

NATHEALTH[®]
Healthcare Federation of India

Arogya Bharat

2023



9th NATHEALTH Annual Summit
22 & 23 March 2023 . The Lalit. New Delhi

**Addressing current barriers & unlocking critical
pathways towards universal health coverage**

An initiative by

NATHEALTH[®]
Healthcare Federation of India

In association with

Digital Health & Innovation Partner

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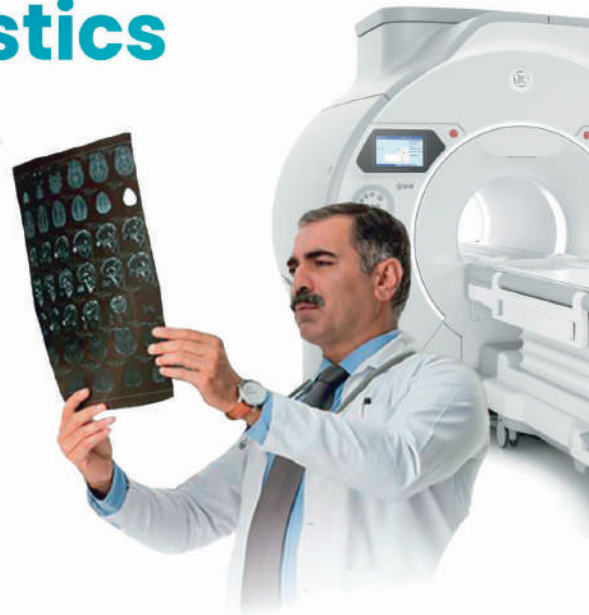
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NIPT with Microdeletions

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DAY 1: THOUGHT LEADERSHIP THEME	
Session 10:00 am – 11:00 am	
Curtain Raiser Plenary (Crystal Ballroom)	
10:00 am – 10:08 am Welcome Address and Presentation on Theme of the Event and Introduction to The Digital Health Report outlining pathways to scale adoption of Digital Health in India	Dr. Shruvan Subramanyam President, NATHEALTH
10:08 am – 10:27 am Introduction on Key Thought Papers:	NATHEALTH Leadership Team:
<ul style="list-style-type: none"> Allied Healthcare Skilling Healthcare Safety - Empowering Patients Health Financing Towards Tackling Missing Middle and Result Based Financing - Building PPP Through Innovative VGF Road Map Towards Expanding Dialysis Delivery Capacity in India 	Dr. Ashutosh Raghuvanshi Senior Vice President, NATHEALTH & Managing Director, Fortis Healthcare Ms. Ameera Shah Vice President, NATHEALTH Managing Director, Metropolis Healthcare Mr. Sunil Thakur Treasurer, NATHEALTH Partner, Quadria Capital Ms. Vrinda Mathur Secretary, NATHEALTH & Senior Principal, Financial Institutions Consulting, Asia, IQVIA
10:27 am – 10:35 am Special Address	Dr. Prathap C Reddy Founder President NATHEALTH, Founder Chairman, Apollo Hospitals
10:35 am – 10:55 am Keynote Address by Guest of Honor	Dr. Vinod K Paul Hon'ble Member (Health), NITI Aayog, Government of India
Releasing the Key Publications	

10:55 am – 11:00 am	<ul style="list-style-type: none"> Dialysis White Paper Health Financing Paper The Digital Health Report outlining pathways to scale adoption of Digital Health in India
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Special Announcements: 11:00 am – 11:10 am
Sponsor Announcements: 11:10 am – 11:20 am
Audience Poll Quiz: 11:20 am – 11:30 am

Plenary Session: Achieving Universal Health in Dialysis Through Strategic Public Private Partnership (Crystal Ballroom)	
Time: 11:30 am - 12:30 pm	
Session lead: Ms. Vrinda Mathur, Secretary, NATHEALTH & Senior Principal, Financial Institutions Consulting, Asia, IQVIA	
11:30 am – 11:35 am Setting the Context	Ms. Vrinda Mathur Secretary, NATHEALTH & Senior Principal, Financial Institutions Consulting, Asia, IQVIA
11:35 am – 11:45 am Special Address	Dr. Ranjan Choudhury VSM Advisor – Healthcare Technology National Health Systems Resource Centre (NHSRC)
11:45 am – 12:25 pm Panel Discussion: Achieving Universal Health in Dialysis Through Strategic Public	Moderator: Ms. Shambhavi Sharan Manager, Tax and Economic Policy Group, Ernst & Young LLP Speakers: <ul style="list-style-type: none"> Mr. Vikram Vuppala Founder & Chief Executive Officer, NephroPlus Mr. Bhaskar Guha Managing Director & Country Manager, Fresenius Medical Care India Private Limited

12:25 pm – 12:30 pm Summary & Conclusion	<ul style="list-style-type: none"> Mr. Indranil Roy Choudhury Group Chief Executive Officer, Apex Kidney Care Private Limited Dr. Saurabh Polkhrlyal Nephrologist, Co-founder & Director Vitus Care Dr. Narayan Pendse Vice President, Medical Strategy & Operations, Fortis Healthcare Mr. Manish Sardana President, PolyMedicare Limited
	Mr. Rajnish Gupta Associate Partner, India Tax and Economic Policy Group, Ernst & Young LLP

Sponsor Videos: 12:30 pm – 12:45 pm
Audience Poll Quiz: 12:45 pm – 01:00 pm
Lunch Break: 01:00 pm – 02:00 pm

Plenary Session: Health Financing (Crystal Ballroom)	
Time: 02:00 pm – 04:00 pm	
Session lead: Mr. Sunil Thakur, Treasurer, NATHEALTH & Partner, Quadria Capital	
02:00 pm – 02:05 pm Setting the Context	Mr. Sunil Thakur Treasurer, NATHEALTH & Partner, Quadria Capital
02:05 pm – 02:15 pm Presentation on the Health Financing Paper	Mr. Ashish Rampuria Director, PwC
02:15 pm – 03:00 pm Roundtable Discussion: PPPs (VGF) in Healthcare for Infrastructure Creation	Session Chair: Mr. Rajib Kumar Sen Senior Advisor, NITI Aayog

	Moderator: Mr. Mohit Khullar Managing Director, o3 Capital Speakers: <ul style="list-style-type: none"> Ms. Visalakshi Chandramouli Founding Partner, Tata Capital Healthcare Fund Mr. Panikaj Sinha Investment Officer at IFC, International Finance Corporation Dr. Pranav Mohan Lead - South Asia, Health & Education Investments Unit, Private Sector Operations Department Asian Development Bank (Virtual) Mr. Saurabh Sunjeja Principal, National Investment & Infrastructure Fund (NIIF) Mr. Arpan Malhotra Senior Vice President, Zone India, Healthcare Strategy & Business Development, Siemens Healthcare Private Limited Concluding Remarks by Session Chair: Mr. Rajib Kumar Sen Senior Advisor, NITI Aayog
03:00 pm – 03:45 pm Roundtable Discussion: Leveraging the Network to Cover the Missing Middle & Linking Reimbursement to Health Outcomes	Moderator: Dr. Rana Mehta Partner & Leader Healthcare PricewaterhouseCoopers Services LLP Speakers: <ul style="list-style-type: none"> Dr. K. Madan Gopal Senior Consultant, NITI Aayog Mr. Gautam Chakraborty Senior Health Finance Specialist, USAID Mr. Amitabh Dube Country President, Novartis India Dr. Raajiv Singhal Founding Member, Managing Director & Chief Executive Officer, Marengo Asia Healthcare Mr. Amol Nalkawadi Joint Managing Director, Indus Health Plus Mr. Mayank Bathwal Chief Executive Officer, Aditya Birla Health Insurance (Virtual)

AGENDA

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Audience Poll Quiz: 03:45 pm – 04:00 pm

Plenary Session: Pathways to Scaling Up Digital Health Adoption
NATHEALTH - NASSCOM Joint Session (Crystal Ballroom)

Time: 04:00 pm – 06:00 pm

Session lead: Dr. Shравan Subramanyam, President, NATHEALTH

04:00 pm – 04:10 pm Setting the Context	Mr. Sanjeev Malhotra Chief Executive Officer, Centre of Excellence for IoT & AI, NASSCOM
04:10 pm – 04:20 pm Keynote Address:	Shri Kiran Gopal Vaska Executive Director, IT policy & Coordination, National Health Authority (NHA), Government of India
04:20 pm – 04:30 pm ABDM Overview & Adoption	Shri. S Gopalakrishnan* Special Secretary (Health) Ministry of Health and Family Welfare (MOHFW) Government of India
04:30 pm – 04:40 pm Presentation: Challenges in ABDM Stack Adoption & Solution Framework to Improve Adoption	Mr. Barnik Chitran Maltra Managing Partner, ADL India & South-East Asia
04:40 pm – 05:20 pm Panel Discussion: How Digital Technology Can Help in Reimagining Primary Care in Post COVID Era	Moderator: Mr. Neeraj Jain Country Director, Program for Appropriate Technology in Health (PATH) Speaker: <ul style="list-style-type: none"> Dr. Sonia Trikha Khullar Director General of Health Services, Haryana Mr. Girish Krishnamurthy Chief Executive Officer & Managing Director, TotalMedical Mr. Prabhat Sinha Director of Public & Government Affairs Boehringer Ingelheim India Private Limited Ms. Ruma Banerjee Vice President, Ambuja Neotia Healthcare Venture Limited

05:20 pm – 06:00 pm Panel Discussion: Key Challenges to the Digital Adoption in Hospitals, MedTech & Diagnostic Chains & How to Overcome Those Challenges	Moderator: Mr. Gautam Khanna Chief Executive Officer, PD Hinduja National Hospital & Medical Research Centre Speakers: <ul style="list-style-type: none"> Dr. Alexander Thomas President, Association of Healthcare Providers India Dr. Om P Manchanda Managing Director, Dr Lal Pathlabs Mr. Yash Prithviraj Mutha Executive Director, Krsnaa Diagnostics Limited Mr. Sumeet Aggarwal Managing Director, Midmark India Limited
06:00 pm – 06:10 pm Concluding Keynote Address	Mr. Rizwan Kolta Co-Founder, Citius Tech, Kolta Foundation

Important Announcements from Emcee

Plenary Session: Future of Health and Areas of Imminent Breakthrough Opportunities

Time: 07:30 pm – 08:30 pm (Crystal Ballroom)
March 22, 2023

07:30 pm – 07:35 pm Setting the Context & Welcome	Dr. Harsh Mahajan Immediate Past President, NATHEALTH & Founder & Chief Radiologist, Mahajan Imaging
07:35 pm – 08:25 pm Special Address Followed by Q&A Session	Moderator: Dr. Harsh Mahajan Immediate Past President, NATHEALTH & Founder & Chief Radiologist, Mahajan Imaging Guest of Honor: Dr. Soumya Swaminathan Chairperson, MS Swaminathan Research Foundation Former Chief Scientist, WHO
08:25 pm – 08:30 pm Vote of Thanks	Dr. Harsh Mahajan Immediate Past President, NATHEALTH & Founder & Chief Radiologist, Mahajan Imaging

STARTUP & INNOVATION HUB (Parallel Track)

22 March 2023

Innovation Sessions: Industry Startup Interface Startup & Innovation Hub: 02:00 pm – 07:00 pm
(Regency 4 & 5)

INNOVATION THEME: INDUSTRY STARTUP INTERFACE

02:00 pm – 02:30 pm	Important Announcements
2:30 pm – 2:55 pm Welcome Address & Setting the context	Mr Sanjeev Malhotra-CEO Centre of Excellence for IoT and AICEO -- Centre of Excellence for IoT and AI, NASSCOM Mr Amit Mookim, VP & General Manager, South Asia, IQVIA
2:55 pm – 3:35 pm Fireside Chat	Moderator: Mr Amit Mookim, VP & General Manager, South Asia, IQVIA Speakers: <ul style="list-style-type: none"> Mr Kabir Mahajan, Associate Director, Mahajan Imaging & Labs Dr Arjun Dang, CEO, Dr Dang's Lab Ms Anu Acharya, Founder & CEO, Mapmygenome Mr Deepak Sahni, Founder & CEO, Healthians Mr Girish Raghavan, VP, Digital Engineering & Technology, GE Healthcare
3:35 pm – 4:10 pm Fireside Chat	Moderator: Mr Vidur Mahajan, CEO, CARPL, AI Speakers: <ul style="list-style-type: none"> Dr Sameer Gupta, Director, Metro Hospitals Ms Ruma Banerjee, VP, Ambuja Neotia Healthcare Venture Limited Dr Dhruv Joshi, Cofounder, CEO, Cloudphysician
4:10 pm – 4:30 pm Fireside chat on Fund Sights and Growth Journey	Moderator: Ms Apoorva Shrivastava, Founder & CEO, Resolve360, Rehabunified Pvt. Ltd / NASSCOM

	Speakers: Mr Arun Agarwal, Founder, Janitri Mr Rahul Ranganathan, CEO, NuGenomics
04:30 pm – 04:45 pm AMA	Dr Raajiv Singhal, Founding Member, MD & CEO, Marengo Asia Healthcare
04:45 pm – 5:00 pm AMA	Mr Sunil Thakur, Treasurer-NATHEALTH and Partner, Quodria
05:00 pm – 05:15 pm AMA	Mr Anjan Bose, Founder Secretary General NATHEALTH and Former President, Philips Healthcare and Consumer Lifestyle
05:15 pm – 05:30 pm AMA	Mr Gautam Khanna, CEO of PD Hinduja National Hospital and Medical Research Centre
05:30 pm – 05:45 pm AMA	Mr Ashish Bhatia, COO, Fortis Hospital, Delhi
06:00 pm – 07:00 pm	Industry Startup Interaction

Networking & Fellowship Dinner

Time: 07:00 pm Onwards (Crystal Ball Room)

End of Day 1

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Day 2: 23 March 2023

Thought Leadership Sessions: 10:00 am – 04:00 pm (Crystal Ballroom)
 Innovation Sessions: Industry Startup Interface Startup & Innovation Hub: 10:00 am – 02:00 pm (Regency 4 & 5)

