facilitate ease of doing business
- Fragmented regulatory environment Limited transition time
- Large number of licenses and approvals Uncertainty of application responses Multiplicity of regulators
- Severe penalties
- Lack of digitilisation



## Realizing the full potential of MedTech Industry in India 2.0

#### Overview

The Med-Tech industry is a critical pillar of India's healthcare ecosystem, contributing to innovation, economic growth, and global competitiveness. The Government of India has significantly supported this sector through initiatives like Make in India, the Production Linked Incentive (PLI) scheme, and the establishment of medical device parks, driving advancements in research, development, and domestic manufacturing. The Indian medical device market, valued at \$15.35 billion in 2023, has the potential to scale up to \$200 billion with the right policy interventions.

#### Challenges

- Domestic Demand
- Tariff Policies
- Issues in Ease of Doing Business
- Compliance Burden
- R&D and Supply Chain hurdles
- Medtech Brand & Sectorial USP

- Create predictable demand to foster domestic production
- Calibrate tariff policies to align with market realities
- Incentivize R&D and enhance the supply chain
- Simplify regulatory frameworks to enhance ease of doing business
- Streamline compliance processes with global standards
- Support manufacturing and scaling operations

## Accelerating Digital Health adoption and creating pathways for scalable healthcare innovations

#### Overview

The healthcare landscape in India is fast evolving and requires innovative technologies including digital health tools to integrate with traditional practices in a seamless and interoperable manner. The NATHEALTH Foundation – as a collaborative CSR and through the collective participation of its partner network – is contributing to this transformation by three key programs i.e., Digital Health Masterclass, Health Nexus Accelerator, and the Patient Safety Initiative that aim to digitize the health systems all the way to Tier II and III cities, accelerate start-up driven innovations into scale-up ready industry solutions, and institutionalize patient safety practices through awareness, policy advocacy, and industry best practices.

The objective of this session is to share the key achievements and learnings from the NATHEALTH initiatives followed by expert deliberation on ideas to drive a force multiplier effect and catapult these into self-sustainable future programs that yield benefits to all the stakeholders.

#### Challenges

- Digitalization in Tier II and III cities
- Need for start-up driven innovations
- Institutionalizing patient safety practices

- Integrate digital health with traditional practices in a seamless manner
- Learn to scale-up ready industry solutions
- Improve awareness, policy advocacy, and industry best practices
- Knowledge on key achievements and learnings of NATHEALTH initiatives
- Discover ideas to drive a force multiplier effect
- Catapult ideas into self-sustainable future programs

## Igniting Medical Value Travel (MVT) and Building the Heal in India Brand

#### Overview

Healthcare in India is nascent with spend at ~4% GDP, significantly trailing most other countries. It is expected to scale to ~6% by 2030 on the back of govt.'s push on strengthening healthcare delivery post COVID and increase in private spend to cater to an ageing population with higher incidence of lifestyle diseases.

Healthcare infrastructure in India is fast catching up. Over time, India has witnessed 5-6x surge in facilities delivering high-quality care at a significantly lower cost vs. other nations, however, there is still substantial headroom to expand the network of highquality units. This expansion has led to a strong inflow of medical tourists in addition to servicing domestic demand. The trend likely to accelerate with govt's push for "Heal in India" - program to promote medical value travel (MVT) into India by setting up an integrated MVT portal that will streamline the care journey of patients seeking healthcare.

#### Challenges

- Building Brand India as the ideal MVT destination
- Government support in demand creation
- Disintegrated public-private paradigm

- Strategies to build sufficient infrastructure in India
- Ways to remove regulatory and policy barriers and lack of unified regulations
- Emulate from the success stories of other countries; offer full stack MVT value proposition unifying traditional & modern medicines
- Plan co-ordinated branding & promotion between Government & private sector
- Ensure quality control, standardization, and hospital accreditation
- Simplify fast-track visa processing and price transparency

## Role of (National Health Claim Exchange (NHCX) in healthcare digitization

#### **Overview**

The National Health Claims Exchange (NHCX) is one of three digital gateways developed under the Ayushman Bharat Digital Mission (ABDM) as part of the National Health Stack. The other two gateways include the Unified Health Interface (UHI) and the Health Information Exchange – Consent Manager (HIE-CM). NHCX marks a significant milestone in digitizing India's health insurance claims process. Designed by the National Health Authority (NHA) and supported by the Insurance Regulatory and Development Authority of India (IRDAI), NHCX aims to streamline claim processing, reduce delays, and enhance transparency. The platform went live in July 2024.

#### Challenges

- Need for reduced discharge times.
- Increasing bed availability.
- Digitization & standardization
- Claim processing costs
- Lack of innovation

- Ensure faster claim processing by standardization & automation to reduce discharge times.
- Enhance digitization and standardization to lower claim submission & processing costs.
- Standardize digital workflows and automated claims adjudication to improve efficiency across the ecosystem.
- Focus on high digital transaction volumes for advanced data analytics.
- Support start-ups to launch new products.
- Foster a more structured and transparent insurance ecosystem.
- Ensure data quality supports evidence-based policymaking.
- Scale-up NHCX, evaluate its current adoption levels, and explore actionable steps to expand its reach and maximize its intended benefits.

## WHITEPAPER EXTRACTS

Preview of the whitepapers being launched at the Summit





## Whitepaper Extract

### Realizing the full potential of MedTech Industry in India



#### Overview

The "Med-Tech 2.0" report provides an in-depth analysis of the current state and future potential of the MedTech industry in India. It emphasizes the need for strategic investments and mechanisms to enhance the penetration of medical technology across the country, particularly to underserved areas.

#### **Key Areas of Focus**

#### 1. Enhancing "Make in India"

- Stimulating the ecosystem to manufacture high-quality medical devices for both domestic and international markets.
- Encouraging innovation and self-reliance in the MedTech sector.

#### 2. Device-led Digital Health

- Promoting the integration of medical devices with digital health solutions to improve preventive care and extend the care continuum.
- Focusing on non-metro areas to ensure equitable access to advanced healthcare technologies.

#### 3. Safe Usage of Medical Devices

- Supporting initiatives to raise patient awareness about the safe use of medical devices.
- Enhancing accreditation and skilling programs to ensure the proper handling and maintenance of medical devices.

#### 4. Regulatory Framework

- Advocating for a conducive regulatory environment that supports industry growth and innovation.
- Encouraging the adoption of industry best practices to ensure compliance and quality standards.

#### 5. Market Insights

- The MedTech industry is a critical component of the Indian healthcare ecosystem, driving the transition towards patient-centered and proactive care models.
- There is significant growth in high-complexity outpatient centers, driven by the rising prevalence of chronic diseases, advancements in medical technology, and increasing demand for specialized healthcare services.
- The adoption of point-of-care (POC) testing has accelerated, particularly in response to the COVID-19 pandemic, highlighting the need for accessible and rapid diagnostic solutions.

#### 6. Future Projections

- The demand for MedTech devices is expected to grow substantially with the expansion of healthcare infrastructure and shifts in care delivery models.
- Emphasis on skilling, standardization, accreditation, and capability building will be crucial to support the industry's growth and ensure the safe and effective use of medical technologies.

#### Conclusion

The "Med-Tech 2.0" report underscores the immense potential of the MedTech industry in India. By fostering innovation, enhancing regulatory frameworks, and promoting the safe and effective use of medical devices, India can realize the full potential of its MedTech sector, ultimately improving healthcare outcomes and accessibility for its population.



## Whitepaper Extract

## Simplifying Compliance Bottlenecks in Private Healthcare Sector



#### Overview of regulatory landscape and key compliance bottlenecks

Complex regulatory structure creating compliance bottlenecks for the healthcare sector and preventing ease of doing business

#### Hospitals • Diagnostics • MedTech

#### Regulatory landscape for the healthcare sector

- **440+** applicable legislations impacting the healthcare industry in India (considering 15 states)
- **29000+** annual compliance tasks triggering for a healthcare organization with operations pan-India.
- **1400+** compliance tasks pertain to licenses/approvals/registrations to be obtained by the healthcare sector.
- **60%** of regulations applicable to healthcare industry are decentralized leading to complexity of compliance due to lack of standardization
- **25-30%** of compliances undergo change every year leading to a dynamic and complex regulatory structure.
- Healthcare industry is one of the **top three regulated sectors** in India. **24%** of regulations applicable to the industry are healthcare specific.

#### Key compliance challenges faced by the industry

- Highly dynamic and changing regulatory landscape with little/no transition time
- Multiplicity of regulators and enforcement agencies
- Dated regulations resulting in delayed approvals, project completion, ability to expand
- High number of industry specific regulations impacting day-to-day operations
- Multiple/ numerous licensing requirements
- High frequency of compliance reporting / high number of compliance requirements

#### Key recommendations

- Single window clearance
- Self-certification or touchless certification to increase transparency
- · Stringent penalties to increase accountability on industry to self-certify
- · Digitization of processes and records
- Need for collaborative discussions and consultations with industry prior to implementing regulatory changes

#### Key challenges and suggested recommendations to reduce compliance burden

Top 12 compliance challenges identified by the industry

- Single window clearance
- Self-certification or touchless certification to increase transparency
- · Stringent penalties to increase accountability on industry to self-certify
- · Digitization of processes and records
- Need for collaborative discussions and consultations with industry prior to implementing regulatory changes

- Restriction on hospital building heights leading to reduced number of beds in hospitals and lack of clarity of definition of "critical patients" leading to ambiguity in occupancy permissible in hospitals beyond the 3km height
- Lack of clarity on rejection reasons for lift licenses, and lack of transparency in timelines for issuance of lift licenses
- Licensing of blood banks required for central and state licensing authorities leading to delays
- State registrations for medical practitioners leading to multiple UNI generations and administrative burden

МЕДТЕСН	<ul> <li>Mandated BIS certifications and compliance with multiple OCOs leading to delays in medical device registrations and approvals</li> <li>Different licensing authorities based on activity and class of device leading to multiple registrations and complex procedures and high response time by authorities to grant approvals</li> <li>Multiple regulations governing medical device labelling</li> <li>No defined timelines or guidance on seeking approvals for HCPs travelling for an event</li> </ul>
DIAGNOSTICS	<ul> <li>Lack of standardization in clinical establishment regulations across states</li> <li>Digital signatures are not accepted on lab reports and physical presence of doctors is mandated while signing of lab reports</li> </ul>
COMMON CHALLENGES	<ul> <li>Lack of timelines defined to approval ultrasound devices under PCPNDT Act, and lack of clarity on the list of devices to be registered under the Act</li> <li>Lack of standardization or defined processes to obtain consent from State PCBs and stringent penalties imposed in case of failure to obtain / renew consent in a timely manner</li> </ul>

Long Term	Medium Term	Short Term
<ul> <li>Enhancement to NSWS to include all statutory approvals</li> <li>Bring uniformity in state requirements pertaining to establishment set-up</li> <li>Adopt specific regulations for medical devices</li> </ul>	<ul> <li>Increase transparency around license approval response times</li> <li>Rely on approvals from international regulators for granting approvals</li> <li>Allow deemed approvals on licenses for establishment set-up</li> <li>Decriminalize non-safety related compliance</li> <li>Eliminate dual licensing authorities</li> <li>Extend hospital building height limits</li> </ul>	<ul> <li>Permit usage of digital signatures</li> <li>Centralize registrations for medical practitioners</li> <li>Leverage ABHA to digitize health records</li> <li>Rely on international certifications like ISO for OCO compliance</li> </ul>
		1

## LEADERS SPEAK

Words from NATHEALTH Leaders & Members





NATHEALTH has steadfastly prioritized addressing systemic challenges and is paving the way for transformative change. As we strategize our next steps, an important spoke in the hub is the 11th NATHEALTH Arogya Bharat Summit 2025, with the theme - Propelling Healthcare in India towards Viksit Bharat.

I am thrilled that the summit will deep dive into key agenda items of NATHEALTH, which have been our central focus all year through. The summit themes are a way to showcase our collective efforts and will prove to be a wonderful platform for releasing key positions to shape the future of healthcare in India.

I am happy that all members and stakeholders will participate actively at this crosssectorial Futuristic Annual Senior Leadership Healthcare Conclave organized by NATHEALTH. Let us all discuss solutions for healthcare challenges and opportunities to drive innovation, accessibility, and excellence.



Healthcare in India is at a turning point. We can propel the sector towards a healthier and more resilient future through innovation, collaboration, and bold thinking. This is the essence of the 11th NATHEALTH Arogya Bharat Summit 2025. On March 19th, we will bring together the brightest minds, industry leaders, and changemakers to engage in thought-provoking discussions under this year's theme: 'Ideas to Propel Healthcare in India Towards Viksit Bharat.' But this summit is more than just a gathering—it is a platform for action, where strategic insights will shape the roadmap for a stronger healthcare ecosystem. I invite you to be a part of this transformative journey.



India is at the helm of global healthcare and on the road to Viksit Bharat. Strengthening collaborations between hospitals, academic institutions, and global healthcare leaders will enable India to make ground-breaking medical discoveries benefiting both domestic and global healthcare. By reinforcing such partnerships and expanding hospital networks, the healthcare system can better meet the needs of a growing population.

Through NATHEALTH Summits, we try to create a platform for all stakeholders to come together and discuss pertinent areas like strengthening public healthcare infrastructure, addressing the healthcare workforce gap, expanding health insurance, strengthening PM-JAY, boosting medical research and innovation.



The recent Union Budget's focus on expanding the medical tourism under the 'Heal in India programme' with simplified visa norms will provide a renewed momentum to India's medical value travel (MVT). Over the past two decades, India has emerged as a preferred destination for global population. India's affordable world-class healthcare services, minimal waiting time, state-of-the-art infrastructure, skilled healthcare professionals, cutting-edge medical technology and infusing modern medicine with traditional healing practices like Ayurveda and Yoga, is gradually cementing India's position as a global hub for medical tourism.

The 11th NATHEALTH Annual Summit will deep dive into more such relevant araes of discussions. I am sure we will all leave with important takeaways to propel India ahead.



We stand at a pivotal moment in India's healthcare journey – a crossroads where vision meets execution, where innovation intersects with implementation. The 11th NATHEALTH Arogya Bharat Summit 2025 is not just an annual gathering, it's a strategic convergence point for those committed to reshaping India's health narrative. Here, we don't just dream of a healthier India; we blueprint its creation. Welcome to the Summit.



As we stride into an era of convergence, collaboration, and connection, I invite you to join us at the 11th NatHealth Arogya Bharat Summit 2025, scheduled for the 19th of March in New Delhi. This summit brings together leaders and changemakers from hospitals, medical devices, diagnostics, and health tech to deliberate on groundbreaking innovations and policies that will redefine India's healthcare landscape. Together, we have the power to drive transformation, strengthen partnerships, and take India towards Arogya Bharat–a future of accessible, advanced, and inclusive healthcare for all.



As we move towards Viksit Bharat, strengthening India's healthcare ecosystem is more crucial than ever. At Vygon India, we believe that collaboration and innovation are the driving forces behind meaningful change. Thus, I am honored to invite you to NATHEALTH's 11th Annual Arogya Bharat Summit 2025 on March 19th in Delhi. With the theme 'Ideas to Propel Healthcare in India Towards Viksit Bharat,' this summit is more than just a gathering —it is a platform to exchange ideas, forge strategic partnerships, and accelerate progress towards a healthier, more resilient nation. Let's come together, contribute, and take decisive action in shaping the future of healthcare in India.

## FROM THE DESK OF

Authored articles by NATHEALTH Leaders & Members





#### Mr. Abhay Soi

President, NATHEALTH Chairman & Managing Director, Max Healthcare

#### Transforming India's Healthcare Landscape: A Call for Strategic Reforms in the Union Budget 2025-26

India's healthcare sector stands at a pivotal stage, with the Union Budget 2025-26 offering a transformative opportunity to address critical challenges and realise its full potential. As we progress swiftly towards becoming a USD 5 trillion economy, quality healthcare becomes a prerequisite for the population. Whilst the private sector continues to do its best to meet growing demand for quality healthcare, with over 110% of profit of private sector being deployed towards capex in past 5 years, certain support from the government will go a long way in meeting gaps.

Strategic reforms and substantial investments are essential to bridging gaps, enhancing access to quality care, and tackling the dual burden of communicable and lifestyle diseases.

#### Increased Budget Allocation for Healthcare

One of the key priorities for the Union Budget should be raising healthcare expenditure to over 2.5% of GDP. This increase would enable significant expansion in physical and digital infrastructure, ensuring improved access to curative and preventive healthcare services. A nationwide effort to add 2.5–3.0 million hospital beds through Viability Gap Funding (VGF) and long-term, low-interest capital investments is critical. These investments could be targeted toward mid-sized and smaller healthcare providers, fostering a more equitable distribution of healthcare facilities.

Additionally, allowing hospitals to expand vertically by raising permissible building heights to 60 metres from the current limit of 45 metres could alleviate the strain on urban infrastructure. Complementary funding for fire safety upgrades would ensure compliance and safety in high-rise healthcare facilities.



#### Making Cancer Care more affordable

Cancer continues to be a leading cause of death in India, with treatment expenses often out of reach for many. To make care more accessible, policy measures such as reducing import tariffs and lowering GST on oncology equipment, including Linear Accelerators (LINACs), to 5% could play a transformative role. Expanding treatment facilities in lessserved regions is equally vital, ensuring patients nationwide have access to timely and advanced care. At present, the high import duties on medical devices, which can reach up to 36%, significantly inflate costs, particularly for smaller healthcare providers who struggle to remain competitive. Easing these duties could empower mid-sized service providers to offer more affordable treatment options, especially in smaller cities. Increased competition in these regions would further drive down costs, creating a more equitable system and extending essential cancer care to those in need.

#### Streamlined GST Rates for Healthcare

The cost of healthcare services in India is often impacted by fragmented tax structures. Simplifying the GST regime by introducing a unified 5% GST slab on all healthcare goods and services could help reduce input costs for providers. Revenue generated from healthcare-specific CESS and a proposed higher GST rate on some products could be redirected to bolster public health programmes.

#### Enhancing Insurance Reimbursement Rates

Insurance reimbursement rates under public schemes like PMJAY, CGHS, and ECHS have not been revised for nearly a decade, making it challenging for healthcare providers to remain financially viable. Indexing these rates to the Consumer Price Index (CPI) would ensure that providers can sustain operations while continuing to deliver high-quality care.

#### Promoting Innovation in Med-Tech

The medical technology (med-tech) sector plays a pivotal role in advancing healthcare outcomes. Announcing dedicated funding to support research and development (R&D) in this sector would incentivise innovation and enable India to transition to quality-linked procurement norms. Such initiatives could drive value-based care and position India as a leader in med-tech innovation.

#### Digital Health Innovation

Technology has the potential to revolutionise healthcare delivery in India. A comprehensive 10-year digital health incentive plan could drive the adoption of Ayushman Bharat Digital Mission (ABDM) infrastructure. This would include the implementation of electronic health records (EHR), enhanced data security measures, and technical upskilling for healthcare professionals. Collaborations between industry, academia, and start-ups could further accelerate innovation and make India a leader in digital health solutions.



#### Positioning India as a Global Healthcare Hub

India has significant potential to become a premier destination for medical tourism. A dedicated fund to promote India as a provider of high-quality healthcare services, along with investments in critical and holistic health infrastructure, would attract international patients. This move could also contribute to economic growth while showcasing India's strengths in specialised and affordable healthcare.

Addressing critical areas such as infrastructure, affordability, innovation, and workforce development can pave the way for a resilient healthcare system. The Union Budget 2025-26 presents an opportunity to implement strategic reforms that ensure equitable access to quality care and prepare India to tackle healthcare challenges effectively. The 2025-26 Union Budget is a momentous opportunity to transform India's healthcare system and secure a healthier future for all. Reforms ranging from increased healthcare spending and affordable cancer care to digital health adoption and med-tech innovation can drive significant progress. With bold decisions and a clear vision, India can emerge as a global leader in healthcare, ensuring its citizens receive the care they deserve while setting an example for the world.



#### Dr. Sangita Reddy

Joint Managing Director, Apollo Hospitals & Vice President, NATHEALTH

#### India at the Helm of Global Healthcare: The Road to Viksit Bharat



India has reached a defining benchmark in its position as a global healthcare hub with accessibility, affordable treatments, medical innovation, and global collaborations. In its pursuit towards achieving Viksit Bharat, the healthcare ecosystem requires continuous investment in key areas, including digital health, medical research, workforce expansion, infrastructure development, and broader insurance coverage.

Technology plays a crucial role in bridging gaps in digital health infrastructure, ensuring better healthcare access in this journey of Viksit Bharat and Apollo has been at the forefront of digital health adoption in India over many years now. The global AI in healthcare market is projected to reach \$187 billion by 2030, and India is rapidly integrating AI-driven solutions into medical care.

Apollo Hospitals has been harnessing AI and technology for a healthcare revolution to enhance diagnostic accuracy, enabling predictive analytics for early disease detection, and optimizing hospital workflows. Our partnership with Microsoft focuses on AI-driven tools that predict patient deterioration, enabling timely interventions. We just launched a new India Digital Health Activator, a first-of-its-kind initiative to accelerate public-private collaboration in digital health with World Economic Forum. It aims to drive systemic change in India's healthcare ecosystem by fostering health data interoperability, scalable digital health adoption, and innovative public-private partnerships.

Similarly, our collaboration with Google Cloud has resulted in the Clinical Intelligence Engine, an AI-driven clinical decision support system that provides real-time insights for physicians, improving diagnostic precision and treatment strategies. These advancements are not only enhancing medical efficiency but also expanding access to quality healthcare, particularly in remote and underserved regions.

Boosting Medical Research and Innovation: Investment in medical research and innovation is essential for positioning India as a global healthcare leader. India already contributes 60% of global vaccine production and supplies nearly 20% of the world's generic medicines, yet further progress in pharmaceuticals, biotechnology, and medical devices is crucial. Recognizing this, Apollo Hospitals and The Apollo University, in collaboration with the University of Leicester, have established the Centre for Digital Health and Precision Medicine (CDHPM) in Andhra Pradesh. This initiative focuses on using advanced analytics to revolutionize patient care, particularly in cardiovascular diseases, emergency medicine, and AI-driven diagnostics. Strengthening collaborations between hospitals, academic institutions, and global healthcare leaders will enable India to make ground-breaking medical discoveries benefiting both domestic and global healthcare.

Addressing the Healthcare Workforce Gap: According to the World Health Organization (WHO), India needs at least 44.5 healthcare workers per 10,000 people to meet global standards, but the current number falls short. To Bridge this gap, the Union Budget 2025 has announced the addition of 75,000 new medical seats in government and private institutions, ensuring that more professionals are trained to serve the nation. However, increasing medical professionals alone is not enough–improving the quality of medical education is equally important. Apollo Hospitals is addressing this challenge through AI-assisted training programs that provide personalized learning experiences, helping medical students and professionals develop critical skills. Digital learning platforms and simulation-based training are equipping healthcare workers with real-world expertise, ensuring they are prepared to tackle evolving healthcare demands.

Strengthening Public Healthcare Infrastructure: Expanding and upgrading healthcare infrastructure is critical, particularly in rural and tier-2/3 cities, where nearly 65% of India's population resides but access to advanced medical facilities remains limited. While India has 1.3 hospital beds per 1,000 people, well below the WHO recommendation of 3.5 beds per 1,000, ongoing efforts aim to bridge this gap.

Initiatives like Ayushman Bharat and Health and Wellness Centres are being strengthened to ensure that quality care reaches every corner of the country. Additionally, Public-Private Partnerships (PPPs) are playing a crucial role in infrastructure expansion. For example, the Aragonda telehealth facility established by Apollo Hospitals has introduced modern healthcare technology to remote regions, serving as a model for similar projects nationwide. By reinforcing such partnerships and expanding hospital networks, the healthcare system can better meet the needs of a growing population.

Expanding Health Insurance Coverage is essential for making healthcare accessible and reducing financial burdens on families. PM-JAY (Ayushman Bharat), the world's largest government-funded health insurance scheme, has provided coverage to over 50 crore Indians, yet millions remain uninsured or underinsured.

Strengthening PM-JAY while promoting private insurance models will help reduce this financial strain. Increased insurance penetration will not only reduce healthcare expenses but also promote preventive healthcare, reducing the overall burden on the healthcare system.

India's healthcare system has reached remarkable milestones, but achieving Viksit Bharat requires sustained momentum. A truly developed nation is one where every citizen, regardless of their socio-economic status or geographical location, has access to high-quality healthcare.

With healthcare spending expected to reach \$372 billion by 2025, the country is on a transformative path. to achieve Viksit Bharat, India must ensure that its healthcare system is much more inclusive, proactive, and future-ready. This means reducing regional disparities in medical infrastructure, advancing digital health solutions to reach the last mile, and expanding preventive care measures.

Universal healthcare access is not just a moral imperative but an economic necessityhealthy citizens contribute to a productive workforce, drive economic growth, and strengthen national resilience.

Apollo Hospitals remains committed to driving this singular goal of Viksit Bharat by ensuring that when the world looks toward the future of healthcare, it looks to India.



#### Dr. Om Manchanda

Managing Director, Dr. Lal PathLabs & Treasurer, NATHEALTH

### Healing the World: India's Rise as Global Medical Hub

Over the past two decades, India has emerged as a preferred destination for medical value travel (MVT). Kudos to its affordable world-class healthcare services, minimal waiting time, state-of-the-art infrastructure, skilled healthcare professionals, cutting-edge medical technology and infusing modern medicine with traditional healing practices like Ayurveda and Yoga. The country is gradually cementing its position as a global hub for medical tourism. The recent Union Budget's focus on expanding the medical tourism under the 'Heal in India programme' with simplified visa norms will provide a renewed momentum to this initiative. The sector, which is valued at approximately Rs 1 lakh crore in 2024, is projected to grow at a healthy CAGR of 17.2% to surpass ₹4.3 lakh crore by 2034.

Our health system is on par with other medical tourism countries such as Thailand, Singapore, Brazil and Turkey. India has been ranked 10th in Medical Tourism Index (MTI) for 2020-21 out of 46 destinations of the world by Medical Tourism Association. Many facilities are accredited by global standards such as the Joint Commission International (JCI), which enhances their credibility and attractiveness to international patients. The cost of medical procedures in India is significantly lower compared to Western countries. Patients can save up to 60-90 per cent on treatments, which makes the nation a costeffective option without compromising on quality. This affordability extends across a wide range of medical services, including cosmetic surgeries, fertility treatment and more complex procedures such as cardiology and oncology.

In addition to the direct savings on medical procedures, medical tourists in India benefit from several cost advantages that make their overall treatment experience more affordable. Accommodation expenses are significantly lower, with a wide range of budget-friendly options available for patients and their companions. Many hospitals also provide in-house guest facilities at competitive rates. Additionally, the cost of medications is considerably reduced as India is one of the world's largest producers of generic drugs, making post-treatment care more economical. Another key advantage is the favorable exchange rate, which further lowers expenses for patients from countries like United States, United Kingdom, Bangladesh, Middle East, Africa, CIS countries, SAARC nations, Southeast Asia, and the Pacific Rim.



#### Why should we focus on Heal in India programme?

With around 7.3 million medical tourists visiting annually from diverse regions, giving a special impetus on the Heal in India programme is essential. It will not only bolster India's position as a global leader in medical tourism but also enhance the healthcare ecosystem, streamline patient services and reinforce trust in Indian healthcare facilities.

Besides that, medical tourism is crucial in attracting FDI into India's healthcare sector. FDI in the healthcare sector improves the quality of services, enhances technology adoption, and enables Indian hospitals to compete with global standards. As India becomes a preferred destination for medical value travel, the growing influx of international patients increases the demand for world-class hospitals, advanced medical equipment, and specialized healthcare services. This, in turn, encourages global healthcare providers, investors, and private equity firms to invest in India's hospitals, telemedicine platforms, wellness centers, and medical research facilities.