Plenary Session: Scaling Up Allied Healthcare Skilling (Crystal Ballroom)	
Time: 10:00 am – 11:15 am	
Session Lead: Dr. Ashutosh Raghuvanshi, Senior Vice President, NATHEALTH & Managing Director, Fortis Healthcare	
10:00 am – 10:05 am Welcome Address & Setting the Context	Dr. Ashutosh Raghuvanshi Senior Vice President, NATHEALTH & Managing Director, Fortis Healthcare
10:05 am – 10:15 am Presentation by BCG: Skilling Allied Healthcare Professionals	Mr. Kshitij Vijayvargiya Managing Director & Partner, Boston Consulting Group (BCG)
10:15 am – 10:30 am Keynote Address	Session Chair: Mr. Alok Kumar Principal Secretary (Medical Education), Government of Uttar Pradesh
10:30 am – 11:15 am Industry Remarks Across Sectors on Allied Skilling	Moderator: Mr. Kshitij Vijayvargiya Managing Director & Partner, Boston Consulting Group (BCG) Speakers: <ul style="list-style-type: none"> • Mr. Ashish Jain Chief Executive Officer, HSSC • Dr. Shubnum Singh Principal Advisor Health Policy Confederation of Indian Industry (CI) & Board Member, Healthcare Sector Skills Council • Dr. Rajiv Verudekar Dean, Faculty of Health Sciences, Symbiosis International (Deemed University) • Ms. Nanki Lakhwinder Singh Chief Executive Officer, Protribe Senior Care Services Private Limited • Mr. Prashant Sharma Chief Executive Officer & Managing Director, Charnock Hospital

Plenary Session: MoU signing between NATHEALTH & Director of Medical Education, Andhra Pradesh Government (Crystal Ballroom)	
Time: 11:15 am – 11:45 am	
11:15 am – 11:20 am Welcome Speech & Inviting Dr. V Vinod Kumar on the Stage	Ms. Anu Acharya Co-Chair South Chapter, NATHEALTH, Founder & Chief Executive Officer, Mapmygenome
11:20 am – 11:40 am Special Address & MoU Signing	Dr. V Vinod Kumar IAS, Director of Medical Education, Government of Andhra Pradesh
11:40 am – 11:45 am Concluding Remarks	Ms. Anitha Niranjan Co-Chair South Chapter, NATHEALTH, Director, GHA Global Healthcare
Followed by Close Door CXO Roundtable (Regency 4)	

Close Door CXO Roundtable with Director of Medical Education, Government of Andhra Pradesh	
Time: 02:30 pm – 03:30 pm (Regency 4)	
02:30 pm – 02:40 pm Opening Address	Session Lead: Dr. Harsh Mahajan Past President, NATHEALTH
02:40 pm – 03:20 pm Round Table Discussion	Chair: Dr. V Vinod Kumar IAS, Director of Medical Education Government of Andhra Pradesh Moderator: Mr. Rana Mehta Partner & Healthcare Leader-PWC Speakers: <ul style="list-style-type: none"> • Mr. Sanjeev Vashistha Managing Director & Chief Executive Officer, PathKind Diagnostics Private Limited • Dr. Rajeev Sharma Vice President, Tata 1mg
1. Develop a comprehensive human resource augmentation plan at all levels particularly allied health workers and nurses focusing on tech enable digital education and task shifting. 2. Augment diagnostic capacity and information network across the state and develop data intelligence around preventive health, AMR and other emerging health threats through data algorithms, collaborations and research.	

<p>3. Work closely with Andhra Pradesh Public Procurement Systems</p> <p>4. Plan a health industry convention in Tirupati to mobilize the technical capacity and participation of private sector.</p>	<ul style="list-style-type: none"> • Mr. Tushar Sharma Managing Director, Abbott Vascular • Mr. Saurabh Pandey Chief Executive Officer, Aknamed • Mr. Anirudh Sen Country Lead, ApacMed • Dr. Sameer Gupta Group Cardiac Cathlab Director, Metro Hospitals & Umkal Hospital • Mr. Manish Sardana President, Polymedicure Limited • Mr. Raajeev Virmani Clinical Head, Ultrasound, GE Healthcare • Mr. Prabhdeep Singh Founder & CEO-Stanplus. • Mr. Abhishek Kapoor Executive Director, Strategy, Regency Healthcare • Dr. Srivatsa. P Senior General Manager & Head, Projects, SRL Diagnostics
03:20 pm – 03:30 pm Concluding Remarks	Ms. Anu Acharya Founder & Chief Executive Officer, Mapmygenome, Co-Chair South Chapter, NATHEALTH Ms. Anitha Niranjan Co-Chair South Chapter, NATHEALTH Director, GHA Global Healthcare

Audience Poll Quiz: 11:45 am – 12:00 pm

Plenary Session: NATHEALTH Healthcare CSR Awards 2023 (Crystal Ballroom)
Time: 12:00 pm – 01:00 pm

Session Lead: Mr. Daljit Singh, Past President NATHEALTH, Former President, Fortis Healthcare	
12:00 pm – 12:02 pm Welcome Address & Setting the Context	Mr. Daljit Singh Past President NATHEALTH, Former President, Fortis Healthcare
12:02 pm – 12:15 pm	Mr. Ashwajit Singh NATHEALTH North Region Chair & Founder & Managing Director, IPE Global Group 12:02-12:07 Briefing of NATHEALTH's CSR Campaign on Win with Vx 12:07-12:10- Screening of film on Win with Vx-3 mins 12:10-12:15Release of the Win with Vaccines Coffee Table Book In presence of representatives of Win with VC Grantees - <ul style="list-style-type: none"> • GE Healthcare • Charnock Hospital • Fresenius Grantees to speak for a few minutes
12:15 pm – 12:22 pm Inauguration of Healthcare CSR Award Ceremony	Chief of Jury Mr. CK Mishra , Former Secretary, Government of India, Mentor, Swasth Bharat Task Force, FICCI to give an overview on CSR nomination and evaluation process
12:22 pm – 12:25 pm	Mr. Daljit Singh to welcome and introduce Shri Rao Inderjit Singh Hon'ble Minister of State, Ministry of Statistics and Programme Implementation, Ministry of Planning and Ministry of Corporate Affairs
12:25 pm – 12:35 pm	Announcement of Award With a Brief Note About the Projects and Award Distribution by the Chief Guest and Jury 6 awardees - Facilitated by the emcee
12:35 pm – 01:00 pm Chief Guest Address	Honorable Shri Rao Inderjit Singh Minister of State, Ministry of Statistics and Programme Implementation, Ministry of Planning and Ministry of Corporate Affairs
Lunch Break: 01:00 pm – 02:00 pm	

Plenary Session 8: Patient Safety and Quality (Crystal Ballroom)
Plenary Session: 02:00 pm – 04:00 pm

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Session A- Perspective on Quality and Accreditation System in India healthcare space Session B- Embracing Patient Safety: Can we protect patients while ensuring access?	
Session An Overview: A Perspective of Quality & Quality Systems in India the Healthcare Quality Development in India, Accreditation and its impact on Quality Role of Quality Tools (other than accreditation) in	
Session Lead: Ms. Ameera Shah, Vice President- NATHEALTH & Managing Director of Metropolis Lab	
02:00 pm – 02:05 pm Setting the Context	Ms. Ameera Shah Vice President, NATHEALTH & Managing Director of Metropolis Lab
02:05 pm – 02:45 pm Roundtable: Quality and Accreditation System and Its Impact in the Healthcare E-space	Moderator: Ms. Abha Mehndiratta Non-Resident Fellow, Center for Global Development Speakers: <ul style="list-style-type: none"> • Dr. Vijay Agarwal President, CAHO • Mr. Narendra Varde Managing Director, Roche Diagnostics India, Neighboring Markets • Mr. Srikant Srinivasan Head Service South Asia, GE Healthcare • Mr. Chhitiz Kumar Vice President, Health Systems, Philips • Dr. Rupak Barua Director & Group Chief Executive Officer, AMRI
Session B Overview: Embracing Patient Safety: Can we protect patients while ensuring access? Global Patient Safety Action Plan (WHO), Opportunities and Challenges in India, Medication, Medtech Safety from Patient's Perspective	
02:45 pm – 03:35 pm Roundtable: Embracing Patient Safety: Can We Protect Patients While Ensuring Access?	Moderator: Prof. Anupam Sibal Group Medical Director, Apollo Hospitals Speakers: <ul style="list-style-type: none"> • Dr. Pavan Choudary Chief Executive Officer & Managing Director, Vygon • Mr. Sanjiv Navangul Managing Director & Chief Executive Officer, Bharat Serums & Vaccines Private Limited • Mr. Rishabh Gupta General Manager, Baxter • Dr. Ratna Devi Director, Patient Academy for Innovation & Research
	<ul style="list-style-type: none"> • Mr. Sanjeev Vashishtha Managing Director & Chief Executive Officer, Pathkind*
03:35 pm – 03:50 pm <i>Launch Of Patient Safety Microsite Synthesis and Concluding Remarks</i>	Overview on Patient Safety Campaign, Its Significance in Today's Scenario Dr. Narottam Puri Principal Advisor, QCI, Ex-Chairman, NABH Medical Advisor, Fortis Healthcare Advisor (Health Services), FICCI Video Messages from (4 mins Video messages, 1 min each) <ol style="list-style-type: none"> 1. Mr. Jaxay Shah Chairman QCI, Founder & CMD Savvy Infrastructure Private Limited, Director (Founding Member), ONDC* 2. Dr. Ravi P Singh Secretary General, QCI 3. Prof (Dr.) Mahesh Verma Vice Chancellor, CGS IP University, New Delhi, Chairman NABH 4. Dr. Atul Kochhar CEO, NABH Launch Of Patient Beta Safety Microsite, Synthesis and concluding remarks.
03:50 pm – 03:55 pm Summit Wrap up and Concluding Remarks	Dr. Vikram A Munshi Founder WhiteSpace Consulting & Capability Building
Vote of Thanks 03:55 pm – 04:00 pm	Ms. Vrinda Chaturvedi National Lead, NATHEALTH
END OF DAY 2	

Achieving Universal Health in Dialysis through Strategic Public Private Partnership

Dialysis: The popular treatment of ESRD disease requires policy focus to build access and capacity, thereby helping reduce mortality rates

Dialysis Overview - Renal failure is a significant public health issue, but it is often not recognized as a cause of premature death in developing countries such as India. Each year, approximately 220,000 Indian patients develop end-stage renal disease, resulting in a demand for 34 million additional dialysis sessions. Hemodialysis and peritoneal dialysis are the two primary complementary treatments provided to ESRD patients in India, with 94% of patients receiving hemodialysis. Despite the existence of around 5,000 dialysis centers and 3,340 nephrologists, it may not be enough to fulfill the growing demand for dialysis.

Key Challenges - Dialysis delivery in India faces a lot of challenges. Starting from the lack of access to dialysis centers and machines across districts, lead to the low frequency of treatment, impacting the health of patients to the erratic and low rate of reimbursements for dialysis sessions affecting the operation of dialysis centers. There is a lack of skilled workforce including dialysis technicians and renal nurses.

Need for Clinical Outcome Monitoring - The four key indicators for dialysis patients are mortality, anemia, seroconversions, and dialysis access. Monitoring the clinical outcomes can further our understanding of the impact of treatment on patients, and help improve the quality of services.

Human resource requirement in dialysis - The industry has identified various gaps in the training of healthcare professionals, such as addressing the shortage of Dialysis Technicians (DTs), providing short-duration courses to upskill existing nurses, doctors, and allied professionals, and addressing the need for more training centers in the country.

Recommendations - The short-term recommendations aim to enhance access to dialysis centers and optimize the use of resources, maintain standards, and address empanelment delays. The reimbursement rates are suggested to be increased. The medium-term recommendations suggest training opportunities for dialysis technicians, nurses, and doctors, as well as addressing infrastructure challenges and providing specific training for surgeons, nurses, and patients for peritoneal dialysis.

Key recommendations for peritoneal dialysis - various measures are suggested to improve peritoneal dialysis (PD) treatment delivery in India, including implementing a PPP model, building patient awareness through education campaigns, reducing the cost of consumables, establishing and monitoring clinical outcomes, and promoting PD treatment through community healthcare.

Health Financing in India's context

Indian health infrastructure faces many challenges. One of these challenges is insufficient infrastructure. India has a bed density of 1 bed/1000 population, compared to the world average of 2.7 beds/1000 population. Another major challenge is inequitable health coverage. At least 30% of the Indian population - the missing middle - is devoid of any financial protection for health even for IP services. India also faces the challenge of inadequate focus on outcomes. Currently, healthcare provision is largely fee-for-service and is incentivized based only on the quality accreditation and volume of services, with an inefficient payment model.

A whitepaper on Healthcare Financing has been prepared, which focuses on the design and structure of health financing reform to facilitate Universal Health Coverage (UHC). This will be done by: creating healthcare infrastructure (hospitals) under the PPP model, bringing the “missing middle” under the health protection scheme, and incentivizing care coordination and viability of care delivery in form of value-based payment.

- **Catalyzing PPPs in healthcare infrastructure creation:** The session would deliberate on the success behind some of the non-hospital PPPs and the reasons behind the limited traction of the revised VGF scheme for hospital PPPs, along with the key learnings and best practices around PPP structuring.
- **Leveraging the AB-PMJAY network to cover the missing middle:** The session would highlight that high OOPE is largely due to the lack of any form of health protection for the missing middle and the catastrophic health spending on the out-patient requirement. Hence, the need for alternate options to extend the existing PMJAY scheme by means of developing a low-cost private health insurance product by leveraging on the existing PMJAY network.
- **Linking reimbursement to health outcomes:** This session will emphasize the importance and relevance of value-based pricing of healthcare services in the Indian context, the best practices across the globe, and the recommendations on a possible reimbursement model that could be implemented in India.