This further expansion of healthcare infrastructure-such as specialized hospitals, wellness centers, and telemedicine services-will also create job opportunities in construction, facility management, and medical technology. Furthermore, ancillary sectors like travel, hospitality, and pharmaceutical industries will also reap the benefit and set the stage for overall economic development.

#### What policy changes should the government make?

Though the MVT sector has immense potential, it faces several key challenges that hinder its growth and efficiency. One of the major weaknesses is the absence of a regulatory framework to govern the sector. This lack of regulation leaves MVT largely unorganized, making it difficult to monitor the quality of services provided by stakeholders. Without proper oversight, patients may face inconsistencies in service quality, impacting India's reputation as a medical tourism destination. There is an urgent need for the government to step in with clear regulations, better facilitation, and structured marketing efforts to establish India as a trusted hub for medical value travel.

Another significant challenge is the fragmentation of efforts across various ministries and organisations involved in the promotion of MVT. The lack of a dedicated nodal body to spearhead and coordinate medical tourism efforts results in inefficiencies and missed opportunities. Poor coordination among key stakeholders—including airlines, hospitals, and hotels—further affects the seamless experience that international patients expect. Additionally, India has not been effectively promoted as a global medical tourism destination. While individual hospitals invest in marketing their services, there is no large-scale, government-led campaign to establish India as a brand for medical value travel. A well-structured promotional strategy, coupled with regulatory support and stakeholder coordination, is crucial to unlocking the full potential of India's MVT sector and positioning it as a premier destination for international patients.



#### Mr. Anish Bafna

CEO & MD, Healthium Medtech Secretary, NATHEALTH

#### Challenges in the MedTech Sector and Strategies to Enhance Business Growth in India



India's MedTech industry is poised for significant growth, yet it is dealing with certain challenges that hinder its full potential. Among the most pressing issues is the compliance burden, complex legal frameworks, rising operational costs and talent shortages. To unlock the sector's growth, it's crucial to understand these challenges and address them strategically. There is an urgent need for regulatory harmonization in which regulatory requirements converge and facilitate expedited product approvals both domestically and globally.

#### **Regulatory Hurdles and Compliance**

A robust regulatory system has a significant role in the MedTech industry, and the industry truly appreciates the rigorous efforts that regulators around the world, especially India are taking to ensure the safety and efficacy of the products which would ensure quality patient outcomes. Navigating these complex regulatory landscapes is no small feat and its commendable how organizations work tirelessly to meet the required global accelerated standards while simultaneously striving to bring innovative solutions to market.

The industry recognizes the promising developments in India, particularly with the introduction of the National Medical Devices Policy, 2023, which aims to promote local manufacturing and reduce import dependency along with India's move to join the International Medical Device Regulators Forum (IMDRF) as an affiliate member which will result in regulatory harmonization. Additionally, the focus on post-marketing surveillance will also help to ensure the safety and effectiveness of products in the market. This regulatory policy shift holds great potential, especially if it is consistent, transparent and long term as frequent updates to policies and standards may create some uncertainty, especially for start-ups and smaller organizations.

Given the high cost and complexity of achieving certifications like FDA clearance or CE marking approvals, would it be possible to explore ways to support smaller organizations in managing these challenges? Perhaps there could be opportunities for regulators to simplify processes or enhance international collaboration, which would provide significant relief to the industry and foster innovation.


The continued efforts to balance safety, innovation and market accessibility are truly appreciated and the medical device industry looks forward to any potential developments that can further ease this regulatory journey.

## **Compliance and Quality Control**

Ensuring strict adherence to quality management standards is vital in the MedTech sector. Standards like ISO 13485 govern the entire process of designing, manufacturing and maintaining medical devices. The challenge lies in ensuring that every step of the process, from raw material sourcing to post-market surveillance, complies with these standards. It is crucial for companies to work closely with outsourced partners to meet regulatory expectations. Proper quality control mechanisms not only ensure patient safety but also protect businesses from potential legal and financial penalties associated with noncompliance. There is also a need to have a strong product quality standard ecosystem in the country, which is harmonized with global standards, leading to better global acceptance of locally manufactured products.

## Talent and Supply Chain Challenges

A shortage of skilled talent in areas like research and development (R&D) further exacerbates challenges in the MedTech space. Specialized training programs have so far been a few, leaving companies to develop their own in-house training modules. The government is cognizant of the fact and has undertaken initiatives such as the Human Resource Development (HRD) Scheme and the Capacity Building and Skill Development in the Medical Device Sector Scheme by the Department of Pharmaceuticals (DoP) which could play a crucial role by promoting specialized education programs that align with the needs of the MedTech sector. Additionally, the lack of local component suppliers makes it difficult for companies to scale operations. With many components still imported, the cost of goods remains high, making it hard for companies to offer competitive pricing.

## **Balancing Safety and Market Speed**

For regulatory bodies, the task of keeping up with the fast-evolving MedTech industry is increasingly difficult. While it is essential to maintain stringent safety standards, there is also pressure to expedite product approvals to meet market demand. Striking a balance between ensuring patient safety and minimizing time-to-market is a critical issue. Regulatory agencies must adapt to emerging technologies while ensuring products meet high standards for efficacy and safety. This delicate balancing act presents a challenge for both regulators and manufacturers alike.

11th NATHEALTH Annual Arogya Bharat Summit 2025 www.arogyabharat.net



## **Implications of Policy Changes and Schemes**

The Indian government has introduced various initiatives aimed at strengthening the MedTech sector, such as the Scheme for Strengthening of Medical Device Industry (SMDI) which has a clear focus on marginal investment for reducing the import dependence by providing support for production of key components, raw materials & accessories used in manufacturing of medical devices, generation of clinical evidence, creation of common facilities, promotion of 'Make in India' medical devices globally and the Promotion of Research and Innovation in Pharma-MedTech (PRIP) scheme, which fosters collaboration between industry and research/ academic institutions. The National Medical Devices Policy aims to enhance domestic manufacturing capabilities, reduce reliance on imports and promote innovation.

## Approval Processes and Classification

One of the primary regulatory challenges in MedTech is the approval process, particularly when different regions have varying device classifications and regulatory requirements. For example, a medical device classified as low risk in one market may be classified as highrisk in another, impacting approval timelines and associated costs. These discrepancies can significantly affect a company's ability to plan for global market access. Understanding these different classification systems and approval processes is essential for MedTech companies to successfully navigate global markets.

#### **Overcoming Regulatory and Compliance Overhaul**

To alleviate some of these compliance burdens, the medical device industry has proposed financial assistance and subsidies for the industry to help with certification processes, such as CE marking and FDA 510 (k) clearance. Additionally, establishing more local high-end testing laboratories for biocompatibility and electrical safety would reduce dependency on foreign labs, lowering testing costs and shortening certification timelines. Streamlined governance, risk and compliance (GRC) systems can help companies manage regulatory compliance more efficiently while maintaining enterprise risk oversight.

#### Investment and Growth in the Sector

The recent regulatory streamlining and policy changes have led to increased investment in the MedTech sector. Start-ups focusing on low-risk devices have attracted venture capital and established companies are diversifying their portfolios to cater to India's unique healthcare needs. This influx of investment is driving R&D, which could lead to the development of innovative solutions that serve the Indian market. However, the high costs of clinical testing, documentation and international certification still pose a significant barrier, especially for smaller players.



## Government's Role in Fostering Growth

For the MedTech industry to reach its full potential, government intervention is critical. Support through harmonized regulatory frameworks, subsidies and the creation of dedicated infrastructure, such as medical device parks, can reduce the operational burden on manufacturers. The Production-Linked Incentive (PLI) scheme and the development of medical device parks aim to attract foreign investment and strengthen local manufacturing capabilities. As multinational companies diversify their supply chains away from China, India's MedTech sector is well-positioned to benefit from this global shift.

**Conclusion**: India's MedTech industry holds immense promise, but it faces certain hurdles, particularly around regulatory compliances, cost pressures and talent shortages. By addressing these challenges through supportive government policies, fostering innovation and investing in local infrastructure, India can position itself as a global leader in MedTech.



## Mr. Sunil Thakur

Partner, Quadria Capital & Chief of Mission, Nathealth Foundation

## Healthcare Infrastructure and Financing: Two Essential Pillars for Ensuring Population Health



In the intricate fabric of human progress, healthcare serves as a cornerstone, woven together with the threads of infrastructure and financing. These two critical elements function synergistically, forming the bedrock upon which the health of the population is built. This is all the more relevant for a growing economy like India, where its strides on the path of economic growth and development underscore the importance of robust healthcare infrastructure and financing. With a burgeoning population and increasing urbanization, India's healthcare system faces the dual challenges of meeting rising demand and ensuring equitable access to quality care. Strengthening healthcare infrastructure and financing is pivotal not only for improving health outcomes but also for sustaining and enhancing economic growth.

Healthcare infrastructure encompasses the physical, organizational, and technological assets that support the delivery of medical services. Healthcare financing includes financing the healthcare needs of individuals. India's journey towards a robust healthcare system has seen remarkable progress, with significant investments in healthcare infrastructure and the expansion of universal healthcare coverage. However, there is still much work to be done to address existing challenges and ensure that every citizen has access to high-quality, equitable healthcare services. By continuing to invest in healthcare, embracing innovation, and prioritizing health equity, India can build a resilient and inclusive healthcare system that supports the health and well-being of its growing population and contributes to sustained economic growth.

## System reboot for building healthcare infrastructure

The key lever to improving healthcare infrastructure is to increase public health spending, which, in the case of India, is abysmally low at around 2.2% of the GDP, compared to the global average of 6%. The principal areas requiring investment include increasing bed capacity, primary healthcare infrastructure, and clinical education resources to improve the clinical manpower ratio. Currently, India has only 0.79 government hospital beds per 1,000 population, far below the global average of 2.7 beds / 1,000 population. To meet the National Health Policy 2017 recommendation of 2 beds / 1,000 population, India needs an additional 2.4 million hospital beds. Increasing healthcare spending to expand and modernize hospital infrastructure will not only improve patient care but also create jobs and stimulate economic growth in the healthcare sector.



Primary health infrastructure is another area that requires urgent attention. As of 2024, India had c.167k Sub Centres, c.27k Primary Health Centres, and c.6k Community Health Centres. However, many of these facilities are under-resourced and lack essential medical equipment and trained personnel. By increasing healthcare spending, the government can upgrade existing facilities and construct new ones, particularly in rural and underserved areas. This will ensure that more people have access to basic healthcare services, reducing the burden on tertiary care facilities and improving overall health outcomes.

Finally, while the government has announced investments in the expansion of medical colleges to address the acute shortage of healthcare professionals and increase MBBS seats from 51,348 to 1,07,948, there is still a significant gap in the availability of trained medical professionals. By increasing the number of medical seats and improving the quality of medical education, the government can produce a larger and more skilled workforce of doctors, nurses, and allied health professionals. This will not only enhance the capacity of the healthcare system but also ensure that medical professionals are well-equipped to handle the evolving health challenges of the nation.

## Universal Affordability for All: Inclusion of missing-middle

The other important leg to accomplish true universal healthcare is to provide affordability to sections of the society. Inorder to achieve this, the government must focus on inclusive insurance for the "missing middle"—the 30% of the population that lacks financial protection for health. This segment, comprising around 40 crore individuals, falls between the bottom 50% covered by schemes like Ayushman Bharat – Pradhan Mantri Jan Arogya Yojana (AB-PMJAY) and the top 20% covered by social and private health insurance. One of the primary challenges in achieving universal health coverage is the high out-of-pocket expenditure (OOPE) in India, which accounts for about 62.4% of total health expenditure. This financial burden often leads to impoverishment and limits access to necessary healthcare services. By introducing affordable and comprehensive health insurance products tailored for the missing middle, the government can pool risks and provide greater financial protection against health shocks.

The NITI Aayog report on health insurance for the missing middle recommends creating a large and diversified risk pool to ensure the success of private voluntary contributory health insurance products. This can be achieved through education programs to raise consumer awareness about the benefits of health insurance. Additionally, the government should work with the private sector to design low-cost insurance products that cater to the needs of the missing middle. This could come through tax incentives, government subsidies, community insurance, and the allowance of corporate CSR pools to fund this missing section. Amid the rise of the middle class in India, countless households teeter on the brink, just one health setback away from slipping back into poverty. We need to prevent that.



## Dr. Indu Bhushan

Founding CEO, National Health Authority (NHA) and Senior Associate, Bloomberg School of Public Health, Johns Hopkins University

## Health care: Innovations for an Inclusive Future

India's health care sector is experiencing unprecedented growth, driven not just by rising incomes, but also through a confluence of transformative factors. As people's financial resources expand, their demand for a broader range of services, including health care, inevitably increases. This surge in demand is also driven by an evolving landscape, rising health insurance coverage, uptick in lifestyle-related diseases, a growing elderly population, heightened health awareness and the expanding reach of services--often delivered directly to people's homes. On the supply side, the sector is undergoing a revolutionary transformation, spurred by government initiatives, technological breakthroughs and increased private-sector investment.

## Health Care

As India ambitiously strives toward universal health coverage, innovation stands at the forefront of this effort, promising to enhance both affordability and accessibility. To address the current gaps in the health system, disruptive innovations are required. Fortunately, the sector has been a dynamic arena for cutting-edge advancements, with rapid developments across diagnostics, therapeutics, medical devices, genomics, and digital health. India's vibrant ecosystem of entrepreneurs and skilled professionals plays a pivotal role in driving these innovations. By fostering supportive government policies, India has the potential not only to improve health care for its citizens but also to set a global benchmark for affordable, high-quality care.

In the last few years, several innovations in the health sector have become a part of our daily lives, improving access to medical care and reducing costs. Telemedicine is enabling patients to communicate with health care providers remotely, offering convenience, saving time, and fast-tracking processes. It is also bridging the urban-rural divide and addressing the shortage of medical specialists. Another example is a Delhi-based startup that is reshaping cardiac care with a low-cost portable ECG device. The device, priced at just ₹4,000 after discounts on popular e-commerce platforms, has minimal operating costs and allows clinics to offer ECGs for free as a point-of-care (PoC) diagnostic test.



Indian pharmaceuticals have also impacted global health care, as with a skilled workforce and competitive costs, India has become a major supplier of quality generic drugs worldwide, helping in the treatment of HIV/AIDS, tuberculosis and cancer.

India has also excelled in scalable digital health models, which gained prominence during the Covid-19 pandemic. We rapidly developed and deployed vaccines, launching the world's largest immunisation program in January 2021. Using the Co-WIN app, India administered over two billion vaccines in 18 months, showcasing its efficient digital infrastructure. Co-WIN enabled vaccination at an astonishing rate, at one point vaccinating 14,000 people per minute, surpassing the combined efforts of the United States, Brazil, Indonesia, and Japan. The e-Sanjeevani portal of the health ministry is another notable example of digital health, having served over 27 crore patients across India to date.

## Bottom of Form

The advent of IoT devices has increased the potential for health sector innovations. Health status and vital parameters of individuals can be monitored remotely, reducing costs, ensuring timely interventions, and improving the effectiveness of treatment. Similarly, Artificial Intelligence (AI)/machine learning (ml) is leading to more accurate and faster diagnostics and better health outcomes.

Partnerships between academia, industry, and government have shown remarkable results--IIT Roorkee developed a low-cost portable ventilator in collaboration with AIIMS, Rishikesh, to save the lives of Covid-19 patients. Similarly, scientists at the Dr APJ Abdul Kalam Missile Complex, RCI, DRDO-Hyderabad, made a portable and low-cost ventilator, Deven to address the requirement for many ventilators during the pandemic. The Bureau of Indian Standards recently sanctioned 82 research and development projects for faculty members of Indian Institutes of Technology and National Institutes of Technology, focusing on cutting-edge domains such as AI, blockchain, medical devices, renewable energy, sustainability, smart cities and digital transformation.

While there are several success stories, India can, and should, do more to leverage its huge potential and address large needs in the health sector. The government has to play a bigger role as a catalyser, in scaling the speed and scope of innovations. Four areas need urgent attention:

**Policy and regulatory support**: There is a need for a rationalised regulatory system that classifies health care facilities based on complexity and risk. Approvals can be streamlined based on specific parameters for both smaller clinics, nursing homes and health care applications, as well as larger facilities, hospitals, complex devices and procedures. A one-size-fits-all approach overwhelms the system, delays approvals, and distracts attention from critical issues. We also need to shift focus from process-heavy regulations to outcome-based ones, measuring the success of facilities by patient satisfaction, infection rates, and adherence to best practices, while allowing flexibility in achieving these outcomes.



**Funding and investment**: The current funding for the health sector is abysmally low, even though India's public health expenditure as a percentage of gross domestic product (GDP) increased from 1.2% to 1.8% between FY2015 and FY2023. The National Health Policy (2017) aims to raise this to 2.5% by 2025, focusing on preventive and primary health care, financial protection at secondary and tertiary levels, and free drugs, diagnostics, and emergency care at public hospitals. The policy also encourages private sector collaboration with financial and non-financial incentives. However, the implementation of the national health policy vision has been slow. Post-Covid, it is imperative to enhance the focus on emergency care and noncommunicable diseases. The government should prioritise funding for health care infrastructure, innovation, and the skill development of medical professionals, aiming to increase health care spending to 2.5% of GDP.

**Training and capacity-building**: To effectively promote innovations in the health sector, the government should focus on robust capacity building and financing support for entrepreneurs. These include offering specialised training programmes, workshops and mentorship opportunities tailored to health sector innovations, equipping entrepreneurs with the necessary skills and knowledge to navigate regulatory landscapes and commercialise their ideas. Innovation hubs and incubators can provide crucial infrastructure and networking opportunities. The government should create targeted funding mechanisms such as grants, low-interest loans, blended finance, and venture capital funds specifically for health tech startups. This support can be complemented by tax incentives for investors and co-investment programs that leverage private sector funding. Fostering a supportive ecosystem can stimulate groundbreaking advancements in health technology and improve overall public health outcomes.

**Proactively promoting innovations**: To effectively identify and harness opportunities for innovations, the government can implement a multifaceted strategy that includes organising start-up challenges and competitions to showcase groundbreaking ideas and attract investment. Additionally, the government can facilitate partnerships between startups and industry players, creating procurement programmes that prioritize innovative solutions, and integrate new technologies into public services and infrastructure. Policy frameworks can support by promoting scalability, provide incentives for early adopters, and establish regulatory pathways that streamline the integration of new technologies.

India stands at a critical juncture in its health care journey, with the potential to not only revolutionise its own health care landscape but also to set a precedence for the world. The nation's commitment to innovation, combined with its rich pool of talent and entrepreneurial spirit, positions it as a global leader in delivering affordable, high-quality health care. Steve Jobs famously said "innovation distinguishes between a leader and follower" As India continues to innovate and invest in its health care sector, it will not just create a healthier nation but also offer hope and inspiration to the global community.



## Varun Khanna

Group Managing Director, Quality Care India Ltd. Member of NATHEALTH & Co-chair, NATHEALTH Provider Forum

## Strengthening India's Healthcare Infrastructure: The Need for Smart Hospitals



India's healthcare system is at a turning point. With a growing population, increasing disease burden, and rising patient expectations, traditional hospital models are struggling to keep pace. The need of the hour is a fundamental shift—one that leverages technology, automation, and data-driven decision-making to create Smart Hospitals that are efficient, patient-centric, and future-ready.

## Why India Needs Smart Hospitals?

India faces serious healthcare challenges. The number of hospital beds is below the WHO recommendation of 2 beds per 1,000 people. Private hospitals provide 48% of the country's hospital beds and handle 60% of all hospitalized cases, but shortages still affect accessibility complimented by the fast that we have only 0.88 doctors per 1,000 people, improving healthcare delivery is critical.

Financial constraints remain a concern despite increasing private insurance coverage and government initiatives like Ayushman Bharat PMJAY. While India is a preferred healthcare destination due to its cost-effectiveness, affordability for lower-income populations continues to be a challenge.

The country is also witnessing a shift in its disease burden. India is the world's fastestgrowing cancer market, with a sharp increase in lifestyle-related diseases—one in three Indians above 30 is diabetic, or hypertensive. In response, healthcare models and government policies are shaping from treatment-based approaches to preventive care and early screening initiatives.

At the same time, patient expectations are evolving. Today's patients demand greater transparency in treatment costs and progress updates, emphasizing the need for hospitals to enhance engagement and trust.



## The Transformative Pillars of Smart Hospitals

In India, 56% of hospitals are still following traditional approaches to patient care. Some of the early adopters have realized the need for the necessary digital tools for AI-driven diagnosis and complex smart healthcare solutions to provide better integrated support and enhanced patient experience.

A key concern is the shortage of trained professionals, particularly in upcoming technology like robotic surgery and digital healthcare applications. Additionally, India's hospital infrastructure falls short of meeting the rising healthcare demands and the high cost of upgrading the infrastructure and implementing digital systems further slows this transition, underscoring the urgent need to develop both technological capabilities and specialized skills.

To address these challenges, hospitals need better training programs, increased investment in digital healthcare, and stronger collaborations between the government and private sector. Expanding medical education, upgrading hospital facilities, and integrating smart technologies will help speed up the shift to digital healthcare. Additionally, funding support and public-private partnerships are crucial to ensuring that hospitals can afford this transformation.

A clear and practical roadmap is essential to align technology, policies, and patient care effectively. By adopting AI-powered solutions, telemedicine, and IoT, hospitals can improve efficiency and accessibility. With the right strategy, India can build a modern, technology-driven healthcare system that benefits both patients and medical professionals while ensuring better healthcare delivery.

#### Readiness Today: The Way Forward

The transformation to Smart Hospitals is no longer an option but a necessity. To meet India's growing healthcare demands, the country must embrace AI, automation, and digital health ecosystems to build an accessible, efficient, and future-proof system. This requires:

•Commitment from Policymakers, Healthcare Leaders, and Technology Providers to drive nationwide adoption.

•Investment in AI-Driven, Patient-Centric Models to ensure equitable, high-quality healthcare.

·Scalable, Digital-First Solutions that bridge infrastructure and accessibility gaps.

By leveraging cutting-edge medical innovations, India has the potential to lead the global Smart Healthcare Revolution, ensuring every citizen has access to world-class medical care-regardless of geography or income level.



## Establishing the Path to Smart Hospitals

In India, 56% of hospitals are still following traditional approaches to patient care. Some of the early adopters have realized the need for the necessary digital tools for AI-driven diagnosis and complex smart healthcare solutions to provide better integrated support and enhanced patient experience.

A key concern is the shortage of trained professionals, particularly in upcoming technology like robotic surgery and digital healthcare applications. Additionally, India's hospital infrastructure falls short of meeting the rising healthcare demands and the high cost of upgrading the infrastructure and implementing digital systems further slows this transition, underscoring the urgent need to develop both technological capabilities and specialized skills.

To address these challenges, hospitals need better training programs, increased investment in digital healthcare, and stronger collaborations between the government and private sector. Expanding medical education, upgrading hospital facilities, and integrating smart technologies will help speed up the shift to digital healthcare. Additionally, funding support and public-private partnerships are crucial to ensuring that hospitals can afford this transformation.

A clear and practical roadmap is essential to align technology, policies, and patient care effectively. By adopting AI-powered solutions, telemedicine, and IoT, hospitals can improve efficiency and accessibility. With the right strategy, India can build a modern, technology-driven healthcare system that benefits both patients and medical professionals while ensuring better healthcare delivery.

## Readiness Today: The Way Forward

The transformation to Smart Hospitals is no longer an option but a necessity. To meet India's growing healthcare demands, the country must embrace AI, automation, and digital health ecosystems to build an accessible, efficient, and future-proof system. This requires:

- Commitment from Policymakers, Healthcare Leaders, and Technology Providers to drive nationwide adoption.
- Investment in AI-Driven, Patient-Centric Models to ensure equitable, high-quality healthcare.
- Scalable, Digital-First Solutions that bridge infrastructure and accessibility gaps.

By leveraging cutting-edge medical innovations, India has the potential to lead the global Smart Healthcare Revolution, ensuring every citizen has access to world-class medical care-regardless of geography or income level.



## Chaitanya Sarawate

Managing Director, Wipro GE Healthcare and President & CEO, GE HealthCare South Asia

# The Policy Pivot for India's Healthcare System: Access & Quality



The most populous country in the world, India's economy is poised to become the third largest by FY28 with a GDP of \$5 trillion. This economic expansion is lending a fillip to the growth of healthcare industry across provider, diagnostic, health insurance and Medical Devices (MedTech) sectors. Particularly, India has emerged as the world's fastest growing MedTech market resulting in the Government defining it as a Sunrise Sector.

The Union Budget 2025-26 allocated ₹99,858.56 crore for the health sector, which is an 11% increase from the previous year. With policy level initiatives to increase focus on R&D, 'Atmanirbhar Bharat' agenda picking pace, expanding budgetary allocation, and impetus to boost local manufacturing- we are at the cusp of a major change.

## Bridging Infrastructural Gaps

While the government's focus on self-sufficiency stands strong, historically, infrastructural, and human resource gaps, have impacted access to care in India. The country currently has 1.3 hospital beds per 1,000 population which is a substantial improvement since 2014.[1] However, reports indicate, "an additional 3M beds will be needed for India to achieve the target of 3 beds per 1,000 people.[2]" Today, the doctor-population ratio in the country is 1:834; better than WHO standard of 1:1000 and substantial progress from 2014. Simultaneously, there are 3.4M registered nurses and 1.3M Allied Healthcare Professionals in the country.[3] This has significantly bridged the gap between need and availability of healthcare personnel.

Over the years, government has made consistent efforts to bridge infrastructural roadblocks. Latest statistics indicate that there are ~1,75,000 Ayushmann Bharat centres providing primary health care to communities closer to their homes. Moreover, 21.9 crore beneficiaries are enrolled under Ayushman Bharat Pradhan Mantri – Jan Arogya Yojana (AB PM-JAY) Scheme (January 2023).[4]Government's focus on gaps is also reflected in its Make in India 2.0 concrete action plans that have created a conducive environment for investment in health infrastructure.



While infrastructural and human resource gaps ameliorate, India's dependence on imported MedTech stands at a staggering 75%. Government is taking strategic steps to address overdependence on imports, especially from China, to ensure equitable access to care without compromising nation data and economic security. The recently launched National Medical Policy 2023 provides impetus to the vision of not just making India Atmanirbhar but a global leader in innovation & manufacturing of MedTech, achieving 10-12% global share over next 25 years. While implementation of Medical Device Rules 2017/2020 under aegis of (Central Drugs Standard Control Organisation, CDSCO) is a positive move towards ensuring the safety and efficacy of MedTech as per WHO norms.

## Digital Future with Innovations Leading the Way

India is the most populous country with growing ageing population and a threatening burden of non-communicable diseases. Even as we strengthen healthcare infrastructure, human resource capacity and reduce dependence on imports, the urban-rural divide in India will continue to persist. A major share of the healthcare infrastructure continues to be concentrated in metro cities. The geographical expanse and population distribution calls for more innovative approach to healthcare delivery that is leverages local strengths such as mobile penetration, cheap data, and leverages India's unique digital stack.

Digital healthcare is the most promising enabler to ensure healthcare reaches the last mile using the mobile penetration, low-cost data, and India stack. Launch of National Digital Health Mission offers accessibility and equity in health services as demonstrated during Covid vaccination roll out. The state-of-the-art digital health systems can capitalize on core digital health stack with power of Artificial Intelligence and more. As the government moots ₹1 lakh-crore corpus for research and development in its interim budget, it is set to open new doors to bridge the innovation gap in the country. It is hoped that a substantial portion of the spend is allocated towards innovation that can enhance access to quality care via digital health.

At the same time, it is encouraging to see the government is taking steps like 'Promotion of Research and Innovation in Pharma MedTech' (PRIP) to push local manufacturing from cost-based to innovation-based manufacturing. The coming decade will need more innovation hubs, and collaboration across the healthcare sector to invest significantly in R&D. These local innovations will reduce our dependence on imported MedTech while making India a powerhouse in global MedTech markets.