The conference will bring together key stakeholders from the central and state government, regulating bodies, private sector providers, private sector insurers, development partners, Healthcare PE players, and Healthcare knowledge partners to deliberate on practical solutions to the above-mentioned problems. There will be a roundtable discussion on “PPPs (VGF) in healthcare for infrastructure creation” and another one on the topic “Leveraging the network to cover the missing middle and Linking reimbursement to health outcomes”. There will also be a presentation on the key recommendations of the Health Financing paper.

Digital Health - Pathways to scaling up Digital Health Adoption

Ayushman Bharat Digital Mission (ABDM) is enabling the National stack for a Patient-centric digital health ecosystem, to facilitate the continuum of care with the patient as the owner of data. One of the key objectives is to create a system of personal health records, easily accessible to individuals, healthcare professionals, and services providers, based on Aadhaar, Unified Payments Interface, and Mobile phones. The Digital Health track, "Pathways to scaling up Digital Health adoption" is led by Dr. Shravan Subramanyam, President NATHEALTH and Managing Director, Wipro GE Healthcare

Context setting: Mr. Sanjeev Malhotra, CEO, MeitY-NASSCOM Centre of Excellence - IoT and AI Collaboration between all stakeholders is crucial to addressing healthcare challenges and creating real-world impact.

Keynote Session: Shri Kiran Gopal Vaska Ji, Director, Policy & Coordination, National Health Authority (NHA), Govt. of India

Focus of the Session - The overview of ABDM, the current state of adoption, and how to accelerate it.

Keynote Session: Shri Abhishek Singh*, President & CEO NeGD, MD & CEO Digital India Corporation (DIC); CEO Karmayogi Bharat; Govt of India

Focus of the Session - The impact of digital in healthcare and how to leverage the innovation ecosystem to enhance healthcare standards.

Panel Discussion 1: How Digital Technology can help in reimagining Primary Care in Post COVID era.

Focus of the Session - To close the digital gap in rural and tier 2 healthcare ecosystems to enhance the accessibility of care. The panel discusses the role of digital technology in reimagining primary care in the post-COVID era. They will showcase success stories of digital technology enhancing access to care, and address challenges and possible solutions in adopting digital technology.

Panel Discussion 2: Key challenges to Digital adoption in Hospitals, MedTech, and Diagnostic Chains

Focus of the Session - Key challenges to Digital adoption in Hospitals, MedTech, and Diagnostic Chains and how to overcome those challenges. The panel will discuss the challenges and solutions for healthcare providers in integrating with India's digital health infrastructure. They will also share their expectations from the National Health Authority (NHA) to accelerate the adoption of the ABDM stack.

Revolutionizing Medical Education

Bridging the demand-supply divide for Allied Health Professionals via structural interventions

India is facing a significant shortage of around 6 million allied health workers, which is increasing with the expansion of healthcare services to semi-urban and rural areas. The shortage is caused by a lack of clear learning pathways, low wages, nebulous career paths, lack of incentives, and a lack of social recognition.

Our perspective on resolving this situation via structured interventions

To address this situation, we need a concerted effort along 3 sets of interventions.

1. Collaboratively strengthen the training delivery and execution - This includes establishing a jointly curated certification program managed by a body like NATHEALTH, on-the-job training at public and private infrastructure, digital delivery of theoretical and practical training, pooling CSR funds to enable higher-tier certification skilling without the requirement to join back the funding organizations, upskilling programs for professionals with the right aptitude in care delivery, etc.

2. Enable recruitments, placements, and compensation while building social recognition - These measures include regularizing the workforce under a common e-registrar, building a digital demand capture platform, mandating certification in hiring, enabling compensations in line with the level of certification, etc.

3. Generating Demand for the profession - This involves improving focus on skilling, monetary benefits, and social recognition. It proposes promoting "Swasthya Mitra" as a campaign in the target groups and celebrating the profession through events like "Swasthya Sambandhi divas."

The Impact - Strong execution of identified interventions will enable us to break this vicious cycle and convert it into a virtuous one. The impact can be massive. It includes creating 3-4 million incremental jobs, improving health outcomes in India, and securing India's place as a global supplier of high-quality talent. With a well-planned and well-executed strategy, the shortage of allied health workers in India can be addressed.

The Session - The session aims to address the challenges faced by frontline health workers, identify the gaps in their current profession and discuss potential solutions to address the key skilling gaps for allied health professionals. The role that both public and private sectors can play in their skilling will also be discussed, along with potential challenges that may arise. The session will feature industry experts and administrators sharing their insights on the topic.

NATHEALTH Healthcare CSR Awards 2023

The NATHEALTH Healthcare CSR Awards 2023 acknowledges corporates and philanthropic organizations for commendable healthcare initiatives through CSR. The awards recognize companies' efforts in internalizing CSR into their everyday thinking, with applications accepted in four categories. These categories include Health Technology Innovations, Community Based Health Solutions, Environmental Health, and COVID-19 Preparedness and Resilience.

Recognized leaders in the social development sector, Mr. Chandra Kishore Mishra, Former Secretary, Government of India, Dr. Indu Bhushan, Ex-CEO, Ayushman Bharat, Ms. Roli Singh, Additional Secretary & Mission Director National Health Mission, Ministry of Health and Family Welfare, Government of India, Dr. Rajani Ved, Director, Health, India Office Bill & Milinda Gates Foundation (BMGF), Ms. Sheena Chhabbra, Senior Health Specialist, World Bank, Dr Samapti Guha, Professor, and PhD. Coordinator Centre for Social Entrepreneurship, Tata Institute of Social Sciences, Mumbai, are a part of the esteemed jury that is selecting the most deserving awardees of the 63 applications received across corporates, and implementation partners. The award gives organizations and corporates their deserved recognition and establishes their project among the biggest names in the Indian Health Sector. This year, we are honored to have Hon'ble Shri Rao Inderjit Singh Minister of State, Ministry of Corporate Affairs, to present the awards.

Win with Vaccines

The IPE Global Centre for Knowledge & Development implemented a public education campaign to improve COVID-19 vaccine confidence in five low-coverage districts across India. The targeted districts were Baksa, Chirang, South Salmara, and Udalguri in Assam, as well as Nuh in Haryana. This initiative was aimed at historically vaccine-resistant communities living in hard-to-reach geographies.

The project collaborated with government stakeholders, including district administration, health, education, and livelihood officials, as well as community members. The team nurtured influencers and developed a Behaviour Change Communication Campaign that aimed to sensitize over 2 lakh community members in a four-month period. The project successfully addressed myths and misconceptions surrounding COVID-19 vaccinations by employing a focused, ground-level approach. The project was a success due to community consultations, key engagements, and a Behaviour Change Communication campaign in local languages.

Launch of Win with Vaccines Coffee Table Book - The Win with Vaccines initiative used a Behaviour Change Communication campaign to engage with left-out, drop-out, and resistant (LODOR) communities. The photo book is a snapshot of the project process, beneficiaries, and stakeholders.

Patient Safety and Quality in Indian Healthcare

Patient safety is a crucial aspect of healthcare that aims to prevent and reduce risks, errors, and harm during healthcare provision. Unsafe care is among the top 10 causes of death and disability globally, particularly in LMICs, with errors occurring in various medical domains. Patient safety is essential for achieving universal health coverage under the Sustainable Development Goals. In India, key priorities include developing a culture of patient safety and a "fault-tolerant" healthcare system through standard operating procedures, identifying and reporting medical errors, and evidence-based patient safety activities such as infection prevention, safe surgical care, safe childbirth, medication safety, blood safety, and medical device safety.

Coordination between healthcare providers, technology, drugs, and processes is crucial for patient safety due to medical technology advancements. Encouraging healthcare workers to report safety-related events in a non-punitive environment, community involvement, patient empowerment, impartial assessments, and education and training of healthcare workers are necessary for ensuring patient safety.

Quality of Care

India has made significant progress in healthcare with improved access to skilled birth attendance, immunizations, and other priority services. However, poor quality services lead to a total of five million deaths each year, with one-third occurring in India. Informal practitioners and poor quality care in both public and private sectors are major challenges. To address this, the Indian government has launched the National Quality Assurance Programme for Public Health Facilities, with published standards incorporating patient safety measures. Facilities that meet these standards will receive certification and financial incentives.

Patient Safety Microsite & Campaign

The microsite launch is part of a high-level campaign on "Choose Safer Healthcare".

NATHEALTH along with key partners such as QCI, NABH, and others are initiating a public education campaign on "Patient Safety and Quality Care". The campaign seeks to improve patients and the general public's understanding of safety measures that are important for patients and the quality of healthcare. Presently, patient understanding of many aspects of healthcare services is limited and several misconceptions exist. The campaign seeks to educate patients and consumers, establish the deep link between safety and quality, and give information out to people through simple messages and animated videos, short blogs, and/or infographics based on data and facts.

A NATHEALTH CSR Initiative

Patient Safety & Quality Care In collaboration with



NATHEALTH, along with NABH, NABL & QCI has launched a campaign to spread awareness and adaptability of quality and patient safety in Indian healthcare. The central focus of the campaign is to educate patients and caregivers about the critical importance of implementing safety measures in healthcare settings, using simple messages and engaging visual media such as animated videos, infographics, and data-based illustrations. The microsite's primary objective is to provide patients and caregivers with the tools and knowledge they need to make informed decisions and stay safe while receiving medical care.

The microsite is a vital component of a broader public education initiative focused on the critical issues of patient safety and quality care. The microsite content is designed to be accessible and easily understood by the general public, with a particular focus on using straightforward language that does not require specialized medical knowledge. Through the dissemination of key facts, data, and practical advice, the campaign aims to empower patients to take an active role in their healthcare and increase awareness of patient responsibilities.

Elements of the Campaign

The "Patient Safety and Quality Care" campaign incorporates various elements to achieve its goals effectively. One of the key components is the microsite, which serves as an online platform for providing accessible and engaging information to patients, caregivers, and the general public.

Media outreach is another essential component of the campaign. The campaign leverages media outreach to disseminate key messages, share success stories, and showcase best practices in patient safety and quality care.

The campaign also employs **social media engagement**, such as engagement with social media influencers, to raise awareness and increase engagement with its target audience.

Opinion pieces are another valuable tool used by the campaign to share insights, perspectives, and best practices on patient safety and quality care. These opinion pieces are published in reputable media outlets and provide valuable insights from experts in the field.

Finally, the campaign utilizes information, education, and communication (IEC) materials and collaterals to disseminate critical information and raise awareness about patient safety and quality care.

A NATHEALTH CSR Initiative

Visualizing the Creative Elements

There will be 30-40 second self-explanatory videos with a central character, preferably a woman. Videos with voice-over are an effective way to convey a message while keeping cultural context in mind. These videos can feature changing characters based on the scenario, but they must have a clear call to action, such as visiting a website to learn more. By using this approach, viewers can quickly understand the message being conveyed and be motivated to take action, all while being culturally sensitive and inclusive.

Key Themes

The central themes for this campaign are medicine safety, hospital safety, and test and diagnostic safety. Medicine safety involves preventing adverse effects of medication, reducing medication errors, and improving medication management. Hospital safety encompasses various measures to ensure patient safety, such as reducing hospital-acquired infections, improving patient identification, and preventing falls. Test and diagnostic safety involves minimizing the risk of errors in diagnostic testing and ensuring accurate interpretation of results.

Key Asks

From Leaders

Patient safety in healthcare is crucial and can be achieved through accessible and simplified material, adoption and implementation of quality standards, data on patient outcomes, and facilities for international patients. It is also important to educate patients on the quality supply chain, which includes hospitals, labs, equipment, quality check systems, medication storage systems, hygiene and sanitation, responsible medical waste disposal, COVID preparedness, and staff training measures. Video messages can be used as part of campaigns to promote the significance of patient safety.

From Partners

To ensure patient safety and quality healthcare, it is important to understand national and international guidelines and standards, conduct quality checks, and provide education initiatives. Regulation methods and training programs are also essential for maintaining high standards. Opinion articles, research reports, and data on global practices can provide useful insights into these standards.

A glimpse at the CSR Award Nominees

Aditya Birla Health Insurance Company Ltd

Since its establishment in 2015, Aditya Birla Health Insurance has focused primarily on incentivized wellness, with its offerings based on the philosophy of "Empowering people to lead healthier lives." ABHI's main objective is to provide customers with innovative health-first insurance solutions that safeguard them against medical uncertainties and encourage them to live health-focused life. Aditya Birla Health Insurance takes great pride in pioneering this health insurance model that surpasses the boundaries of the conventional indemnity-based model by prioritizing proactive healthcare for its customers.

Billion Hearts Beating Foundation

Billion Hearts Beating Foundation, established in 2010 by Apollo Hospitals, is a not-for-profit organization with a noble mission to provide healthcare and promote health awareness among the neglected segments of society. The foundation is dedicated to serving the needs of the elderly population, organizing life support workshops, and empowering healthcare workers with essential skills to save lives. Guided by its core values of empathy, dignity, and respect, the organization strives to make preventive healthcare accessible to all, with a vision to touch a billion lives through free healthcare initiatives. Its ultimate goal is to create a better India, where primary preventive healthcare is available to seniors with limited access to medical facilities and healthcare.

Dayananda Sagar Entrepreneurship Research and Business Incubation Foundation

DERBI, which stands for Design, Engineering, Research, and Business Incubator, has a clear vision to become a world-class incubation center and establish a sustainable ecosystem for entrepreneurship with advanced technology support and business wisdom. The incubation center's mission is to be the premier incubator in India, offering exceptional emphasis on mentoring and scaling early-stage technology ventures. DERBI aims to aid technology entrepreneur companies in expanding their impact by incubating technology and business, providing expertise, mentoring, guidance, and incubation. Additionally, DERBI intends to solidify its position as a top-tier technology business incubator and expand its operations by reaching out to corporate bodies, philanthropists, foundations, development agencies, government bodies, and other institutions.

Project Suswathya, implemented by Child In Need Institute (CINI) and funded by the National Stock Exchange Foundation

CINI has a Vision to create a friendly and responsive community where children and adolescents achieve their full potential. The project Suswasthya is strengthening health and nutrition services for women, children and adolescents in Khoyrasole Block of Birbhum District, West Bengal and upscaling the best practices in other 18 blocks through capacity building and advocacy.