#### Conclusion

Finally, it is encouraging to see an increased allocation to healthcare coupled with creation of stable policy framework that supports closing of gaps in healthcare infrastructure and human resource capacity. Additional impetus on innovation, reducing import dependence in MedTech (especially on China) and creation of a digital health ecosystem that will allow India to leapfrog in delivering equitable access to quality care. This makes Indian healthcare landscape poised for a promising future in the Amrit Kaal.



## Mr. Rajit Mehta

MD & CEO, Antara Senior Care & Member of NATHEALTH



## Bringing out the importance of Senior Living in India

India is experiencing a remarkable demographic shift, with a rapidly growing elderly population. This presents both challenges and opportunities for the nation. Traditional caregiving models, often centred around joint family structures, are evolving. As nuclear families become more prevalent and young adults pursue opportunities in urban or global arenas, the need for alternative care solutions has become increasingly apparent. Senior living communities emerge as a compelling response to these changing dynamics. These communities offer a lifestyle choice that prioritises independence, well-being, and social engagement. For many seniors, it represents an opportunity to embrace a new chapter in life, filled with purpose, freedom, and companionship.

By choosing senior living, individuals assert their agency in shaping their later years. They gain control over their living environment, healthcare decisions, and social interactions. These communities provide a platform for seniors to cultivate new interests, pursue hobbies, and connect with like-minded individuals. It's about living life on one's own terms, free from the constraints of traditional caregiving roles.

## A Lifestyle of Well-being and Purpose

Senior living communities are designed to foster a lifestyle characterised by well-being and purpose. These vibrant environments offer a range of amenities and services tailored to the needs and preferences of seniors. From fitness centres and swimming pools to libraries, hobby rooms, and social spaces, residents have ample opportunities to stay active, engaged, and connected. A key aspect of senior living is the emphasis on holistic health and wellness. These communities often provide access to healthcare professionals, wellness programs, and nutritious dining options. Residents can participate in fitness classes, yoga, meditation, and other wellness activities to maintain physical and mental well-being.

Beyond physical health, senior living communities nurture social connections. Residents have the chance to build new friendships, share experiences, and participate in group activities. This sense of belonging and camaraderie is essential for overall happiness and life satisfaction.



## The Freedom of a Maintenance-Free Lifestyle

One of the most significant advantages of senior living is the freedom from the burdens of homeownership. Residents can enjoy a maintenance-free lifestyle, free from the responsibilities of property upkeep, repairs, and household chores. This allows them to focus on what truly matters: spending quality time with loved ones, pursuing hobbies, and enjoying life to the fullest. Additionally, senior living communities offer peace of mind through enhanced security measures. Residents can feel safe and protected within their community, knowing that support is readily available. This sense of security contributes to a higher quality of life and allows residents to age in place with confidence.

By choosing senior living, individuals are making a proactive decision to prioritise their well-being and happiness. It is an investment in a fulfilling and enriching later life, filled with opportunities for growth, connection, and enjoyment.

## Government Policies: Nurturing a Thriving Senior Living Ecosystem

The growth and success of senior living communities in India are significantly influenced by government policies and support. A conducive regulatory environment is essential to foster innovation, investment, and accessibility in this sector. Incentives such as tax breaks, land allocation, and financial assistance can encourage the development of senior living facilities across the country. Government initiatives to promote awareness about the benefits of senior living can also contribute to a positive public perception. Moreover, collaborations between the government, private sector, and non-profit organisations are crucial for addressing the diverse needs of the elderly population. Public-private partnerships can facilitate the development of affordable and accessible senior living options, ensuring that these communities are inclusive and cater to a wide range of income levels. By prioritising the well-being of its elderly citizens and creating an enabling environment for senior living, India can position itself as a global leader in age-friendly communities.

## A Brighter Future for India's Seniors

Senior living represents a transformative shift in how India cares for its elderly population. By prioritising independence, well-being, and social connection, these communities offer a higher quality of life for seniors. As the nation continues to evolve, it is imperative to create a supportive ecosystem that encourages the growth of senior living options. Government policies, private investments, and societal attitudes play crucial roles in shaping the future of eldercare and by fostering collaboration and innovation, India can establish itself as a global leader in senior living, ensuring that its elderly citizens enjoy a fulfilling and dignified later life. The journey towards a society that truly values its elders is ongoing. By embracing senior living as a viable and desirable lifestyle choice, India can build a brighter future for generations to come.



## Digital Personal Data Protection Act, 2023 and Its Impact on Health Industry

## Mr. Gautam K. M.

Partner, Krishnamurthy & Co (K Law), Member of NATHEALTH

## Ms. Ridhi Kalra

Senior Associate, Krishnamurthy & Co (K Law), Member of NATHEALTH

In August 2017, the Supreme Court of India, in a landmark decision in the case of Justice K.S. Puttaswamy (Retd.) & Anr. v. Union of India recognized the right to privacy as a fundamental right under the Indian Constitution. Following this judgment, the Indian government proposed a few versions of the Personal Data Protection bill in the Parliament before passing the Digital Personal Data Protection Act, 2023 (Act), and the Act was finally published in the official Gazette of India on the 11th August, 2023, making it official legislation of India for personal data protection and privacy.

## Need for the Legislation

In this busy age, most individuals i.e., data principal under the Act (Data Principal) provide their data to various organisations including private and state-controlled without much thought and with a belief that their data is being collected for the purpose of rendering services requested by such individuals, whereas, some organisations have gone far beyond to use the personal data collected in the garb of providing the services, for the purposes unknown to the Data Principals. The lack of adequate security measures by organizations has also contributed to the growing cyber security attacks and ransomware risks in India. A report by the Economic Times in November 2023 stated that nearly 60% of healthcare organizations globally suffered a cyberattack in the past year.

The US recognized the requirement of legislation for the protection of health data some decades back and enacted the Health Insurance Portability and Accountability Act in 1996, with the primary goal of safeguarding sensitive patient health information held by healthcare providers. At first, India introduced Information Technology (Reasonable security practices and procedures and sensitive personal data or information) Rules, 2011 (SPDI Rules) aiming to regulate the processing of sensitive personal data in digital space, where it also recognized health data as a sensitive personal data, however, these rules were not consistent enough with the rapid technological advancements that took place in the subsequent years and a need for robust overarching legislation was felt for addressing individual's privacy concerns and for protection of personal data.



#### Introduction of the Act to the Public

In this digital era of the free flow of data, it was highly imperative that there exists a strict legislation to regulate the personal data exchange to protect and maintain the integrity of the individual's personal data and this Act will bring confidence in the minds of the Data Principals that the privacy of their personal data is not just protected as their fundamental right but protected by a robust legislation giving more voice to the Data Principals in the manner in which their personal data is handled.

#### Transformations

The enactment of the Act shall replace the Section 43A of the Information Technology Act, 2000 (IT Act) and the SPDI Rules. The new legislation imposes onerous obligations on the persons determining the means of processing the digital personal data i.e., the data fiduciary under the Act, irrespective of the sensitivity of personal data, scrapping the classification of the health data as sensitive personal data as provided in the SPDI Rules.

As the name of the Act suggests, this law only protects the personal data which is collected in a digital form or if collected physically is later digitized, so this Act with its present provisions may not apply to the handling of data by the traditional clinics, vaccination drives, healthcare facilities which still collect patient's data in physical entry register and do not digitize it ever.

Most organizations today collect personal data by placing cookies on an individual's system and the individual accepts those cookies to avoid the pop up which keeps repeating unless an individual has not actioned on it, and consent to process personal data is deemed by these data fiduciaries upon acceptance of their privacy policy by the Data Principal by merely accessing the website of these data fiduciaries. The Act imposes on healthcare providers an obligation to obtain an accurate, informed consent from patients backed by an affirmative action by such patients which consent request need to be backed with a privacy notice detailing the manner in which the patient may exercise her rights in the digital personal data collected by these healthcare providers and the recourses available to such patient for grievance redressal. In case of children and persons with disability being the patient, the healthcare providers will have to ensure that they obtain a verifiable consent from their parents or legal guardians.

Also, the legislatures have come up with a unique provision where privacy notice is required to be made available in 22 languages officially recognized under the eighth schedule of the Indian constitution other than English, which may require the healthcare providers to implement appropriate technological measures to provide this privacy notice in the regional languages, if requested by the Data Principal. These provision not just add an obligation on the healthcare providers to obtain informed consent but will help educate the Data Principal about their personal data and build a nation of more informed Data Principals, who are more vigilant about their rights against any unauthorized processing of their digital personal data, however, for the healthcare providers they will have to ensure proper compliance with the requirement of privacy notice to ensure there is no breach at their end.



Amongst other rights, this new Act allows the patients to nominate another individual responsible to exercise the rights on behalf of the patient in her personal data in the event of patient's death or incapacity, also enabling the healthcare providers to reach out to concerned person for the consent to process the personal data of such a patient.

While the Act is a robust legislation focusing on the privacy of the individuals, it also allows the state and other data fiduciaries process the personal data for certain legitimate uses as provisioned under the Act and provides for remedies for the stakeholders under the Act.



## Mr. Hari Thalapalli

Director and CEO, Call Health, & Member of NATHEALTH

## Healthcare Digitization through Ayushman Bharat Digital Mission: Bridging the Gap

Over the past few decades, technology has dramatically transformed consumer experiences across various sectors, from retail to travel. However, healthcare has lagged behind in fully integrating digital solutions that can revolutionise patient care and accessibility. This gap is particularly evident in India. The Ayushman Bharat Digital Mission (ABDM) seeks to bridge this divide by creating a cohesive digital healthcare ecosystem and an information highway.

## Technological Advancements in Medicine

Medical technology has advanced remarkably, enabling unprecedented insights into the human body and even allowing for the editing of genes to combat deadly diseases. Innovations such as MRI, CT scans, and genomic editing continue to revolutionise diagnostics and treatment. However, access to these advanced technologies and their integration into everyday healthcare remain inconsistent.

## The Stagnation of Healthcare Accessibility

While sectors like Edutech, Foodtech, and Travel have rapidly adopted digital innovations, the healthcare sector has been slower to embrace these changes. Unlike other consumer technologies, healthcare requires a more nuanced approach due to its episodic nature and focus on curative care. The urgency and emotional weight associated with ill health often necessitate in-person consultations for comfort and healing. Additionally, doctors' busy schedules and the high demand for their time leave little room for online engagements.

Despite a decade of innovation in HealthTech and regulatory efforts, access to primary healthcare in India remains limited. As of 2021, the eSanjeevani platform had conducted over 14 million teleconsultations—a commendable number but still insufficient for a country with over 1.3 billion people. A significant barrier to digital health adoption is the lack of user awareness and understanding of its tangible benefits. Furthermore, healthcare providers and doctors have been slow to adopt digital tools, with online consultations representing only a small fraction of total medical consultations.



## The Benefits and Challenges of Digital Health Adoption

Online doctor consultations offer significant advantages, particularly in a country like India, where geographical constraints and limited medical expertise often hinder access to care. According to a World Bank report, the average Indian spends approximately 4.6 hours traveling to healthcare facilities, significantly impacting productivity and economic growth. Online consultations can help alleviate this burden. The rapid increase in internet and mobile penetration—India had over 751.5 million internet users as of January 2024—facilitates the adoption of digital healthcare solutions. These digital interactions can effectively manage many common ailments, although some conditions will always require in-person visits. Despite these advantages, progress in this area has been slow.

Continuity of care is another critical issue. Physicians often lack access to patients' previous medical records, leading to less effective treatment and potential cognitive errors. A unified digital health solution like ABDM can address this problem by ensuring comprehensive access to longitudinal patient data.

## The Role of the Ayushman Bharat Digital Mission

The ABDM represents a significant step toward establishing a structured digital health information highway. It aims to integrate the needs of patients, healthcare providers, and professionals while prioritizing data privacy and continuity of care. However, for the ABDM to achieve its full potential, mandatory adoption of its standards by healthcare providers is essential. Currently, awareness and adoption rates are minimal, especially among private-sector players.

## Public vs. Private Healthcare

India's healthcare needs in major cities are predominantly served by private providers, catering to perhaps 20% of the population. In contrast, an underfunded public health system serves the remaining 80%. However, improvements in India's road and transport infrastructure over the past decade have enabled citizens to reach the nearest city in case of emergencies. A robust digital healthcare infrastructure could further enhance access to quality care across the country, leveling the playing field between urban and rural populations.

## Government's Pivotal Role

To catalyze this transformation, the government must implement several critical mandates. These include ensuring that every qualified physician dedicates a mandatory number of hours to online consultations and that all health records—from diagnostic reports to discharge summaries—are uploaded to the patient's electronic health record (EHR). These mandates could serve as a strong starting point for widespread adoption.



## The Future of Digital Healthcare

Private players are likely to develop innovative applications that make digital healthcare appealing and user-friendly for both citizens and providers. These apps may offer features that enhance patient engagement and streamline access to affordable care. However, the success of such initiatives depends on foundational support from the government and widespread adoption of the ABDM framework.

Healthcare digitization, led by the Ayushman Bharat Digital Mission, holds the promise of transforming India's healthcare landscape. By addressing issues such as data privacy, increased transparency in the financial records of providers, and misuse of information by payers or other agencies, the ABDM can pave the way for a more equitable and efficient healthcare system. The journey is challenging, but with coordinated efforts from the government, private sector, and technology providers, a digitally empowered healthcare future for India is within reach.

## MedTech Innovations Empowering ABHA For National Healthcare Transformation



## Mr. Guruprasad S

Vice President, Engineering Multi-Market, Bosch Global Software Technologies, Member of NATHEALTH

The Ayushman Bharat Health Account (ABHA), functioning within the framework of the Ayushman Bharat Digital Mission (ABDM), represents an essential effort by the Indian Government to further healthcare digitisation. This initiative also referred to as the health ID initiative, seeks to develop a unified health data repository for all Indian citizens. Individuals possessing an ABHA can retrieve their medical records electronically from any place at any given time. The ABHA database operates as a centralised repository for health data, offering a platform for health awareness, standardisation of practices, and efficient public health communication.

In the last ten years, India's healthcare sector has seen notable advancements, diminishing the disparity between rural and urban healthcare. The COVID-19 pandemic accelerated the adoption of telehealth and digital medical innovations, reshaping the healthcare landscape. Nonetheless, it underscored preexisting healthcare inequalities impacting ethnic and racial minorities, rural populations, the underprivileged, and the elderly. Government-led initiatives involving controlled supply chains endeavoured to mitigate these disparities. Concurrently, healthcare providers and MedTech companies adjusted to the evolving norms, prioritising healthcare digitisation as a pivotal enabler.

ABHA facilitates easier sharing of health-related information, equipping individuals with an enhanced level of oversight over their medical care and personal data. The process of ABHA implementation across all states presents a multitude of challenges, which encompass engaging the participation of private entities and state administrations, handling issues pertaining to interoperability, and addressing of biases of a linguistic and social nature. The diagram below emphasizes the key requests from the ABHA Ecosystem for each stakeholder.

Technology holds the key to successful implementation and widespread acceptance of ABHA. MedTech companies are key partners to develop in-country for-country frugal solutions. Requests from each stakeholder in the ABHA ecosystem must be addressed. The key challenge for MedTech companies is to innovate and find solutions that will reduce cost, improve accessibility and personalization with ABHA as the pivot.

## Challenges MedTech companies will face in the Indian context are listed below,

1. User-Friendliness and Accessibility: Ensuring that ABHA interfaces are intuitive and easy to use for patients and healthcare providers. Localization is a key aspect of this platform in a country as linguistically diverse as India.



2. **Privacy and Security Concerns**: Addressing data privacy and security to protect sensitive health information. Adherence to guidelines and accountability for MedTech companies is crucial.

3. **Reducing Bias and Localization**: Developing solutions that account for cultural and regional variations and reducing bias.

4. **Bridging the Digital Divide**: Ensuring equitable access to ABHA across different socioeconomic backgrounds is key for large-scale adoption.

Though the challenges are many technological advancements are also gearing up to the task at hand. MedTech companies need to get ABHA into the ecosystem to cater to the stakeholders. Companies invested in secure sustainable data storage will be tested for scale in a country like India. Current offerings must be improved for the data requirements of a large population like India. A robust digital backbone delivering seamless access to data with centralized regulations will be key for the digital healthcare transformation. Availability and lean footprint of data which is completely tracked with ABHA as the primary healthcare ID can solve healthcare equity problems for the masses and ensure the government bodies of effective utilization of resources, this will also be instrumental in bookkeeping for audits if any.

Enormous data collected and tracked via a central identification will help all stakeholders to tailor personalized healthcare. Linking ABHA will enable personalized insurance for an individual based on the comorbidities and ensure easy claims processing. AI-driven technology that will use ABHA to predict healthcare needs will be the way to plan for the individual and the Government to define healthcare policy clearly mapping it to a region/population.

Communication to a large population with specific information for a government at times of a health crisis is a herculean task, Specific information needs to be shared with the targeted audience based on geographical locations, and ABHA is used as a pivot to engage for such special communications will be a boon. Designing using AR and VR technologies centrally and communicating it to a specific group will help resolve paniclike situations.

MedTech OEMs producing mobile applications, wearable devices, and prevention or posttreatment monitoring systems can also use ABHA as a connection link to the national health ecosystem ensuring that they are part of the overall digital mission. It would also entail a "Make in India" Program like SAMEER, a government organization that works with commercial medical device makers to design and develop domestic, reasonably priced medical products.

ABHA is a Government of India initiative to drive a health identity for each citizen under the ABDM. MedTech companies are key liaison to the government to provide economical & equitable solutions for a country as diverse as India. Technologies like telehealth used for remote monitoring integrated with ABHA will enable seamless care delivery. Data and AI applications for better-personalized care and health financials will be best pivoted on ABHA as an identifier. MedTech companies contributing to solutions that integrate ABHA will also be benefited by being complaint with future government programs like Make in India.



# Bridging the gap: Critical role of healthcare education and skilling in India

## Mr. Prashant Sharma

Partner, Krishnamurthy & Co (K Law), Member of NATHEALTH

## Mr. Ravindra Pai

Deputy Managing Director, Peerless Hospitex Hospital and Research Centre Limited

## Mr. Sumit Sinhal

Managing Director, KINS Hospital Member of NATHEALTH

With 1.3 billion people living in 3.3 million square kilometers, India is a country with enormous healthcare delivery issues. Despite, India being the second most populous country in the world, its healthcare system suffers from poor health indicators and a lack of workers. To address these challenges, there is a pressing need to enhance healthcare education and skilling, which are pivotal to building a robust, effective, and accountable health system.

The healthcare workforce in India is significantly undersupplied in the healthcare industry. To fulfill the increasing demand, an additional 1.54 million doctors and 2.4 million nurses are believed to be required.

The shortage emphasises how important it is to fund skill-building initiatives that effectively close the gap. India is committed to developing a strong healthcare workforce over the long term. By 2034, the government aims to have at least 2.5 doctors and 5 nurses per 1,000 people.

## Key drivers for skilling initiatives

The demand for skilling programs in the healthcare industry is driven by multiple sources. The ambitious plan to add 3 million beds by 2025 calls for a major increase in the number of highly qualified healthcare workers. Additionally, there is a greater need for highly qualified individuals who can meet the unique requirements of medical tourists due to India's expanding medical tourism sector.



This requirement is further highlighted by the intersection between healthcare and technology, where developments like generative AI, surgical robotics, and telemedicine are changing the way that healthcare is delivered.

Healthcare education is a continuous process. In hospitals, paramedical staff spend approximately 90% of their time with patients, necessitating extensive knowledge beyond their specialization. On-the-job training and ongoing education are essential for ensuring that healthcare personnel are capable of managing medical emergencies, reducing risks, and avoiding mistakes.

Hospital training programs have consequently developed into a wealth of information and practical experience.

## Patient safety and quality improvement

In healthcare settings, patient safety is the most important factor. Medical facilities are held to high standards of patient care through strict rules and regulations, such as those enforced by the National Accreditation Board for Hospitals & Healthcare Providers (NABH) and international standards, such as those of the Joint Commission International.

Healthcare personnel must acquire and adhere to standard training guidelines covering infection control, handling biomedical equipment, and basic life support.

Initiatives aimed at developing skills could increase the proportion of women working in the healthcare industry. Healthcare-focused apprenticeship programs provide women with defined skill development pathways and the opportunity to gain specialized knowledge and real-world experience.

These initiatives promote a diverse and competent workforce by addressing the skills gap and enabling women to assume more prominent roles in the healthcare industry.

To ensure an effective force of skilled healthcare professionals, collaboration between the government and private medical facilities is essential. Healthcare facilities can invest in coaching and training initiatives to make the workplace safer for employees and patients. Continuous skill improvement leads to better overall healthcare delivery by raising clinical outcomes, decreasing readmission rates, and increasing patient satisfaction.

## Emerging Trends and the Future

The healthcare industry is witnessing significant shifts in how services are delivered. Technological innovations like telemedicine, connected medical equipment, and AIassisted decision-making are driving the need for a workforce that is resilient, adaptable, and capable of providing the best care possible to individuals in need.



The demand for ongoing education and skill development grows as the sector develops in order to stay up to date with new treatment approaches, findings from science, and changing patient needs.

Enhancing patient care, coordinating healthcare, and advancing medical research all depend on healthcare education and skill development. To fulfill the changing needs of the healthcare business and guarantee the provision of high-quality healthcare services, it is imperative to invest in thorough and current healthcare education.

India can develop a workforce of healthcare professionals who are equipped to tackle both present and future issues by building a culture of ongoing learning and collaboration. Pathways to address challenges in medical education and skill training in India





## Mr. Siddhartha Bhattacharya

Secretary General, NATHEALTH



## Mr. Brajesh Singh

President, Arthur D Little India

India's doctor-to-population ratio has improved to 0.9:1000, nearing the WHO's recommended 1:1000. However, there is still a significant shortage of doctors in rural areas as well as specialists. About 1/3rd of the population is short of doctors, and we have only 0.2 specialists per 1000 people. This shortage is particularly acute in Community Health Centres (CHCs), crucial to rural health. Addressing issues in medical education and skill training such as lack of infrastructure, poorly leveraged private sector role and lack of digital technology use are critical. There are also additional challenges in the area of nursing that include low compensation, lack of career pathways, and high attrition rates, for holistic development of the healthcare sector.

While the Government has announced new medical colleges and AIIMS across the country, upgrading existing colleges and using existing hospitals infrastructure are practical options. A Centre for Social and Economic Progress (CSEP) study shows that the number of medical colleges and seats has increased over the past decade mainly due to the growth of government medical colleges and relaxed norms for setting up new medical colleges. Despite this, 57% of districts in India do not have a medical college and there is limited seat availability in existing ones. In 2022, 17.6 lakh candidates took the National Eligibility cum Entrance Test (NEET), with 56.3% qualifying, but only 12% secured a berth in a medical college, according to National Testing Agency.



## Giving DNB due recognition and increasing seats

Between 2015-16 and 2023-24, medical postgraduate seats have doubled with most of the increase happening in government medical colleges. Public colleges are primarily responsible for expanding postgraduate seat availability while private colleges tend to favour Diplomate of National Board (DNB) seats. Introduced by the government in 1975 to address the shortage of doctors and teaching faculty, the DNB course emphasizes practical training. Currently, DNB seats make up 19.7% of the total postgraduate seat pool, with 67% of these seats offered by private sector institutions.

Although private colleges have more undergraduate medical seats than government colleges, they also have the potential to help bridge the demand-supply gap for specialists, a process that requires significant investments. And this is where DNB seats can play a crucial role. A study by NATHEALTH shows that DNB seats have an additional demand potential of 7500 seats in private hospitals with over 200 beds. There are around 3.7 lakh beds among 200+ bedded private hospitals in India. But the total number of beds can go up to 7.5 lakh if hospitals with 100-200 beds are included. The private sector has an allocation of 9000 DNB seats, but unfortunately, that is not fully utilized. There is a possibility that if 100+ bedded hospitals are considered, the total potential DNB seats can go up to 35000 (with an error margin of 10%).

## Where are the barriers?

While there is a significant opportunity to expand DNB seat availability as mentioned earlier, there are barriers that need to be overcome. Among those are - the current distribution of approved DNB seats and penetration across various specialties which is a matter of concern. The National Board of Examinations (NBE) which awards the DNB postgraduate degree needs to tweak guidelines and reduce cumbersome processes to enable wider penetrations.

Private sector hospitals also face challenges in meeting infrastructural compliance (additional laboratory, library, faculty stipends) when increasing DNB seats. Given the shortage of specialists, it is crucial to re-evaluate the demand based on patient influx and prioritize optimal utilization of existing resources.

Perception is another hurdle that needs to be overcome through dedicated improvement initiatives to make DNB more attractive and widely accepted. Additionally, incentivizing the intake of DNB, and flexibility on additional infrastructure for incremental DNB seats will boost private sector participation.



#### Way forward

To increase the number of specialists, leveraging the DNB program effectively is crucial. Ensuring seats are filled with quality candidates matching demand with specialization is key. The NBE should create a strong marketing arm to promote the DNB program, offer student counseling, and build support among MBBS students and undergraduate residents. Additionally, addressing students' concerns about infrequent assessments or delayed re-examinations, which can cause a year's loss, is necessary.

The annual tuition fee for DNB could be raised by 50-75% based on fee rates at different colleges and all outstanding dues need to be settled within the next 30 days. Simultaneously, another step could be to ensure a minimum 33% stipend cost offset for each new DNB seat compared to the previous year's baseline. The additional funds generated can be used to strengthen academic infrastructure, increase faculty and other facilities. It will also be better for private hospitals to adopt the practice of public hospitals that require candidates to sign bonds and eliminate the no-bond requirement for private students. A reasonable percentage of overall capacity can be mandated to ensure that all hospitals consider DNB-certified specialists as full-time or part-time consultants. Changing the medical education policy to allow part-time or contractual doctors to fulfil part of the staffing criteria and enable standalone centres to offer DNB programs. A hub-and-spoke model that could enable small district hospitals to offer DNB programs in collaboration with neighbouring large private hospitals could also help in producing more specialists.

Designating hospital chains exceeding a specified minimum DNB seat threshold as centres of excellence would be a huge boost to the DNB program. Allowing foreign direct investment (FDI) in Higher Medical Education could enhance resources, expand the supply pool, improve technical proficiency, introduce modern simulators, refine pedagogy, strengthen faculties, and foster global partnerships. Additionally, exploring alternative financing options, such as loans and interest subvention schemes, is necessary to facilitate seat expansion.

Another way of stimulating the DNB program would be to establish innovation and simulation centers along with startup hubs, actively involving faculty to promote sustainability and enhance the student learning experience. For the DNB program to be effective, the government should facilitate the seamless mobility of faculty between Medical Colleges and Hospitals offering DNB programs, both in the public and private sectors. These recommendations, if implemented, could give India's healthcare system a much-needed shot in the arm.



## Mr. Somenath Chatterjee

Co-Founder, Versatile Healthcare Advisory LLP, Member of NATHEALTH

## The Role Of Healthcare Financing In India's Healthcare Evolution



The World Health Organization recognises health financing as a "core function of health systems that can enable progress towards universal health coverage by improving effective service coverage and financial protection." For a significant part of the Indian population, this is crucial given the rural-urban healthcare divide, the prevalence of low and middle-income groups, and the general lack of awareness about health concerns. These factors compromise our healthcare infrastructure and delivery.

Despite the notable evolution of our healthcare system, providers are yet to realise their true potential as global leaders. Healthcare financing can fuel their efforts with a multifaceted approach to provision, management, and accessibility for India's vast and diverse population.

The healthcare finance arsenal is designed to enable organisations to meet every person's needs and achieve positive patient outcomes. Proper and informed financial planning promotes operational efficiency, ensuring smooth day-to-day functioning, preparedness for unforeseen circumstances (highlighted by the COVID-19 pandemic), and adherence to regulatory parameters.