A glimpse at the CSR Award Nominees

Karjat Jamkhed Integrated Development Foundation (KJIDF)

The Karjat Jamkhed Integrated Development Foundation (KJIDF) is an organization with the noble objective of empowering communities to become champions of self-initiated and sustainable changes. The foundation has developed a mechanism that serves as a constant and synergetic vehicle for the socio-economic transformation of Karjat and Jamkhed. The solution offered by KJIDF has significant potential for replication in the future, making it a unique model for community development. The organization is dedicated to creating an empowered and self-sufficient society through its innovative approach and aims to bring about a positive and lasting impact on the lives of people in Karjat and Jamkhed.

Dr. Lal PathLabs Foundation

Lal PathLabs Foundation is dedicated to building a healthier nation and improving the lives of communities through high-quality preventive healthcare initiatives. The foundation strives to ensure the improved health and well-being of communities by promoting preventive healthcare and investing in programs, partnerships, and ideas that raise awareness and take preventive action and diagnostic measures for the community it serves. Lal PathLabs Foundation focuses on various areas, including non-communicable diseases, adolescent healthcare, geriatric care, public healthcare initiatives, water and sanitation, and creating employment opportunities in healthcare. The organization also collaborates with NGOs, like-minded organizations, and the government to achieve its goals and make a positive impact on the communities it serves.

Project Manyata, a first-of-its-kind initiative in the private maternal healthcare sector in India, funded by MSD For Mothers India.

Manyata is implemented in partnership with Jhpiego-India, a non-profit global health leader and Johns Hopkins University affiliate and the Federation of Obstetric and Gynaecological Societies of India (FOGSI) (representing over 37,000 private practicing member gynecologists) and Government of Maharashtra. Manyata is a quality improvement and certification initiative for private maternity providers in India to ensure that each woman receives consistent, safe, and respectful care during and after childbirth, ensuring that no mother should die giving life.

Access to Affordable Cancer Care for One and All, implemented by Tata Memorial Centre, Mumbai and funded by the Mylan Laboratories Ltd. (A Viatris Company)

With a vision of strengthening cancer care facility in all states, the project is providing continuous technical support for strengthening Cancer Care facility in the state. Under this project State Health Department of Maharashtra has established Cancer Day care Centres in 10 districts of Maharashtra at 10 District Civil Hospitals. The Doctors and nurses from the Public Health Department of Maharashtra have been trained for the early detection, screening and prevention of common Cancers.

A glimpse at the CSR Award Nominees

Nayara Energy Limited

Nayara Energy is a visionary organization with a strong commitment to building a better India by doing what is right and just for its communities and the nation at large. The company's ultimate goal is to be one of the most respected organizations in India by creating a symbiotic relationship with its stakeholders and making them equal partners in the process of nation-building. Nayara Energy recognizes that its role in achieving this goal is to pave the way for a collaborative, progressive, inclusive, and sustainable path through its Corporate Social Responsibility (CSR) programs. The company also believes that technology and innovation can accelerate the pace of change and supports new and innovative models of development. The CSR policy of Nayara Energy guides the planning, implementation, and oversight mechanism of its CSR programs to achieve its objectives.

Netram Eye Foundation

The Netram Eye Foundation is dedicated to providing an environment of healing that inspires people to achieve a higher level of health and well-being. With a mission to bring sight to all, the foundation aims to treat curable blindness and reduce preventable blindness in India. Their philosophy is centered on compassion and building a setup that caters to all sections of society. Netram Eye Foundation dreams of empowering women, members of the transgender community, and the poor strata of society while advocating and working on mental health. Their vision is to expand their enthusiasm for social welfare and enhance the dignity and quality of life for individuals, families, and communities.

Network for Enterprise Enhancement and Development Support [NEEDS]

NEEDS (Network for Enterprise Enhancement and Development Support) aims to empower marginalized communities in the regions of Jharkhand and Bihar. Their vision is to create value-based communities of informed and dignified citizens, including those who were previously marginalized and oppressed. Their mission is to sustain the food and nutritional security of these marginalized communities, especially women and children, through environmentally sound interventions while considering equity and human rights. NEEDS mobilizes households into collectives, enhancing their knowledge and skills and increasing their ability to access resources to exit from poverty. The organization also generates awareness, builds community capacity, and establishes linkages with institutions so that the community can advocate for their rights even after NEEDS exits its operations. The organization's goals include sustainable household food and nutrition security, enhanced sustainable livelihoods, reduced mortality rates for children and mothers, improved hygiene outcomes, and access to quality education for all children.

Impacting NCD outcomes at Scale through Project SCREEN (Strengthen Capacity to Reach Everyone for Effective Screening to Prevent NCDs), Funded by Wipro Ge Healthcare Pvt Ltd & Implemented by People to People Health Foundation (PPHF)

Wipro Ge Healthcare Private Ltd. is working for a healthier society, addressing some of South Asia's healthcare challenges by supplementing the Government and Societal efforts. Project "SCREEN" adopts a three-pillar approach to implement the package of interventions based on: capacity building of health teams and primary care physicians; community awareness call to action drive for screening; and advocacy for scaling up. In the first phase the project was implemented in the five States of Haryana, Jharkhand, Karnataka, Maharashtra and Punjab, and in the second phase it is being implemented in the state of Assam.

A glimpse at the CSR Award Nominees

PVR NEST

PVR NEST, the CSR arm of PVR Ltd, has been working towards mitigating the vulnerabilities of socially disadvantaged communities since 2006. Guided by the principles of Sustainable Development Goals, the organization's vision is to establish safe, inclusive, and equitable urban spaces for women and children to improve their standard of living. PVR NEST operates under the Public-Private Partnership model and collaborates with the central and state governments to build opportunities for the socially disadvantaged. Additionally, the organization aims to increase awareness and understanding of the intersectionality of issues faced by these communities, fostering their inclusion in society.

Siemens Healthineers

Siemens Healthineers is a leading medical technology company that enables healthcare providers worldwide to increase value by expanding precision medicine, transforming care delivery, improving the patient experience, and digitalizing healthcare. With a focus on AI-supported applications and digital offerings, the company is continuously developing its product and service portfolio. Siemens Healthineers also provides a range of services and solutions to enhance healthcare providers' ability to provide high-quality, efficient care to patients. In India, the company is committed to long-term sustainable programs that aim to improve the health and well-being of society, through skill development, nurturing innovation, or enabling access to primary and preventive healthcare. Their CSR vision is to transform and sustain the well-being of communities, and their mission is to be a catalyst in creating partnerships and sustainable solutions to increase access to healthcare and promote and protect well-being.

Sun Pharma Laboratories Ltd.

Sun Pharma Laboratories Ltd. is committed to bringing about holistic development in underserved communities in a sustainable and impactful manner. Their mission is to leverage their people, expertise, and networks to address the needs of the communities they serve and catalyze overall development. Their CSR policy is designed with the objectives of serving the community, focusing on quality, ensuring sustainability, and leveraging resources to maximize impact in social initiatives. The organization's CSR philosophy is to undertake its corporate social responsibility in a strategic manner by leveraging its financial and human resources, networks, and expertise to create maximum impact for its stakeholders. Their thematic areas include healthcare, education, water, sanitation, environment, and disaster relief.

Revival and operation of Municipal Solid Waste Plant, Karsada, Varanasi funded by NTPC Ltd

NTPC Ltd. has a vision to be the world's leading power company, energizing India's growth. NTPC is complementing the efforts of Varanasi City to achieve its vision of developing the spiritual capital of India Varanasi into a "clean, green and livable city by adopting sustainable integrated waste management practices thereby providing healthy and quality life to its citizens". Their CSR project aims not only to achieve the India's national development goals, targets under Swachh Bharat Mission but also UN SDGs. With the implementation of this project, the people of Varanasi are benefitted both socially and economically.

A glimpse at the CSR Award Nominees

Vatsalya

Vatsalya is a resource center that has been working to uplift women and children since 1995. With a primary focus on health, nutrition, early childhood development, water sanitation and hygiene, and education, Vatsalya aims to empower marginalized communities through community participation and education. Their target group includes children, adolescents, and women, and they have been working intensively in Uttar Pradesh for over 26 years. Vatsalya has established its network of activities with the support of civil society organizations and CBOs in 36 districts as of now. Their vision is to create a gender-equal society where women and adolescents are safe, healthy, and empowered, while their mission is to enable, implement, innovate, and support policies and programs that enhance the capabilities of adolescents and women to attain their fullest potential.

VisionSpring Foundation

VisionSpring Foundation (VSF) is an NGO dedicated to eradicating vision acuity in India by providing free eyeglasses. VSF's mission is to provide primary eye-care services, eye-health advice, and eye screening to those at the bottom of the socioeconomic pyramid. VSF conducts community outreach activities and free eye screening camps across India, with programs such as See to Learn, See to Earn and See to be Safe. The organization operates through outreach camps and mobile units called MobileYES equipped with state-of-the-art facilities. VSF has eye-care advice centers and expertise and refers patients with complex eye diseases to the nearest hospital. VSF has screened over 17 lakh beneficiaries, distributed over 9 lakh glasses, and worked in 27 states and 5 union territories, striving to improve the lives of poor people in rural and urban India by restoring their vision.

Reaching the Unreached Through COVID-19 Mobile Vaccination Clinics (Vaccine On Wheels) implemented by Jivika Healthcare

Vaccine on Wheels was funded through multiple corporates like 3M, American India Foundation, Alkyl, Angel One, BMC, Credit Access India Foundation, Conductix Wampfler, Cipla Foundation, Crypto Relief, Eaton, Franklin Templeton, GE, Global India Fund, HSBC, Icertis, IIMBAA, ITW, Persistent Foundation, Petrofac, Tata Technologies, TetraPak, British Petroleum, ICICI Foundation, Mahindra Finance, Yokohama, Enam Asset Management, ZS, TKT HVAC, Boston Consultancy Group, Covid Action Collab, Give India, Rotary, Samhita, United Way and USAID. The project ensured equity and accessibility of COVID-19 vaccine to the underserved and unreached communities and spread awareness about the importance of vaccination and reduce vaccine hesitancy in the underprivileged and marginalized communities. It worked for Old aged people, People with disabilities, Tribal Communities, Transgender Communities, Slum dwellers, Street vendors, Truckers, Domestic workers, Migrant laborers, Female sex workers, Rural and hard to reach communities and other underprivileged people across many districts of Maharashtra, Telangana, Tamil Nadu, Karnataka, Jharkhand and Meghalaya.

#This is not an exhaustive. It only contains CSR Nominations of Organizations/Foundation who have provided complete details. NATHEALTH received a total of 67 nominations for its Healthcare CSR Awards 2023.

Start-up & Innovation Hub

Promoting Innovation & Acceleration Concept & Knowledge Partners



The healthcare industry confronts a multitude of challenges such as escalating costs, growing burdens, data fragmentation, and rigorous regulatory frameworks. In this context, startups are playing a pivotal role in driving the digital transformation of healthcare by creating innovative solutions that address some of these issues. These startups are revolutionizing various domains of healthcare with cutting-edge solutions including health risk assessment, disease management, telemedicine, e-pharmacies, drug discovery, clinical development, med-tech, diagnostics, AI/ML-powered clinical decision support, health monitoring, fitness and wellness, and more.

Impact of a strong and integrated digital health ecosystem:

- Enhancing access to quality healthcare, through affordable diagnostics and reduced costs
- Optimization of healthcare delivery systems, with better patient outcomes
- Increasing the efficiency of healthcare providers, and enhancing health monitoring
- Facilitating healthcare data interoperability, and enabling Data based insights

In the Union Budget 2023-24, the government has allocated Rs 283.5 crore for the Startup India Seed Fund Scheme, providing an immense boost to innovation through start-ups. However, these startups need the support of the ecosystem to create opportunities for scaling these solutions and enabling go-to-market opportunities. The Startup Innovation Hub presents a platform for Startups to engage with Hospitals, Diagnostic Chains, MedTech Enterprises, and Public Healthcare stakeholders.

The Start-up and Innovation Hub sessions will enable some of the leading HealthTech start-ups in India to showcase their offerings across six major themes:

1. Patient Engagement
2. AI-based Clinical Decision Support solutions
3. TeleHealth
4. Digital Therapeutic/MedTech
5. BigData/Analytics
6. Hospital Automation

The event will feature a range of engaging activities including panel discussions, AMA sessions, and curated roundtables. Additionally, the event will feature an exclusive pitch session where startups can showcase their solutions to leading stakeholders from healthcare, MedTech, and pharma companies. This pitch session offers an unparalleled opportunity for startups to connect with potential partners and investors, and to gain valuable exposure in the industry.

StartUp Pavilion Participants

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LEADERS SPEAK

Post - pandemic recovery, healthcare financing, elder care, medtech, startups, innovation, you name it, regardless of your area of interest, NATHEALTH has something for everyone. Additionally, our flagship NATHEALTH Annual Event helps you interact with our expert speakers and your colleagues. Healthcare is often seen as a discrete series of interventions, whether it is a prevention, screening, diagnosis, therapeutics but a continuum of care is needed as that one tool that links all of these to make the patient journey satisfactory. Experts both from the Government and the private sector come together at our Annual Summits to discuss more.



Dr. Shравan Subramanyam
President, NATHEALTH

From the desk of
Dr. Shravan Subramanyam
President, NATHEALTH



Made-in-India medtech

We are looking at the future of MedTech with a holistic policy, giving the sunrise sector the much-needed impetus. These developments will strengthen India's domestic and global MedTech value

Standing at the cusp of a new dawn for MedTech, India is at an inflexion point, where the sector is poised to “Aspire” and get ready for a quantum leap. The government is paving a new path for the accessibility of medical devices by placing the sector on accelerated growth, as envisioned in the approach paper on the draft National Medical Devices Policy 2022. We are looking at the future of MedTech with a holistic policy, giving the sunrise sector the much-needed impetus. These developments will strengthen India's domestic and global MedTech value, as it is already among the top 20 markets for medical devices worldwide.