Private equity (PE) investments play a critical role in Indian healthcare. Hospital owners or promoters often opt for PE investments instead of accumulating more debt. PE investors aim to enhance financial performance by curbing expenses, enhancing service quality, boosting sales, and embracing technological advances, collectively improving the company's profit and loss statement and strengthening its balance sheet.

## Investors' steps in this direction

Substantial progress has been made in recognising changing healthcare priorities, as outlined in the National Health Policy of 2017. The policy aims for the highest possible level of health and well-being for all through a preventive and promotive healthcare orientation in all developmental policies. It emphasises professional standards, reducing inequity, ensuring universality, patient-centred quality care, financial and performance accountability, and adapting healthcare organisations based on new knowledge and evidence.



Healthcare finance has attracted significant recent investments. For example, the healthcare financing startup Icanheal raised Rs15 crores from IvyCap Ventures, offering customised solutions focusing on critical care needs like cancer. Platforms such as CarePay and SaveIN provide holistic care, leveraging digital zero-cost EMI to make "healthcare for all" a reality.

#### Private equity and healthcare investments

A 2016 Deloitte report acknowledged the growth of the Indian healthcare industry at double-digit rates over the past decade, predicting the medical devices market to be a USD 25-30 billion industry by 2025. Major buyouts in this sector by KKR, Temasek, and Warburg have garnered substantial attention due to significant investments and valuations.

In April 2023, Temasek spent USD 2 billion to raise its stake in Manipal to 59 per cent from 18 per cent, marking the biggest-ever hospital sector deal in India. This interest can be attributed to the demand for private care in smaller cities facing bed and equipment shortages and overburdened public facilities. Additionally, the alarming increase in chronic and life-threatening diseases has drawn foreign investor attention to Indian healthcare.

## The future of Indian healthcare

With increasing global deal activity, India's healthcare sector is emerging as a prime investment opportunity. The market's segmentation and under-penetration, particularly among private healthcare providers, offer significant long-term potential. India should no longer be associated with lack and ill-favored health outcomes. The India Private Equity Report 2024 by Bain & Company lists healthcare as a sector poised to attract significant investments due to supportive policies and large-scale assets across various subsegments.

These deals signify a commitment to a healthier nation, with healthcare providers equipped to serve people in what is considered the highest service to mankind. Investors who can scale their operations to meet the rising demand for high-quality care are likely to see substantial returns, echoing recent successes.

The risk-return profile for healthcare investments in India is particularly advantageous, offering considerable returns for relatively modest incremental risks compared to more developed markets. This dynamic, coupled with visionary leadership and substantial investments, positions India as a leader in global healthcare transformation.

Overall, India's healthcare sector, driven by growing demand, supportive policies, and strategic investments, offers a compelling opportunity for healthcare finance. Investors who seize these opportunities can anticipate robust growth and substantial returns, solidifying the sector's role at the forefront of global healthcare innovation and expansion.



## Mr. Himanshu Baid

Managing Director, Poly Medicure Ltd.

## The Transformative Role of Technology in MedTech: AI, Robotics, Machine Learning, and Beyond

In the landscape of modern healthcare, technology has emerged not just as a tool but as a transformative force, reshaping how medical professionals diagnose, treat, and care for patients. From Artificial Intelligence (AI) to robotics and machine learning, the integration of advanced technologies into MedTech is revolutionizing every aspect of the healthcare industry. These technologies are profoundly impacting medical practices and significantly enhanced patient outcomes as enablers.

Artificial Intelligence stands at the forefront of innovation in MedTech, offering unprecedented capabilities in data analysis, pattern recognition, and decision-making. Al algorithms can sift through vast amounts of medical data with speed and accuracy, assisting healthcare providers in diagnosing diseases earlier and with greater precision than ever before.

One of the most significant applications of AI in healthcare is in medical imaging. Machine learning algorithms can analyze radiological images, such as MRIs and CT scans, to detect subtle abnormalities that might be missed by human eyes. This not only enhances diagnostic accuracy but also expedites treatment planning, leading to improved patient outcomes and reduced healthcare costs.

Moreover, AI-powered predictive analytics are transforming patient care by forecasting disease progression and identifying individuals at higher risk of developing certain conditions. By leveraging patient data such as genetic information, lifestyle factors, and medical history, AI can personalize treatment plans, optimize medication dosages, and even predict potential adverse events, thereby enabling proactive interventions and personalized medicine.

In the realm of surgical interventions, robotics has ushered in a new era of precision and minimally invasive procedures. Robotic surgical systems, equipped with advanced sensors and robotic arms, allow surgeons to perform complex operations with enhanced accuracy and control.



The benefits of robotic surgery extend beyond precision. They enable surgeons to access hard-to-reach anatomical locations with greater ease, perform intricate manoeuvres with steadiness, and visualize the surgical field in high definition. As a result, patients undergoing robotic-assisted procedures often experience reduced pain, shorter hospital stays, and quicker return to normal activities compared to traditional open surgeries.

Furthermore, advancements in surgical robotics are expanding the scope of what is feasible in healthcare. From neurosurgery to cardiac interventions, robotic systems are pushing the boundaries of surgical innovation, offering new hope to patients facing complex medical conditions.

Machine learning, a subset of AI, plays a pivotal role in delivering personalized care and predictive insights in healthcare settings. By analyzing real-time patient data, machine learning algorithms can identify trends, detect anomalies, and predict outcomes with a level of accuracy that enhances clinical decision-making.

For instance, in intensive care units (ICUs), machine learning algorithms can continuously monitor vital signs, laboratory results, and other clinical parameters to alert healthcare providers to potential deterioration in a patient's condition. This early warning system enables timely interventions, reduces the incidence of adverse events, and improves overall patient safety.

In addition to real-time monitoring, machine learning contributes to the field of precision medicine by tailoring treatment strategies to individual patient profiles. By considering genetic factors, biomarkers, and response to previous therapies, machine learning models can optimize treatment plans, minimize side effects, and improve therapeutic outcomes.

While AI, robotics, and machine learning dominate discussions in MedTech, several other technologies are also shaping the future of healthcare. For example, wearable devices and remote monitoring technologies enable continuous health monitoring outside traditional clinical settings, empowering patients to actively manage their health and enabling healthcare providers to deliver timely interventions based on real-time data.

Furthermore, virtual reality (VR) and augmented reality (AR) are revolutionizing medical education and training by providing immersive simulations of surgical procedures, anatomical structures, and complex medical scenarios. These technologies enhance learning outcomes, improve surgical proficiency, and ensure healthcare professionals are well-prepared to handle challenging clinical situations.

Despite the transformative potential of technology in MedTech, several challenges must be addressed to fully harness its benefits. Data privacy and security concerns, regulatory complexities, interoperability of systems, and ethical implications surrounding the use of AI and robotics in patient care are paramount. It is essential to establish robust frameworks that prioritize patient safety, confidentiality, and equitable access to technological advancements.



Moreover, there is a need for ongoing collaboration between healthcare providers, technology developers, policymakers, and regulatory bodies to navigate these challenges effectively and ensure that innovations in MedTech translate into tangible improvements in patient outcomes and healthcare delivery.

In conclusion, the integration of advanced technologies such as AI, robotics, machine learning, and other emerging innovations is transforming the landscape of MedTech. These technologies are not merely tools but enablers of progress, driving innovations that enhance diagnostic accuracy, enable personalized treatment strategies, and improve surgical outcomes. As we continue to explore the possibilities of technology in healthcare, the future holds promise for a more efficient, effective, and patient-centred approach to medical practice.

By embracing technological advancements responsibly and collaboratively, we can navigate challenges, seize opportunities, and ultimately shape a future where technology empowers healthcare professionals, enhances patient care, and improves health outcomes for individuals around the globe.



## Mr. Mridul Karkara

Partner, YCP Auctus

Aiming to catalyze innovation, collaboration & policy evolution for making Indian pharma globally competitive and future-ready

#### Introduction and Context

The NATHEALTH Pharma Forum, which brings together leaders from various healthcare sub-sectors, has identified critical issues that need to be addressed. These issues range from the need for regulatory reforms (including updates to DCGI Biological Policy, IP and SSE policies, and e-pharmacy regulations), improving drug accessibility, and promoting innovation through funding and education etc. To address these challenges, the Pharma Forum has outlined three key themes and will develop whitepapers to drive discussions with the government and industry stakeholders:

• **Collaborate to Innovate** – Exploring how cross-sector partnerships can help pharma companies innovate more effectively.

• **Better Health for All** – Ensuring that India's growing middle-class benefits from healthcare advancements.

• **Rebuilding Trust in Indian Pharma** – Strengthening consumer confidence in the industry.

YCP Auctus, a fast-growing management consulting firm, will spearhead the development of the white paper in collaboration with NATHEALTH leaders, industry experts, and government stakeholders. As an Asia-focused consultancy with a strong regional presence and global project delivery, YCP Auctus brings deep expertise in healthcare and life sciences, having supported numerous clients across a diverse range of strategic imperatives.

The first whitepaper, Collaborate to Innovate, will explore "how" to innovate through more effective collaborations, mentioning areas of partnership between key stakeholders, examples from within or outside India, and the outcomes that can be achieved.

**Mridul Karkar**a, Partner at YCP Auctus and leader of the initiative, emphasized the need for an innovation-driven ecosystem: "The next phase of growth in India's pharma industry must be fueled by innovation. The goal is to build a supportive environment that enables India to lead in cutting-edge advancements, not just in manufacturing."



**Siddhartha Bhattacharya**, Secretary General of NATHEALTH, highlighted the significance of these whitepapers in shaping industry and policy actions: "These initiatives will serve as essential conversation tools to drive meaningful change and open new opportunities within the ecosystem."

## 2. Need for Innovation

The Indian Pharmaceutical Industry is at a transformative junction and is expected to grow at a CAGR of 10-11%, reaching US\$65-70 billion by 2030. While historically, India grew at the back of our entrepreneurial efforts and economies of scale leading to high-quality yet low-cost manufacturing, future growth will need to charter a different path.

For us to be truly recognized as a global leader, we will need to drive more Innovation. Majority would correlate innovation in the pharma industry with R&D efforts but to fuel the next phase of growth innovation needs to be broader. While innovation in product and R&D is crucial, it is equally essential to explore new business models across the value chain, enhance operational efficiencies, and leverage emerging technologies.

## 3. A case for a collaborative model to drive Innovation

It has been often said that alone you can go fast but together you can go farther. For the Pharmaceutical industry that needs to sustain growth, collaboration with the broader eco-system is going to be imperative.

Israel, ranking 4th for amount invested in HealthTech, is a prime example of how a strong ecosystem consisting of collaboration of various institutions can lead to world leadership in any industry.

Israel has 250+ VCs operating in Healthcare sector, 70+ healthcare-focused Innovation programs and significant financial and regulatory support from government, all coming together to foster the HealthTech industry. This has led to ~1600 innovative HealthTech companies, multiple MNCs having active presence and multiple Tech Transfer Offices (TTOs) which generate more revenue from IP sales than other countries except the US.

## 4. Potential collaborative models to drive innovation in India

In Indian context we will identify key Collaborative models to explore and how can they contribute to innovation while taking inspiration from global examples. Below are some initial examples to showcase briefly on what collaboration will be further explored in the white paper (non-exhaustive, actual whitepaper will include all key stakeholders across industry structure):


• Government for policy reforms on biologics, IP/SSE reforms, clinical trial regulations, trademarks, etc. (such as in China, where National Medical Products Administration (NMPA) implemented regulatory reforms to accelerate drug approvals)

• Academia for research advancements and talent acquisition (e.g. Novartis Institutes for BioMedical Research (NIBR), which collaborates with universities to create programs aligned with Novartis's research)

• **Insurers for innovative payment models** (e.g. Novartis partnered with payers and private insurers in the U.S. to introduce an outcome-based reimbursement model for Zolgensma)

• **Tech firms to harness AI, cloud computing, and advanced analytics** (e.g. Cipla collaborated with IBM Watson Health to utilize AI-powered analytics for analyzing patient data and creating personalized treatment plans for cancer patients.)

### 4. Next Steps

YCP Auctus and NATHEALTH will reach out to various industry leader to gather their point of views to build the white paper. With this collaborative effort, NATHEALTH and YCP Auctus aim to catalyze innovation, collaboration, funding, and policy evolution across sub-sectors, ensuring India's pharma sector remains globally competitive and futureready.



### Dr. Raajiv Singhal

Founding Member, Managing Director, and Group CEO, Marengo Asia Hospitals

### Driving Healthcare Innovation Through Collaboration

Healthcare innovation has always been at the forefront of our mission at Marengo Asia Hospitals. As the industry continues to evolve, the need for close collaboration between healthcare providers, start-ups, and industry leaders has never been greater. I firmly believe that the best way to foster ground-breaking advancements is by creating an ecosystem where emerging ideas are nurtured, tested, and implemented for the benefit of patients and the broader community.

It is in this spirit that we are proud to support NATHEALTH's Health Nexus Accelerator, an initiative that aligns with our vision of transforming patient care through technology and research. This program, launched in collaboration with IHFC (I-Hub Foundation for Cobotics) and NATHEALTH, is designed to mentor, guide, and connect healthcare start-ups with the right ecosystem to scale successfully. The Health Nexus Accelerator provides start-ups with much-needed industry mentorship, regulatory guidance, and access to key networks that can significantly improve their chances of success. The selection of promising start-ups across MedTech, diagnostics, AI healthcare platforms, telemedicine, and robotic medical devices demonstrates the vast potential of this initiative in shaping the future of healthcare.

### Supporting Innovation with Real-World Applications

At Marengo Asia Hospitals, we recognize that innovation must be rooted in practical applications to make a real impact. That is why we are extending our support to these start-ups by offering them the opportunity to run trials at our hospitals. Real-world testing and validation are crucial in ensuring that healthcare solutions are not only technologically sound but also effective in improving patient outcomes.

Moreover, if a start up's solution proves to be of value, we are open to long-term collaborations, integrating their innovations within our hospital ecosystem. By providing these start-ups with access to clinical environments, we hope to bridge the gap between conceptual healthcare advancements and their real-world implementation, ensuring that these innovations ultimately benefit the patients and communities we serve.