The market is expected to increase at a 37 per cent CAGR. While those numbers paint a promising picture, India still relies 70% on imports for medical devices. For a country where MedTech combines large multinationals and small and mid-sized companies, the dependence on imports presents an opportunity for the crisis. Strengthening the Indian MedTech market calls for addressing the fundamentals – building better resilience for future contagions, self-reliance, and ability to handle patient volumes without compromising quality; enabling broader access to care and focusing on prevention with improved diagnostics, higher imaging intelligence and reducing radiation risk.

Charting the path through collaborations

In 2020, the government announced incentivisation plans of at least ₹3,420 crore over five years for manufacturers who invest in set-ups to manufacture key medical devices. The Production Linked Incentives (PLI) Scheme for Medical Devices provides a much-needed boost to domestic manufacturing, making it globally competitive. A case in point, at GE Healthcare, we recently launched a Rs 100-crore unit under the government's PLI scheme for local manufacturing of CT machines, cath lab equipment, ultrasound scanners, patient monitoring solutions, ECG machines and ventilators. The PLI scheme is attracting large investments in medical devices segments. With more participation from the industry, we can look at radiology, cancer care devices, and imaging devices becoming more accessible to people.

Made-in-India medtech

When we speak of collaboration, we saw its value as we witnessed the chip shortage period. MedTech companies should work closely with the governments when critical equipment is unavailable. The partnership will help ensure that public health is not affected, strengthen local manufacturing, and integrate chains domestically. We should use this time to boost local manufacturing and integrate the supply chain domestically.

Leveraging Data to Drive MedTech

This is where data comes into play.

According to the Covid Impact Assessment Study by GE in India in 2021, “60 per cent of the respondents felt that there will be an increased focus on adoption of AI based solutions over the next 3 years, 48% felt that there will be an increase in adoption of cloud-based healthcare solutions while 66% said that there will be a rise in digital transformation initiatives.”

We now have precision medicine and tools that use intelligence platforms to achieve patient outcomes and improve access to care. Integration and assimilation of data from disparate sources and applying advanced algorithms to generate operationally, and financial insights, the new tools have it all.

Building MedTech with Skilled Professionals

Another significant gap area continues to be ‘skill’. We have a lot of talent, but are they suitably trained and qualified for the highly precise work needed for med-tech? Under Pradhan Mantri Swasthya Suraksha Yojana (PMSSY), 22 new All India Institutes for Medical Science (AIIMS) and 75 Government Medical College up-gradation were constructed, and projects have been approved.

With Ayushman Bharat Health Infrastructure Mission, we have 157 new medical colleges, 16 AIIMS, and 37,000 beds. If the government and private sector could collaborate to invest in building better infrastructure like hospitals, diagnostic centres and mental health clinics, India will be able to make affordable and accessible healthcare a new reality for our people.

The future will demand stronger collaborations, smarter technology, and a deeper understanding of the policy ecosystem to drive value from MedTech. From setting up medical parks to partnering with the industry and academia, India is on its way to reducing its import dependency and making healthcare more accessible.

We are aspiring for tomorrow that promises quality healthcare to the last mile. The question is - how do we make it a reality?

LEADERS SPEAK

The pandemic was the challenge for many countries which have some of the best infrastructure in the world. In our part of the world we also witness that what can be achieved through collaborative efforts. Collectively we were able to develop new advanced testing and treatment solutions in the shortest possible time. NATHEALTH summits and events are a vital opportunity for all of us to identify and address critical gaps for our country. I am sure these summits and events will provide all of us with many enriching sessions which will be helpful to charge a strong health care trajectory for India.



Dr. Ashutosh Raghuvanshi
Senior Vice President,
NATHEALTH
Managing Director & CEO,
Fortis Healthcare

From the desk of **Dr. Ashutosh Raghuvanshi**

Senior Vice President, NATHEALTH
MD and CEO, Fortis Healthcare



Budget 2023: A new vision for India's healthcare is needed; will the govt rise to the occasion?

The healthcare sector, particularly the public sector, still faces barriers, despite being one of the world's best. The Budget is an apt time to fix the loopholes

Healthcare in India has progressed remarkably in the last 75 years since independence, with more than doubled life expectancy from 32 years in 1947 to 70 years. The country has now become a top draw for medical tourism, with the industry leveraging both technology and government policies. India has successfully eradicated widespread infectious diseases such as polio and smallpox, and has made significant headway in treating cancer, cardiac, and pulmonary diseases, among others. Earlier this year, the government unveiled the Heal in India campaign, a targeted outreach program to boost India's medical tourism. The government's focus on digitization has facilitated enhanced healthcare delivery, and digital platforms backed by the National Digital Health Mission have eased accessibility to crucial healthcare solutions.

One of the significant achievements of the healthcare sector in recent times has been winning the battle against COVID-19. And this year, the Government has announced that India has achieved one of the targets of the National Health Policy with a significant reduction in maternal mortality ratio (MMR). Seventy-five years ago, achieving such a target may have seemed impossible.

Intelligent Pathways to Smarter Healthcare

The COVID-19 pandemic spurred the digital transformation of healthcare. It underlined the need for partnerships and greater collaboration which can prove to be a force multiplier in enhancing outcomes. The pandemic also fast-tracked adoption of technology to streamline the operational and clinical processes for better management of patients and to offer them access to quality service.

Budget 2023 - A new vision

Artificial intelligence (AI)-based technology is now emerging as a game changer that can transform the patient care pathway. As per a study by World Health Organization (WHO), AI plays a significant role through precision diagnosis in advanced care for a range of Non-Communicable Diseases (NCDs) responsible for 66 per cent of all deaths in India, out of which 82 per cent are due to cardiovascular diseases, chronic respiratory diseases, cancer, and diabetes. Ironically, most premature NCD deaths are preventable, and AI can bring down the casualty rate by enabling the detection of risk factors and helping health professionals respond faster to prevent diseases.

Technological developments in the MedTech sector ranging from intelligent devices, telemedicine services, and remote patient monitoring facilities, have eased access for patients not only in cities but also in rural areas. Upskilled, trained healthcare professionals will be driving this transformation; hence, skilling is an integral part of this story.

Acknowledging the Roadblocks

The healthcare sector, particularly the public sector, still faces barriers such as inadequate access to essential healthcare services shortage of medical professionals and hospital beds. Another hurdle is India's low public expenditure on healthcare at just over 2 per cent. Other healthcare barriers include the lack of active disease management and low priority to preventive care. Comparatively low attention to R&D and cutting-edge technology-led new projects also restrict the healthcare sector's progress.

Patients at the Centre

Patient empowerment is now becoming an essential aspect of healthcare. It means continuously equipping patients with knowledge, training, support and motivation to enable them to understand the disease and the line of treatment. Healthcare players are now adopting a patient-centric approach to ensure patients get the treatment they deserve.

Healthcare players also leverage predictive analytics, a form of advanced analytics that helps predict the future health status based on crucial factors such as historical data, statistical modelling, and machine learning. Since patient journey, diagnosis and treatment often depend on multiple factors, including genetics, family history, nutrition, physical activity and mental health, many hospitals have started using predictive analytics to determine the best treatment.

Budget 2023 - A new vision

The Road Ahead: Mapping the Future

While India needs a holistic approach to eliminate the roadblocks in the healthcare industry, we must expand the use of Artificial Intelligence (AI), Machine Learning (ML), and Blockchain to strengthen the sector with high-tech diagnostics, besides increasing the number of medical professionals, which will improve patient outcomes.

The government and the healthcare industry must also collaborate to scale up infrastructure to meet the rising demand for diagnostics and medical devices. MedTech companies must create business models demonstrating how their new and existing devices create value for key healthcare stakeholders. We have a large population, a robust medical supply chain, almost 800 million plus smartphone users as per a recent study, innovative tech entrepreneurs, and access to funding. We must leverage these elements to boost the healthcare sector's trajectory of growth, which will be driven by longer life expectancy, a shift in disease burden, a growing middle class, and an increase in health insurance. Increased facilities and longer life expectancy should ensure an improved quality of life for our citizens, through better access and environment, physical and mental health, and the right infrastructure in place.

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LEADERS SPEAK

NATHEALTH, through its various thought leadership initiatives, events and summits offers organizations active opportunities in the sector related to healthcare around the world and in India. This is your chance to listen to stalwarts in the space showcase test practice nurse and share learnings.



Ms. Ameera Shah
Vice President, NATHEALTH
Managing Director, Metropolis
Healthcare

LEADERS SPEAK

NATHEALTH's core vision is to be the unified voice of Indian healthcare. The Annual Event of NATHEALTH has now proved itself to be India's most awaited healthcare conference. The themes of these conferences are focussed on industry-specific strategic subjects that help in building, structuring and reimagining a resilient healthcare system in India. The conference agendas are designed to bring together all the important stakeholders, from startups to small, mid, large healthcare providers, product manufacturers and government agencies on one platform to exchange ideas and learn from industry leaders about new operating mechanisms, harness knowledge and technology for best possible solutions to deliver the best outcomes.



Mr. Sunil Thakur
Treasurer, NATHEALTH
Partner, Quadria Capital

From the desk of
Mr. Sunil Thakur
Treasurer, NATHEALTH
Partner, Quadria Capital



Healthcare Financing needs Attention

The country needs new healthcare models to ensure that medical treatment payouts are made for the right approaches and layouts.

Healthcare financing which deals with the generation, allocation, and use of financial resources in the health system has become an area of major policy relevance globally in order to achieve Universal Health Coverage (UHC). In India, public financing of healthcare comes largely from state government budgets (about 80%), and the balance from the Union government (12%) and local governments (8%). Although effective healthcare financing is essential, it has been difficult to achieve, so far. The thrust of healthcare financing should be on devising mechanisms to improve access, reduce out-of-pocket expenditures (OOPE) for the general population, and thereby lessen economic hardships and impoverishment. Most importantly, it should focus on creating an evenly distributed healthcare infrastructure as well as a streamlined protocol that makes treatment payouts align with the right treatment approach and right outcomes.

Reducing OOPE

According to the Economic Survey 2022-23, Indians still pay almost half of all health spending directly at the point of treatment. However, this has been dropping over the course of last few years with the government's spending on health rising significantly from 28.6% in 2013-14 to 40.6% by 2018-19. In recent years, OOPE as a percentage of total health expenditure has declined from 64.2% in 2013-14 to 48.2% in 2018-19. But it is still much higher than the global average of 18.1% as of 2019, according to the World Bank.

Despite the government's recent push through the Ayushman Bharat scheme (PM-JAY) to cover the treatment of the poorest 40% of the population at empaneled tertiary care private hospitals, the overall penetration of health insurance in India remains low at 37%. A large part of this is attributed to lower-middle class slice of the population, called the 'missing middle'. According to a Niti Aayog report, this population set constitutes 30% of the over all population and lacks any financial backing for healthcare treatment. It is because they are not poor enough to be covered by government-subsidized schemes but not rich enough to afford private health insurance. Private insurance penetration is less than 4% mainly due to the high cost of insurance. Government-sponsored schemes that primarily extend to the lowest income strata of the population cover 25% of the population but the middle class is left with the highest exposure to OOPE.

Healthcare Financing needs Attention

Stakeholders must devise new health insurance schemes to bring 60-70% of the population, the ones covered under Ayushman Bharat and the missing-middle, under the insurance net and thereby help in reducing OOPE further. Health insurance coverage for missing middle can be increased in various ways including co-pay model, and mandatory corporate coverage for employees mainly targeted at SMEs

Creating infrastructure

So one hand, while we sort the insurance cover, there is also a need to build more infrastructure, particularly in tier 2/3 towns so that people who are insured don't have to travel long distances for treatment and can have affordable access. India's healthcare infrastructure is lopsided with top-quality medical facilities concentrated in major cities. We must focus on increasing the number of hospitals and healthcare centers across regions evenly with an adequate number of qualified medical professionals, beds, equipment, medicine supply, and all other operational facilities.

The Public Private Partnership (PPP) model can be leveraged to boost healthcare infrastructure, particularly in non-metro areas, and reduce regional disparities. The main obstacles to a robust PPP model in creating healthcare infrastructure have been less private investment due to low demand and resourcing challenges exemplified by a shortage of lack of doctors, nurses, and paramedics.

A PPP model to boost health infra should initially focus on locations that can provide a good resourcing base and strong demand channelization, akin to road or airports traffic, in which govt/insured patients mandatorily must go to PPP hospitals in the catchment areas. Viability gap funding (VGF) can help bigger private hospitals expand into the hinterland, while small clinics manned by doctors could make use of these funds to set up smaller primary health centers with 15-20 beds and leverage local demand. Healthcare players must also build hub-and-spoke models to enable better, quicker access and diagnosis. We should complement this with digital healthcare models that can be leveraged for triaging patients according to their needs and to lessen the load on existing secondary and tertiary infrastructure.

Quality at right price

While the cost of treatment in India is almost one-third compared to countries such as the US and the UK, Indians pay more out of their pockets than some of the poorest countries in the world for availing healthcare, mainly for lack of health insurance and inadequate funding for public health.

In 2021, India recorded the highest medical inflation rate of 14% among Asian countries, as a result of which health insurance premiums also increased. In FY 2022, while the retail premiums went up by c.16.5%, group health premiums increased by c.30%. The country needs new healthcare models to ensure that medical treatment payouts are made for the right approaches and layouts. The National Health Policy recognizes some key dimensions of high-quality healthcare – consistency, positive health outcomes, patient-centeredness, equity, and trustable service delivery.

Healthcare Financing needs Attention

Coverage and quality might need not be a trade-off, and an effective combination of the two is imperative for better healthcare delivery. This involves training and capacitation towards building an end-to-end protocol system comprising correct diagnosis, surgical intervention, and appropriate medication for best patient outcomes.

Way Forward

Much of the problems of access and affordability can be addressed by increasing the insurance base which will also instill discipline in the fragmented healthcare sector.

The COVID-19 pandemic forced a paradigm shift in healthcare in India with massive technology adoption. While technology will dominate healthcare post-pandemic, the challenge of financing and delivering universal access to healthcare to India's population is immense, and the public sector on its own cannot plug the gaps. The private sector must be co-opted to pool in capital and expertise for new-age solutions to meet the challenges of healthcare financing.

Allied Health Worker – A ripe opportunity for PPP

Knowledge Partner



The allied health worker shortage in India is growing due to the increasing demand for diagnostics and elderly care. Although there are many AHP training centers, the quality of training is often poor, and there is no structured assessment of the skillset of trained professionals. The variability in the quality of workers, along with low pay and recognition, leads to high churn and limited upskilling investments. Healthcare organizations often fulfill the shortage by leveraging nurses or low-skilled professionals, which further reduces incentives for management to tackle the issue structurally. The lack of structured training initiatives for emerging skill sets, such as digital health provisioning and insurance, will exacerbate the problem in the future.

Certain measures have been taken by the public sector and private sector to address some of these challenges, however not necessarily address the scale of the challenge. Local skilling initiatives are done by private institutions. The certification program is introduced by NSDC in consultation with the industry. Lastly, financing options are being made available to candidates through schemes like PMKVY

A concerted effort along 3 sets of interventions would be necessary to break this vicious cycle

- **Strengthen the training to enhance the quality of professionals emerging out of the system, with a clear ability to assess their skill levels -**

A "tiered" certification program can be curated in collaboration with private sector organizations, with a base program covering minimum qualification criteria and higher tiers based on advanced skills required during care provisioning. A body like NATHEALTH, with support from the public and private sectors, along with organizations like NSDC, can be entrusted with this program. Hybrid training delivery can be curated to combine theory delivery, practical hands-on experience, and exposure to new technology and innovations. Base theory and practice can be delivered at existing infrastructure and digital tools can be leveraged for standardization in the course delivery. Advanced exposure can be enabled through technology like virtual, VR, and AR solutions, developed jointly with the private sector.

To improve the quality of AHP professionals, the train-the-trainers program should be standardized and evolved. Standardized and digitalized assessments should be employed to evaluate skill levels and provide certification and grading. Additionally, a digital skill assessment mechanism should be created to bridge skill gaps for existing staff.

A ripe opportunity for PPP

- **Strengthen placement support for the trained candidates, and enhance social and professional recognition -**

Regularizing the workforce under a common e-register for all certified professionals, including a separate cut for newly trained professionals, would provide a single view of certified supply availability. Building a common digital demand capture mechanism would enable small centers to consolidate demand and connect directly to the e-register for newly trained professionals, thereby improving demand and supply match. It is also important to ensure that certifications are accepted in hiring the right skill level by various organizations, and third parties should be mandated to ensure these certifications while offering staff for deployment.

To promote a continuous learning mindset in staff, it is necessary to work with the private sector to enable differentiated compensations in line with the level of certification. The use of a clear standardized lexicon for allied health workers in patient-facing roles would enhance patient visibility and recognition, leading to an enhancement of the social stature of the profession.

- **Popularize the cadre and build demand in the community to be part of this profession -**

One way to achieve this is to promote "Swasthya Mitra" as a campaign targeting youths and senior schools, emphasizing the role, opportunity, and pathways available in this profession. Social awareness campaigns like "Salute our Swasthya Mitra" or "Swasthya Mitra Day" can also be conducted to enhance social recognition and respect. Sponsorship of skilling programs for women professionals in areas such as elderly care, nutrition, GDA in pediatric care, and gynecological care can help increase women's participation in the workforce. It is also important to emphasize the new roles that are being generated in the healthcare ecosystem to generate demand and a "coolness factor" among the youth.

If these interventions are addressed effectively, it has the potential to break the vicious cycle and create a virtuous one, resulting in several benefits. This includes the creation of 3-6 million additional jobs in the allied health sector in India. Improved health outcomes in the country would also be a result of a skilled and qualified workforce in the healthcare sector. Moreover, India would strengthen its position globally in healthcare, becoming a powerhouse of talent in addition to being known for providing high-quality, low-cost care and medicines.

Healthcare Financing

Enabling accessible, equitable, and affordable health coverage for 1.4 bn Indian citizens

Knowledge Partner



Indian healthcare is confronted with several challenges from the perspective of care delivery and financing. This paper focuses on ascertaining ways to solve the problems of insufficient infrastructure, inequitable health coverage, and inadequate focus on outcomes.

Access to healthcare is a basic need and right for all citizens. While PMJAY has enabled demand-side accessibility for ~400m people, supply-side accessibility remains limited in non-urban areas due to the low bed density ratio. PPP hospitals are needed in these areas, and there needs to be an exploration of reasons for the limited uptake by private providers for PPP Viability Gap Funding. Towards the goal of equitable health coverage, The Missing Middle (30% of the population without financial protection) needs health protection. The lack of inclusion of OPD/primary care in health insurance leads to high out-of-pocket expenses. An affordable private health insurance product can be developed by leveraging the existing ABPMJAY network.

The current fee-for-service model of healthcare provision in India provides incentives to caregivers based on a higher number of visits, procedures, tests, and treatments, which results in increasing healthcare expenditure and excess healthcare costs. To address this issue, the country is transitioning towards a value-based healthcare model, which rewards healthcare providers for improving patient health outcomes, resulting in better resource utilization and improved service quality.

This section explores the relevance of the value-based payment model for healthcare services in India, examines best practices globally, and makes recommendations for a possible reimbursement model. The ABPMJAY model aims to move towards DRG-based payment models and outcome-based incentives in the future. The transition to a DRG-based payment system in India requires essential building blocks including patient classification, price setting, cost weights, alignment of quality indicators, and costing tools. This transition will be phased over time to allow flexibility for both payers and providers to understand and adapt to the new system. The Government of India introduced the Scheme for Financial Support to Public-Private Partnerships (PPP) in Infrastructure to support healthcare infrastructure development through PPPs. However, private providers have not taken up the scheme, and only three projects in Odisha have received in-principle approval but are yet to be awarded.

Healthcare Financing

This could be attributed to several challenges ranging from the fundamental design and construct of the policy that lacks customization to the health sector, to the identified location not being attractive enough from a catchment and resourcing standpoint. The complex and time taking bidding process, lack of a clear demand channeling mechanism, and cashflow risks owing to predefined unit economics also deter private providers from utilizing this scheme.

Recommendations to address these challenges include structured interactions between stakeholders to create draft tender documents, a separate PPP for building hospitals, a hub and spoke model, pricing services according to the true cost of service delivery, and routing payments through third-party administrators for timely disbursements. These recommendations are based on discussions with industry stakeholders and global case examples.

India has made progress in reducing out-of-pocket expenses (OOPE) on healthcare, with OOPE declining from 64.2% in 2013-14 to 48.2% in 2018-19 due to increased utilization and cost reductions in government facilities. However, this figure is still higher than the global average of 18%. Including outpatient coverage in insurance products and expanding health protection to the missing middle (30% of the population) could further reduce OOPE. One possible solution is the inclusion of cashless OPD benefits or the introduction of Health Savings Accounts. Private insurers could play a role in designing an affordable and sustainable product for the missing middle by developing a multivariant product based on affordability and leveraging the existing ABPMJAY provider network, data, and systems.

A collaborative environment of stakeholders from the government, providers, and payers will be pivotal in achieving the transition to this new payment reform.

The logo for O3 capital features the number '03' in a large, red, stylized font, followed by the word 'capital' in a smaller, grey, lowercase sans-serif font.

Dialysis delivery in India: demand, challenges and policy insights

Knowledge Partner



Renal failure is an important public health problem. However, it remains a mostly undocumented cause of premature death in developing countries, like India. As per government estimates, nearly 220,000 patients develop end-stage renal disease (ESRD) annually in India, leading to an additional annual dialysis demand of 34 million treatment sessions. There are two major types of complementary treatments offered to ESRD Patients in India: Hemodialysis (HD) Treatment and Peritoneal Dialysis (PD). Almost 94% of dialysis patients in India are on HD treatment. With nearly 5,000 existing dialysis centers and 3,340 nephrologists (estimated by the industry), this seems inadequate to meet the upcoming demand for dialysis, accelerated by various sociological and environmental factors.

Key Challenges

Dialysis delivery in India faces many challenges. Starting from the lack of access to dialysis centers and machines across districts, lead to the low frequency of treatment, impacting the health of patients to the erratic and low rate of reimbursements for dialysis sessions affecting the operation of dialysis centers. There is a lack of skilled workers, such as technicians and renal nurses. Another challenge is the low uptake of PD in India due to high costs and low clinical adoption.

Need for Clinical Outcome Monitoring

An essential component of the quality delivery of dialysis services is recording and monitoring the clinical outcome of ESRD patients for improving their safety and clinical care. While there are several important clinical outcomes that are considered critical for dialysis patients, four key indicators are mortality, anemia, seroconversions, and dialysis access. Monitoring these outcomes helps improve the understanding of the effect of dialysis treatment on patients and thereby helps the service providers in turn to improve their services.

Human resource requirement In dialysis

India needs to address several gaps in terms of training healthcare professionals and building a skilled workforce to deliver quality dialysis services. A few of the gaps identified by the industry in the dialysis ecosystem are the following:

- Addressing the shortage of Dialysis Technicians (DTs) and ensuring the employability of DTs in the country

Dialysis delivery in India

- Need for short-duration courses to accelerate the upskilling of the existing pool of nurses, doctors, and allied professionals.
- Addressing the requirement of training centers available in the country.

Need for standalone dialysis centers

There is also a growing need for standalone dialysis centers which can provide higher safety to the patients, and convenient and patient-friendly solutions that will help in accessing services in multiple locations rather than hospitals. And lastly, proximity to patients, will reduce travel costs and hassle for patients who live far away.

Recommendations

The short-term recommendations focus on improving access to standalone dialysis centers through both PPP and non-PPP channels, optimal use of human resources, maintaining standards and mitigating other costs, as well as resolving Empanelment Delays through the provision of default “deemed approved status”. Lastly, reimbursement rates are to be increased considering the overall cost of treatment to providers

The medium-term recommendations include job training and internship opportunities for DTs, short-term training for nurses on both HD and PD as well as training courses for Ayush, BAMS, BHMS, and MBBS doctors to be formulated. It also focuses on addressing infrastructure challenges and specific training required for surgeons, nurses, and patients for PD.

Key recommendations for peritoneal dialysis - This includes PPP mode for PD treatment delivery with private service providers providing consumables and public sector providing care, building awareness amongst patients through information and education campaigns, and establishing supply-side channels by enabling a reduction in the cost of consumables. Lasting it talks about clinical support infrastructure through establishing and monitoring clinical outcomes and promoting PD treatment through community healthcare.

Pathways to Scale Adoption of Digital Health in India

Knowledge Partners



This report provides an overview of the drive toward the adoption of digital health in India. This report begins by mapping out the current landscape of digital health and ABDM adoption by different segments of providers and by patients, drawing key learnings from global digitalization efforts and local success stories, as well as understanding barriers to adoption as perceived by different provider segments. Finally, it charts out a roadmap for the implementation of likely future use cases of digitalization and ABDM adoption and recommends key imperatives to drive adoption.

This report's findings are based on insights from 21 extensive interviews with government stakeholders and industry leaders and 2 comprehensive survey studies - one on the provider side, and the other on the patient side - centered on digital health and ABDM adoption.

Current Adoption Landscape

A Digital Health Adoption Index to assess the adoption of digitalization across healthcare providers has been developed. In this index, there are levels of digital health adoption among healthcare providers, starting from "no digital adoption" to "end-to-end digitalization".

Large private hospitals and labs are the most digital ecosystems, while small labs and out-of-hospital forward players in the provider segment are the least digitized. Uptake and use of ABDM by private players are poor across the spectrum of providers, even among high hospitals and labs. Comparatively, both the adoption and utilization of ABDM components are higher in public health facilities. Digital systems are available in all National Institutes, Medical colleges, and CHCs in public healthcare. In addition, most Health and Wellness centers are digitized. Although the public health system is leading ABDM adoption in the country, it is yet to take full advantage of the massive opportunity to digitize.

Government initiatives to push digitalization have focused on increasing ABHA ID creation, incentivizing ABDM utilization, and driving payor-side consolidation. ADL's provider-side survey findings suggest that providers highly acknowledge digitalization benefits but require a push to undergo the process. There have been levers such as Value Recognition, ABDM Awareness, and Efficiency Impact. ADL's patient-side survey results signal sizeable levels of digital health awareness and strong acknowledgment of the benefits associated with PHR. 74% of the total 135 respondents are aware of the digitalization of health services.

Digital Health in India

Key Learnings from Success Stories

International case studies show that preferred provider networks, payer-side integration, and training programs could drive digital health adoption. It was found that integrating payers into the digital system is an effective method to drive digital health adoption and the training programs for healthcare staff were instrumental in digital health adoption across the country. Simplifying compliance processes and allowing sufficient time for training way is also essential. It was also found that the burden of technical compliance must be systemically placed on the DSCs.

Barriers to Adoption

The key findings from interviews and provider surveys revealed manifolds of factors and barriers to adoption. Overall findings reveal that larger providers have adopted digitalization but don't understand the benefits of ABDM integration. For smaller providers, awareness of the benefits of digitalization and ABDM integration is a major bottleneck. It was also found that ABDM could be a catalyst for digital adoption in smaller, unorganized segments; the biggest barriers include awareness of benefits and initiation difficulties. Low willingness to digitalize may emerge as a barrier from some smaller providers with vested interests in keeping records manual and escaping scrutiny. Moreover, payer-side digitalization and ABDM integration combined with improved insurance penetration can drive the adoption of digital health and ABDM by providers.

Future use Case Roadmap

Digitalization has positively impacted the efficiency of healthcare operations across various case studies be it chemotherapy, OPD registrations, or organ transplantations. It has also positively impacted the efficiency of healthcare operations across various case studies from reminder apps, and telemedicine to virtual counseling services. Future use case roadmap that will drive the adoption of digital health and ABDM across the Indian healthcare ecosystem. It will have providers from various sectors like pharma, diagnostics, etc.