### MarengoVation: Pioneering Research and Industry Collaboration

Innovation at Marengo Asia Hospitals extends beyond supporting external start-ups. We have established MarengoVation, our dedicated program to drive research and innovation within our hospital network.

Through MarengoVation, we have developed:

- A structured Research and Ethics Committee to oversee ground-breaking studies.
- A dedicated internal team for statistical analysis, content development, and paper publication support.
- Partnerships with globally reputed research institutes to enhance analytics and participate in international forums.
- Engagements with clinical teams and industry leaders to design oncology workflows, validate AI-driven solutions, and develop home remote monitoring technologies.
- A robust platform to encourage our consultants to share their deep expertise, fuelling research outcomes that benefit communities at large.

We are also working closely with stakeholders across the healthcare ecosystem-including pharmaceutical companies, medical device manufacturers, AI innovators, and global research institutes-to ensure that research and innovation are aligned with real patient needs. Our goal is to bridge the knowledge gap between "what is made" and "what is required," ensuring that healthcare advancements are practical, scalable, and patient-centric.

### The Future of Healthcare Innovation

The collaboration between Marengo Asia Hospitals and NATHEALTH's Health Nexus Accelerator is a step towards building a sustainable, innovation-driven healthcare ecosystem. By providing startups with the right opportunities, resources, and clinical validation, we are helping to accelerate the adoption of transformative healthcare solutions.

I commend NATHEALTH and IHFC for their efforts in creating this accelerator and look forward to seeing the impact of these promising startups. As healthcare leaders, we have a responsibility to support and uplift the community, and through strategic collaborations like this, we can shape a future where innovation drives better healthcare outcomes for all.

### WE THANK OUR SPONSORS & PARTNERS









Our Experts hold a lifetime of excellence and they never give up. So, your cancer will.

#### No two cancers are the same,

hence we believe that every cancer type deserves a personalized and precision treatment designed specifically for that particular cancer. The reason why, our **Cancer Management Team** consists of a diversity of **highly skilled experts**, each dedicated to treat site-specific cancer.

When a patient comes to us with a specific cancer type, they are rest assured to be under the care of an expert who has **dedicated a lifetime**, to **proficiently treat that cancer type**, giving you a better chance to win over cancer.

### #WinOverCancer.





apollocancercentres@apollohospitals.com

Scan this QR code

# Be there for every adventure

Start now with a personalised **Apollo ProHealth check program** 

### **#NowNotTomorrow**

Personalised health check up

AI predicted health risks

Crafted by expert doctors



# We pioneer breakthroughs in healthcare.

For everyone. Everywhere. Sustainably. siemens-healthineers.co.in

At Siemens Healthineers, we pioneer breakthroughs in healthcare. For everyone. Everywhere. Sustainably. As a leader in medical technology, we want to advance a world in which breakthroughs in healthcare create new possibilities with a minimal impact on our planet. By consistently bringing innovations to the market, we enable healthcare professionals to innovate personalized care, achieve operational excellence, and transform the system of care.

Our portfolio, spanning in vitro and in vivo diagnostics to imageguided therapy and cancer care, is crucial for clinical decisionmaking and treatment pathways. With the unique combination of our strengths in patient twinning1, precision therapy, as well as

<sup>1</sup> Personalization of diagnosis, therapy selection and monitoring, aftercare, and managing health.



digital, data, and artificial intelligence (AI), we are well positioned to take on the greatest challenges in healthcare. We will continue to build on these strengths to help overcome the world's most threatening diseases, enable efficient operations, and expand access to care.

We are passionately pushing the boundaries of what is possible in healthcare to help improve the lives of people. For business queries: please email us at hc\_contact.india@siemens-healthineers.com or call our helpline: 1800 258 5828





### Committed to Improving Healthcare Access For All

Siemens Healthineers pioneers breakthroughs in healthcare. For everyone. Everywhere. Sustainably. As a leading medical technology company, Siemens Healthineers is committed to improving access to healthcare worldwide and is striving to overcome the most threatening diseases. The company is active in the areas of imaging, diagnostics, cancer care, and minimally invasive therapies, augmented by digital technology and artificial intelligence.

We are committed to improving healthcare access for all, limiting our environmental impact as we pioneer breakthroughs, and engaging our diverse Healthineers to achieve this impact on a global scale.

Our passionate colleagues in India, across 20 sales offices, a Development Centre in Bengaluru, 2 manufacturing facilities at Vadodara for Diagnostics, and Bengaluru for Medical Imaging, are supporting healthcare providers across the entire range of patient care – from prevention and early detection to diagnosis and to treatment and aftercare. Siemens Healthineers in India has been Great Place to Work® certified since 2018 and is recognized as one of the best workplaces in Health and wellness.



# CARE ABOVE ALL

A legacy defined by excellence. A journey filled with passion and purpose. CARE Hospitals has been transforming the scale and scope of healthcare in India by bridging the gap of quality healthcare and saving precious lives.

26 +Years

7 Cities

17 Healthcare Facilities

35+ Medical Specialties 3000+ Beds

Key Specialties: Cardiac Sciences | Neurosciences | Orthopaedics | Renal Sciences | Oncology | Integrated Organ Transplant | Gastroenterology, Hepatology and Bariatric Surgery | Vascular and Endovascular Surgery | ENT | Emergency and Critical Care | Woman and Child Care

HYDERABAD 040 61 656565

BHUBANESWAR 0674 61 65656 VISAKHAPATNAM 0891 61 65656

RAIPUR 0771 61 65656





NAGPUR 0712 61 65656 INDORE 0731 477 4444

CHATRAPATI SAMBHAJINAGAR 0240 236 6666

### WHERE ISION TS VIRTUE MEETS

As Southeast Asia's leading healthcare conglomerate, Quality Care India Limited (QCIL) unites three distinguished healthcare networks - CARE Hospitals, KIMSHealth, and Evercare Hospitals - setting new benchmarks in advanced medical care.

Our strategic integration of cutting-edge technology, specialized expertise, and comprehensive clinical protocols continues to transform healthcare delivery across the region, serving millions with precision and unwavering quality.

#### 4,500+ 25 13 39 Beds Advanced Cities Specialized Facilities Departments

#### Daily Impact:

1,400+ Inpatient Admissions | 14,000+ Prescriptions |

2,200+ Radiology Procedures | 1,000+ Dialysis Treatments

Corp. Office: Level One, MAA TV Building, GVK Kohinoor Road No. 02, Banjara Hills, Hyderabad - 500 034 Telangana India





#### 040 6810 6565



### Innovation at the Heart of Healthcare



At GE HealthCare, we believe in transforming healthcare through innovation, ensuring access to high-quality, cost-effective care for every individual. From digitization to advanced diagnostics, we are committed to driving change that benefits healthcare providers and patients alike. Together, we're shaping a future where healthcare is not just better — it's accessible to all.



For information on GE Healthcare products, Call: 1800 102 2977 You can also email us on TeamGEhealthcare@gehealthcare.com

### WHAT IF A HOSPITAL ISN'T A HOSPITAL?

At Jupiter, when we began our journey over 20 years ago, we were inspired to create a vibrant healthcare ecosystem that would put the patient's wellbeing first. Welcoming ambience. Spacious corridors. Green and open to air spaces for patients. 5-star quality food. Besides top-of-the-line equipments, OTs and some of the finest doctors and support staff in the region. Because the best hospital is the one that doesn't feel like one at all.

Bringing care into healthcare.



THANE • PUNE • INDORE





### What If the Hospital of Tomorrow Was Smarter, Greener, and Transformative?

Imagine a hospital that's not just about cures but about experiences—a hospital where state-of-the-art technology meets tender loving care. That's exactly what Jupiter Hospital is all about. Founded in 2007, we set out on a 'Patient First' philosophy, rendering healthcare not merely accessible but truly life-altering.

With Jupiter Hospital in Thane, off the Eastern Express Highway, we made world-class healthcare accessible. But that was not enough. In 2017, we took our vision to Pune, and in 2020, to Indore with Vishesh Jupiter Hospital, so more people receive the treatment they deserve.

Our Greenfield strategy—a future-ready model for healthcare that blends sustainability, innovation, and human touch.

From state-of-the-art facilities and expert doctors to patient-first infrastructure and green spaces, we're redefining what a hospital can be.

At Jupiter, we think hospitals should not just cure illnesses—they should make people well, feel better, and trust more. So, if the future of hospitals is about smarter technology, greener environments, and an energy that actually makes healing less hard, then surprise, surprise. The future is already here.

Come on in to Jupiter Hospital—where healthcare is high-tech, high-care, and low-key life-altering.



HUMANE BY PRACTICE

### **'PATIENT FIRST'** IS OUR PHILOSOPHY THAT GOES EVERYWHERE — WE GO —

We are a healthcare network that is rapidly growing. Our aim is to redefine healthcare by making it humane, one hospital at a time. We steadfastly practice this by keeping the interests of Patients before Profits, and by prioritising Care before Commerce.





Marengo CIMS Hospital, Ahmedabad (JCI Accredited)



Marengo Asia Hospitals, Sector 56, **Gurugram**  K. K. Patel Super Speciality Hospital, **Bhuj** (Managed by Marengo CIMS Hospital)





HUMANE BY PRACTICE



60 Minutes For Life

### Marengo Asia Hospitals EMERGENCY-READY TO TREAT:







### Heart Attack

### Symptoms to watch out for:

Chest pain with sweating, jaw pain, uneven smile, blurred vision, slurry speech, loss of balance or any other emergency

### Why Marengo Asia Hospitals:

24x7 availability of Multidisciplinary Team, Blood Bank, Radiology | Immediate intervention to stablise patient in any emergency | 5G Enabled Ambulance

### ADVANCED CENTRE FOR TRAUMA AND EMERGENCY CARE

EVERY MINUTE COUNTS, EVERY LIFE MATTERS

Ahmedabad | Bhuj | Faridabad | Gurugram

**@1800 309 9999** 



S Dr Lal PathLabs

**HARAT KA VISHWAS** 



**Our App** 



\*Price for Delhi-NCR only. For city specific price, call us / walk-in to nearest centre. T&C apply. Doctor consultation recommended before booking test.



# Anish Bafna

At Healthium, we have a new vision: "Access to precision medtech for every patient, globally." While we continue to increase our dominance in India and strive to reach 1.4 billion lives, we hope to partner with established players globally to be able to reach patients in their geographical area of dominance and give them access to high quality, value products.

essage from the CEO

# **OUR GLOBAL PRESENCE**

# Healthrum

 $\mathbf{1}^{\mathsf{ST}}$  indian medtech company to receive ce certification under the eu-mdr norms for class III implants



# **KEY FOCUS AREAS**



**GMP** 

ISO SO

**TGA** 

FDA

EU-MDR 2017/745 EU-MDR Certified

cGMP Certified

9001:2015 | 13485:2016

TGA Approved

US FDA 510 (k) Cleared

### **P. D. HINDUJA HOSPITAL** & MEDICAL RESEARCH CENTRE

### Spreading Health and Happiness For Over Seven Decades



### STATE-OF-THE-ART FACILITIES

- 520 Beds
- 87 ICU Beds
- 17 Advanced Operation Theaters
- HealthFirst Exclusive Preventive
  Health Check Facility
- Home Healthcare Services (Care@Home)
- CAP Accredited Laboratory
- More Than 45 Specialities

### **ADVANCED TECHNOLOGY**

- Digital Linear Accelerator
- Digital Broadband MRI Suites
- 3D Digital Mammography
- Gamma Knife
- PET Scan / SPECT
- PACS
- Latest Robotic Surgical System

### **CENTRES OF EXCELLENCE**

- Centre for Cancer Care
  Centre for Cardiac Care
  Centre for Neuro Care
  - Centre for Orthopedic Care
    Centre for Mother and Child Care

P. D. Hinduja Hospital & Medical Research Centre, Mumbai, India. www.hindujahospital.com Appointments, call: 022-67668181 / 45108181 (Mahim) | 022-45108989 / 61548989 (Khar)





### Maximize Shareholder Value with an Expert Partner

### Healthcare focused Investment Bank

Fund-Raising and Mergers & Acquisitions Advisory

30+ years team experience | 50+ deals advised | \$1bn+ deal value

Reach us: contact@indiumcapital.com









### Indus Health Plus Private Limited

Regd. Office: Indus House, Pride Port, Model Colony, Pune-411 016

### Call us on: +91-9552525755

Email: alliance@indushealthplus.com I www.indushealthplus.com

Indus Health Plus is dedicated to creating a healthier India. We invite you to join hands with us in this mission prevention.

# Together, we can create **A Healthier India**.





## Transforming Hope into Healing

Our aim is to transform the lives of patients globally, with an unwavering focus on providing the best to the communities that we serve.





### METROPOLIS

# Bridging diagnostic precision with a human touch.





India & abroad



200+ Labs in



4000+ tests & profiles

Present in 750+ towns in India



Detailed reports with actionable insights

At Metropolis, we understand that healthcare isn't about advanced technology, it's about understanding you. We combine the power of cutting-edge diagnostics with a team dedicated to compassionate care. Experience the best of both worlds; precise diagnosis and genuine human connection. Schedule your appointment today and discover a future filled with both clarity and comfort.

To book your appointment: Call 8422 801 801 or visit www.metropolisindia.com



### TRANSFORMING THE FUTURE OF HEALTHCARE



### **DELIVERING ON OUR PROMISE OF INNOVATION & QUALITY**







### **Pioneering Tomorrow's Healthcare**

With our history of 100 years of quality and technology, we will continue to support the precious lives of patients with all of our trusted partners around the world.

Advancing healthcare and enhancing patients' quality of life







### We thank our Sponsors & Partners 11th NATHEALTH Annual Arogya Bharat Summit 2025





# NABH





CARE

evercare

### **NATHEALTH Foundation Implementation Partners**



### Souvenir

### 11th NATHEALTH

### Annual Summit Arogya Bharat 2025

Healthcare Federation of India (NATHEALTH)



Annual Summit Report 2021 ↓



Annual Summit Report 2022 ↓



Annual Summit Report 2023 ↓



Annual Summit Report 2024 ↓

Souvenir compiled, edited & designed by **EVOKE (Health Biz Insight)** 