Recommendations

Key recommendations on accelerating pathways to digital adoption and ABDM usage include demonstrating data security and privacy safeguards for the patient through technology and health records regulatory interventions such as data privacy bill, increasing the ambit of ABDM, creating initial champions and partners, mandating the use of ABDM compliant software and engaging with providers to emphasize the benefits of digitalization and ABDM adoption, among other things.

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PAST PRESIDENTS SPEAK

NATHEALTH is a unique Federation that has brought various stakeholders together, like providers, medtech, diagnostics, and consultancies. The Federation has had many favourable partnerships with successful outcomes with many industry organizations.

NATHEALTH unifies the voice of healthcare, collaborates with the Government, complements other healthcare associations, makes an impact on shaping healthcare regulations and policies, and participates in skilling and scaling up of healthcare infrastructure and manpower. It is a pleasure to be associated with the Federation.



Dr. Sudarshan Ballal
Past President, NATHEALTH,
Chairman, MHEPL Manipal Hospital
Chairman - MHEPL, Manipal
Hospital

PAST PRESIDENTS SPEAK

Since the time NATHEALTH was launched, it has picked up momentum and is committed to not only sustain, but enhance the healthcare sector. The Federation's determined efforts have helped in achieving diverse successes and it underlines the commitment of an energetic NATHEALTH.

The entire team and its members have moved up the ante on its mission and goals. Our resolute objective is to establish NATHEALTH as a competency centre that is par excellence for public-private partnerships, a pivot in stringing healthcare and technology together and driving programs to bring in greater Government support for an all-new national health agenda.



Ms. Preetha Reddy
Past President, NATHEALTH
Executive Vice Chairperson,
Apollo Hospitals

PAST PRESIDENTS SPEAK

NATHEALTH's initiatives and events are designed to discuss pertinent aspects of financing of healthcare and how it can provide the momentum to achieve Universal Health Coverage. Experts discuss new paradigms in healthcare financing and why patients and quality should be at the forefront and how India can move towards a value based framework. Also the ways in which health insurance can be utilized to amplify the impact by leveraging the scale provided by the government jointly with the efficiency of the private sector. We also engage the industry in thought provoking ideas for greater collaborations amongst all healthcare stakeholders while also exploring various pricing models to ensure viability, scale without compromise of quality.



Dr. Harsh Mahajan
Past President, NATHEALTH
Chief Radiologist,
Mahajan Imaging

PAST PRESIDENTS SPEAK

The dominant role of the private sector was further highlighted in India's response to the recent pandemic times. Therefore, it is extremely important to have a platform that represents the united voice of all stakeholders. For us, NATHEALTH is that platform. Being associated with NATHEALTH since inception and after also serving as its President in the past, I firmly believe that NATHEALTH is strategically well positioned to collaborate and complement other federations, to help shape policies, and work towards the scaling up of Indian healthcare status.

It has been a pleasure and I look forward to further working together with NATHEALTH and improve accessibility, affordability and quality of healthcare in India.



(Hony) Brig. Dr. Arvind Lal
Past President, NATHEALTH
Exec. Chairman
Dr. Lal PathLabs Ltd.

EMINENT LEADERS SPEAK

NATHEALTH is only platform which is industry centric and brings together all the stakeholders whether it is manufacturing, Pharma industry, diagnostics, the primary care, secondary care and brings together all the players on to a single platform and helps them engage with each other and learn from each other. The annual event is something which everybody looks forward to simply because of the content and the value the speakers bring to the conference. It's a great occasion for learning and exchanging ideas. This is the time when all of us need to get together ideate and fine solutions which are appropriate to make healthcare accessible both financially and geographically.



Dr. K Hari Prasad
President, Apollo Hospitals

EMINENT LEADERS SPEAK

I am looking forward to attending the 9th annual summit of NATHEALTH in March. It will be a forum where private and public players will come together to discuss the current barriers facing the industry, look at the learning from the pandemic and what we can do to build healthcare infrastructure for modern India. This will also be a place where we will find interaction with the different stakeholders in the ecosystem whether they are startups, large hospitals, medical devices. I think the amount of learning from the peers and from the knowledge sessions and the interactions with the senior leaders in the industry will be a great opportunity to enjoy and learn. I look forward to seeing you all at the NATHEALTH summit.



Mr. Gautam Khanna
CEO, PD Hinduja Hospital

EMINENT LEADERS SPEAK

We have seen during the Covid that to fight any calamity or pandemic it is important for the government to work with the industry and the private sector to meet these challenges. NATHEALTH is the only federation that works exclusively in the health sector to provide policy exchange and dialogue between the government and the industry to facilitate partnership and working together to meet these challenges. If we have to work and achieve the sustainable development goals of good health and well being for all, we need to work together with the government and the private sector. NATHEALTH also started its regional chapters over the last 2 years to get representatives from the states as well as the towns all over the country. Annual summit of NATHEALTH provides a great opportunity for members to discuss some important topics that are being faced by the health sector. It also provides an opportunity for them to network through other colleagues in the industry as well as the senior government officials.



Mr. Ashwajeet Singh
Founder & M.D. IPE Global Group

EMINENT LEADERS SPEAK

I have been associated with NATHEALTH for some time and also as a chair of the Western region. As a part of NATHEALTH it has been a very enriching experience to work with the team and all the members on several health care opportunities that I have been identified with which will go a long way in building a Swastha and Atma Nirbhar Bharat. On behalf of NATHEALTH, let me invite each one of you to the National Annual Summit of NATHEALTH, 2023 that features impactful discussions in health and technology with government and multiple stakeholders. This summit will be looking at investing in and rebuilding healthcare infrastructure as the strategic asset. Come join us at the summit and be part of it.



Mr. Sanjiv Navangul
MD & CEO
Bharat Serums & Vaccines Ltd.

EMINENT LEADERS SPEAK

Healthcare ecosystem in India was fragmented and underrepresented for many years. Now NATHEALTH is able to unified the voice of different sections of the healthcare system like hospitals, diagnostic centres, equipment manufacturers, investors, healthcare, home care, senior care, etc. It provides a very good forum to anyone connected with the healthcare sector. I really feel proud to be associated with it since its inception. It is playing a significant role in shaping and improving the healthcare ecosystem in India. I am confident that any organization in healthcare or related sectors will be immensely benefited by connecting net health or any of its initiatives.



Mr. Suyash Borar
Director,
**Xceptional Health
& Wellness Pvt. Ltd.**

EMINENT LEADERS SPEAK

At NATHEALTH, you get an opportunity to meet a plethora of Healthcare providers, hospitals, diagnostics, medical equipment manufacturers and medtech. There is so much to learn from each other's perspective so much that we can share and make sure that we can address the challenges of affordable and accessible healthcare in India. Secondly, over the last few years NATHEALTH has significantly increased its outreach and developed such good relationships with the Ministry of Health and Family Welfare, NHM and NITI aayog. As a result, each time the government has contemplated a new initiative or a new policy or a new regulation it reaches out to NATHEALTH for its perspective to make sure that the implementation will be robust.



Mr. Rajit Mehta
CEO & MD, Antara Senior Living

EMINENT LEADERS SPEAK

I would like to urge you to join the NATHEALTH annual summit whether you are a startup, whether you are a large healthcare organization or you are somebody who is interested in healthcare. Because if you think about it, it is your chance to interact with India's healthcare industry leaders and gain insight into a robust healthcare system through public private partnership. If you are a startup, it is a great and unique opportunity to showcase your innovative models and a great platform to connect with others to gain access to the technology investments and collaboration. So make the most of it, register now.



Ms. Anuradha Acharya
Founder & CEO, Mapmygenome

EMINENT LEADERS SPEAK

It is your chance to interact with India's healthcare industry leaders and gain insights to build a robust healthcare system through public private participation. This is a chance to learn from our leaders on how they have navigated the course of the healthcare industry in the pursuit of universal health coverage. The summit is designed to bring industry and the government together to discuss, deliberate and chart the way forward for a stronger, resilient India which can be ready for any future complications and uncertainties. This will be a platform to discuss learnings from the pandemic and the way forward. Adopt from the global best practices, engage with varied healthcare forums, startups to philanthropic organizations, create a new operative mechanism, harness knowledge and technology for best possible solutions. The summit will be a significant pivot point around which these important deliberations will take place. It is your chance to learn and share. Don't miss it, register now.



Ms. Ruma Banerjee
Senior VP, Ambuja Neotia
Healthcare Venture Ltd.

EMINENT LEADERS SPEAK

I urge all of you to join the NATHEALTH annual summit 2023. The summit 2023 is your chance to interact with India's healthcare industrial leaders and gain insights into building a robust system through private public partnership. So join today, register yourself and see you at NATHEALTH 2023 annual summit.



Mr. Rupak Barua
Group CEO, AMRI Hospitals

EMINENT LEADERS SPEAK

NATHEALTH is an integrator of the vision to be a credible and unified voice in improving access and quality of healthcare in India. Especially during the pandemic. NATHEALTH also played a significant role in voicing some of the industry issues. During the crisis, while it's heartening to see medical diagnostics emerged as a first line of disease containment and the most critical public health measure implemented at an unprecedented scale in human history. NATHEALTH worked as a collective voice of the entire healthcare ecosystem by creating visibility around broader industry issues and government policies. By voicing these issues, NATHEALTH helped resolve some of the critical challenges that we were facing. Therefore, I urge all the stakeholders to come forward and join us in this journey of making India a country with better healthcare outcomes and better policy making.



Mr. Anand K
CEO, SRL Diagnostics

From the desk of **Dr. Narottam Puri**

Medical Advisor, Fortis HealthCare; Advisor
(HealthCare Services) FICCI; Ex Chairman, NABH,
Principal Advisor, QCI



Communication in Healthcare

Health care is a complex field wherein communicating well is as great a necessity as learning the technicalities of the practice of medicine and surgery

Communication is a means of exchange of information, as also a method of sharing of ideas. Fundamentally it has three components - Speaking, Listening and Non-verbal communication (use of posture, hands, eyes & gestures). We use words, vocabulary, emotion, enunciation, dialect, our knowledge of the subject to speak and our ears and brain to listen. We tend to ignore the role of non-verbal part of communication, despite research that emphasises its role and value. Whilst University of Pennsylvania's research gives 70% of weightage to body language, the more commonly followed 7-38-55 rule gives it 55% weightage.

Communication follows a 7C formula - Complete, Correct, Concrete, Clear, Concise, Considerate and Courteous.

However, in health care, poor communication is a bane as 65% of all sentinel events (JCACO 1995-2004) were related to poor or no communication and most complaints about doctors are related to communication errors. Research also indicates that as we progress from being medical students to senior consultants, our technical proficiencies certainly get enhanced but, in many cases, our ability to communicate well with our patients declines. 75% of wrong site, surgeries (Haynes et al, 2009), 60% of medication errors (Reader et al, 2006), 72% of neonatal deaths in obstetric cases (Leonard et al, 2004) & 30% of all malpractice suits in the United States (US) (2009-13) were a result of communication errors/deficiencies.

Health care is a complex field wherein communicating well is as great a necessity as learning the technicalities of the practice of medicine and surgery. Poor communication between colleagues, peers and juniors, amongst doctors, doctor-nurse, doctor-patient and lack of communication and documentation during patient handovers are quite common and potentially harmful.

The quality of information recorded and conveyed, time given to listen to the patient; (77% time doctors interrupt the patient's initial statement and interrupt the patient once every 18 seconds (Beckerman & Frankel), improper communication using medical jargon like COPD, AMI, CHF and TNM-- words which the layman can't understand, create a gap that causes distress and mishaps.

Communication in Healthcare

Whilst communication is (wrongly) attributed purely as an art, there is a science to it. Art is most important part of "how" in communication but science is key in the "when, where & whom" part of communication. Tools like SBAR for structured communication in healthcare can help. SBAR stands for Situation, Background, Assessment & Recommendation. Even the United Airlines CUUS – Concerned, Uncomfortable, Unsafe, Scared - mode can be used in health care settings to good effect.

Teaching communication to medical and nursing students in the undergraduate curriculum, use of educational tools like Teach Back, check lists (Pilot Gawande, Pronovost, WHO Safe Surgery), Electronic Medical Records, Computer Generated Prescriptions, Patient Engagement Tools & good practice example, like Making Care Better (by Weill Cornell Medical Collage & NY Columbia College of Physicians & Surgeons (2014) can do wonders.

The time has come to pay heed to the saying of two "greats" - George Bernard Shaw who said "The biggest problem with communication is the illusion it has taken place" and Peter Drucker who said "The most important thing in communication is to hear what isn't being said".

Let's make health care safe.

From the desk of **Mr. Amit Mookim**

VP & General Manager,
South Asia, IQVIA



Health tech start-ups: New stars of India's healthcare ecosystem

Health tech start-ups are revolutionizing the healthcare sector by designing and creating innovative medical technologies that are optimizing patient care outcomes, healthcare delivery systems, and reducing costs. The number of ventures in this sector has grown exponentially, from 452 in 2016 to nearly 90,000 in India today.¹ There are over 8,000 health tech start-ups in India valued at around \$2 billion and growing at a rate of almost 40%.

Union Finance Minister Nirmala Sitharaman highlighted India's position as the third largest ecosystem for start-ups globally and the second in innovation quality among middle-income countries during her Budget speech. The government has allocated a Budget of Rs 283.5 crore for the Startup India Seed Fund Scheme, coupled with a National Data Governance Policy, to boost innovation and research by start-ups and academia. The Budget also proposed that losses incurred by eligible start-ups can be carried forward for ten years. This is a major reprieve to start-ups that frequently face financial hurdles during their initial stages of operations.

Innovations for hospitals and patients

Innovations by health tech start-ups have made it easier for doctors and hospitals to deal with a variety of tasks such as operations, patient management, procurement, and surgeries and procedures. By inputting patient data and diagnosis into the system, all relevant issues can be analyzed, including the availability of medicine, doctors for surgery/procedures, other needs for the surgery/availability of beds/rooms in the hospital, which significantly reduces the workload of hospital administrations.

A host of digital technologies now help doctors with clinical decision support. Some of these include AI (Artificial Intelligence) and high-resolution thermal sensing devices for early detection of breast cancer, deep learning algorithms for interpretation, radiology images and scans, and machine learning to assess the aggressiveness of tumors and identify the characteristics of recurrence risk over a five-year period.

Within hospitals, health tech start-ups are now providing solutions for better patient engagement, patient data analysis, and insurance claim management. Wearables and mobile applications that are accessible to all make it possible for patients and their caregivers to make informed decisions on disease prevention, management, treatment, and health maintenance.

Health tech start-ups

However, protecting individual patient privacy is critical. The care providers have to evaluate these solutions and ensure that privacy-enhancing technologies and safeguards are in place to comply with the latest data regulations.

Health tech start-ups have broadened access to healthcare in the country, making diagnostics more affordable to those who previously could not access them. Telemedicine and teleconsultation services are helping people in tier II/III towns and rural areas to consult specialists and benefit from better healthcare facilities. AI is also enabling a new wave of drug development platforms which is helping drug makers use vast data sets to quickly identify patient response markers and develop viable drug targets more cheaply and efficiently. Health tech start-ups engaged in clinical trials use digital devices to capture data in real-time and send it directly to researchers to assist them in detecting infrequent events or incidents that are particular to a certain situation.

An evolving ecosystem

In recent years, India's healthcare system has greatly benefited from innovations by small health tech firms, ranging from the availability of doctors and medications to the creation of tech-driven treatments that save lives. Prior to the COVID-19 pandemic, these start-ups focused on developing wearables, medicine delivery, early diagnosis of genetic conditions, and treatment of lifestyle-related problems like stress and anxiety via remote therapy and post-procedure pain relief. With the pandemic, there are fresh opportunities such as the development of tools for emergency care and technology-based optimization of medical infrastructure, enabling greater integration of AI, robots, and blockchain technologies.

Aligning with Government

Most states and Union Territories now have dedicated policies for fostering a start-up culture across different segments. Given the strong government push for digital health under the National Digital Health Mission (NDHM) and Ayushman Bharat Digital Mission (ABDM), healthcare start-ups are already leveraging government policies for their own growth besides aligning with the government's national health policy. Collaboration among start-ups, government, and other stakeholders will give a push to digital healthcare solutions and allow them to scale up adequately, and a Public-Private Partnership model can also be an additional opportunity for India's healthcare challenges

Challenges & way forward

Despite the benefits they can bring to the healthcare system, start-ups can suffer from a lack of mentorship, which often results in their demise due to the inability of entrepreneurs to successfully navigate the systems and achieve a sustainable customer base. Furthermore, the health tech sector is highly capital-intensive and has a considerable upgrade cost. To overcome these issues, start-ups need mentoring to access resources and guidance, as well as scalability to boost their growth. With the right mentoring and adequate funding, India has the potential to become a world leader in the health technology sector.

From the desk of **Dr. Anup R Warriar**

Lead Consultant - Infectious Diseases and Infection Prevention, Aster DM Healthcare - India

Dr. Ranjeeta Adhikar

Consultant - Microbiology, Infection Control Officer, Manipal Hospital, Bangalore



Exponential growth of Superbugs: Strong multi-sectorial steps needed to stem growing threat of AMR

According to Lancet, AMR was linked to 1.27 million deaths in 2019. In 2016, the Review on AMR commissioned by the British government estimated that by 2050, AMR could claim 10 million lives or one life every three seconds globally.

Antimicrobial drugs including antibiotics, antivirals, anti-fungals and anti-parasitics are used to prevent and treat infections in humans, animals and plants. Microorganisms that develop antimicrobial resistance are sometimes called “superbugs” which make infections harder to treat and increase the risk of disease spread, illness and even death. The exponential growth of superbugs across the world is alarming and Antimicrobial Resistance (AMR) has now emerged as a major public health issue with huge costs to individuals and society, if not contained in time.

According to Lancet, AMR was linked to 1.27 million deaths in 2019. In 2016, the Review on AMR commissioned by the British government estimated that by 2050, AMR could claim 10 million lives or one life every three seconds globally. The World Bank estimates that 28 million people could be pushed into extreme poverty every year by 2050 which could cost the global economy \$1 trillion per year. The WHO has declared AMR as one of the top 10 global public health threats facing humanity. A recent study by the Indian Council of Medical Research (ICMR) AMR surveillance network for the period between June and August 2020 revealed that out of 17,534 admitted patients, 3.6% of patients developed secondary bacterial or fungal infections. Mortality among patients who developed secondary infections was 56.7% against overall mortality of 10.6% in total admitted COVID-19 patients.

Antimicrobial Resistance: Current challenges

The fight against AMR faces several challenges. Irrational use of antibiotics, often even for the mildest of viral infections, is just one of them. Unfortunately, doctors have contributed to this by prescribing inappropriate antibiotics, giving broad-spectrum antibiotics that cover multiple organisms, and moving to higher antibiotics without sufficient evidence to do so. The quality of drinking water and sanitation levels also determine AMR and makes the challenge of combating it even more complex. Governance standards are another challenge to contend with.

Exponential growth of Superbugs

Despite the present and clear danger of AMR, most states in India do not yet have an action plan to tackle it. The widespread use of antibiotics in livestock and poultry that also contributes to primary resistance in humans is another big challenge in the battle against AMR.

Combating AMR: Multisectoral response required

Antibiotics are becoming increasingly ineffective as drug resistance has spread globally making it more difficult to treat infections. Antibiotic resistance can potentially turn into a pandemic in the near future if corrective measures are not taken immediately. Misuse of antimicrobials happen in animals, humans and plants, so there must be sector-wise regulations. Antibiotics should not be prescribed irrationally and particularly on patient demand. Patients should be educated about the risks of multidrug resistance. The sale of at-risk antibiotics should be strictly regulated and should not be sold without a prescription; preventive health advice, on quality nutrition, home solutions, hand hygiene, and masking when unwell must be inculcated

The government has taken some steps to address the threat of AMR. They include strengthening AMR surveillance network by establishing labs in state medical colleges with 36 sites in 26 states/UTs now operational, and a National Action Plan on containment of Antimicrobial Resistance (NAP-AMR). The ICMR has also set up an AMR Surveillance and Research Network as part of the government's efforts.

The government has also taken several initiatives to increase awareness about the misuse of antibiotics with the ICMR starting an antimicrobial stewardship program (AMSP) on a pilot project basis in 20 tertiary care hospitals across India to stop misuse and overuse of antibiotics in hospital wards and ICUs. The DCGI has banned 40 fixed-dose combinations (FDCs) that were found inappropriate. The ICMR is also collaborating with the Indian Council of Agriculture Research, the Department of Animal Husbandry, Dairy and Fisheries, and the DCGI to ban the use of Colistin as a growth booster in animal feed in poultry to break the chain of transmission of AMR.

Way forward

The private sector has an important role in boosting government's efforts by helping in the implementation of the national action plan on AMR and ICMR guidelines on a priority basis. In conjunction with the government or as a supplementary move, private healthcare players should launch mass awareness campaigns on the lines of similar campaigns on HIV, Polio, TB and the most recent, COVID vaccination programme aimed at educating patients and consumers.

Exponential growth of Superbugs

CSR funds can be earmarked for this to include campaign ambassadors, influencer collaboration, social media and media outreach. Public education needs to focus on programs on when NOT to take antibiotics, adverse effects of unsupervised antibiotic usage, correct dosing, frequency, and duration of treatment. Industry experts can assist by building a coalition to raise the intensity via a campaign mode. Private players can also be part of a platform/committee involving central and state agencies to help fine-tune the implementation of ICMR-AMR guidelines.

Training programs for doctors should be mandated by ICMR to raise awareness about AMR. The Government of India and MOHFW should have an oversight overview of Antimicrobial Stewardship (AMS) training as per NMC notification in all medical colleges. A list of essential diagnostic tests for the containment of AMR should be formulated and labs at the district level should be ensured. Private players who run major labs in India can play a vital role. The government can also make it mandatory for hospitals countrywide to report on AMR audits on a monthly or quarterly basis. Infection prevention and control measures should be strengthened by providing increased access to clean water, sanitation, hygiene and vaccines to reduce the need for antimicrobials.

Compiling reliable data on AMR would help in drawing up more effective plans to combat it. An industry-academia collaboration can offer support in this activity. AMR must not be seen anymore as simply a health issue, but as an economic and financial issue. Despite the deadly projections, it must be borne in mind that it is well within our power to change this scenario if we address it with the urgency it demands.

From the desk of **Mr. Rupak Barua**

CEO, AMRI Hospitals,
Kolkata



Heal in India: Medical value travel poised for a giant leap

The government's 'Heal in India' scheme is also expected to fuel Medical value travel with a 'One Step' portal offering multiple services to international patients

Medical value travel (MVT) in India is expected to get a major boost in 2023 on the back of pent-up demand, soaring cost of treatment in the West because of inflation, besides the Russia-Ukraine war driving more patients from both countries for medical care to India. In addition, the government's initiatives under the 'Heal in India' scheme — of accrediting Ayush centers and launching Ayush e-visa — is also expected to fuel MVT in the wellness space which has revived after the Covid-19 pandemic.

The Indian economy could add an additional \$9 billion by 2026 with the use of traditional medicine, wellness, therapeutic use of Ayurveda, yoga and wellness, combined with a focus on the curative aspects of healthcare. Overall, the global MVT market is projected to grow from \$13.98 billion in 2021 to \$53.51 billion in 2028 at a CAGR of 21.1 percent in the forecast period of 2021-2028. According to the Medical Tourism Association (MTA), every year around 14 million people globally travel to other countries for medical treatment. India is clearly poised for a greater share of the MVT pie. In the MTA's Medical Tourism Index (MIT) India is ranked 10th out of the 46 global destinations, 12th in 20 wellness tourism markets, and 5th in the wellness tourism market in APAC. According to the data from the Indian Institute of Public Administration (IIPA), approximately 6,97,453 medical tourists visited India in 2019 alone for medical treatment, and by 2023, India is expected to account for 6 percent of the global MVT market share.

Government support needed

The MVT sector in India is powered by 40 healthcare facilities that are accredited to the Joint Commission International (JCI) and 1400 NABH-accredited hospitals that provide quality care. MVT contributes about 10 percent to the revenues of many large hospital chains and could rise to 12 per cent - 15 per cent in the next couple of years although there is a need to address healthcare infrastructure in general. Since India is amongst the most preferred destinations for MVT, there is a need for more policy support to facilitate medical value travel to India and develop MVT as an organised sector.

The government is moving in that direction with the 'Heal in India' initiative to boost MVT with a 'One Step' portal for the convenience and ease of credible information for foreign patients.

Heal in India

The portal offers multiple services to foreign patients such as easy airport coordination, accessing the patient's documents, addressing queries, etc, and the introduction of medical visas, also known as 'Ayush Visa'. These facilities are expected to increase the inflow of foreign patients.

To provide impetus to the growth of MVT and wellness tourism in India and maintain the country's competitive advantage, a comprehensive National Strategy for Medical Value Travel and Wellness Tourism has been put in place. Under the Heal in India initiative, 37 hospitals including 30 in the private sector across 17 cities in 12 states have been identified for promoting medical value travel.

Sought-after destination

Low cost of treatment, large number of highly trained English-speaking doctors and state-of-the-art diagnostic equipments, among others, make India one of the more sought-after destinations among overseas patients. Patients from different parts of the world come to India for cancer treatment, organ transplant surgeries, plastic surgery, etc. Compared to the United States, Australia, Singapore or the United Kingdom, India can provide cost savings of up to 65-90 percent, which is significant for patients. Chennai, Mumbai, Delhi, Bengaluru, and Kolkata are the top destinations for MVT in India. Kolkata plays a vital role for price-sensitive patients from low and middle-income countries (LMIC) such as Bangladesh, Afghanistan, Nepal, Myanmar, Bhutan, Pakistan, and Nigeria.

Bangladesh, Iraq, Maldives, Afghanistan, Oman, Yemen, Sudan, Kenya, Nigeria, and Tanzania account for about 88 percent of the total international patients visiting India with Bangladesh alone accounting for 54 percent of them.

For the continuous growth of MVT, the government should come out with a framework to prioritise opportunities for India. In the short term, we must focus on increasing market share in regions where India already enjoys high credibility. And as a long-term strategy, we must ensure India's presence in developed countries providing outbound MVT for sustained growth. SAARC countries and select regions of Africa provide immediate opportunity while regions like US and China can be medium-term targets.

Like other sectors of the economy, currency rates also affect MVT. And the rupee's depreciation pushes up the cost of care, since 30-40 per cent of a hospital's cost is on account of medical equipment out of which 80 per cent is imported. If the Indian rupee strengthens against the dollar, MVT would get a further boost. Conversely, a rising dollar, which would lead to inflation, may affect growth rates.

Heal in India

Tech driven

The rapid rise of high tech and its pervasive use in the healthcare industry means digital health and MVT are converging digital technologies with health, living and society to enhance consumer experience and make the process more personalised and transparent.

Hospital chains will be relying more on tele-medicine or remote consultation with video calls for pre-treatment diagnosis and assessment, and post-treatment follow-ups. Healthcare providers will also need to leverage data analytics to analyse the available data to ascertain which practices are more effective for cost-saving and improving patients' health. Additionally, business intelligence can help healthcare providers gain insights into the daily practices of doctors and staff, patient care and satisfaction, and management and administration, to enable them to make value-based decisions.

Going forward, digital tools will continue to increase patient engagement with foreigners through instant messaging apps, tele-medicine, electronic records and AI-enabled technologies as part of the process of digital integration in the MVT value chain. India is already known as 'The Pharmacy of the World' and has the potential to become 'The Provider to the World' by delivering quality care at affordable cost.

From the desk of
Ms. Anuradha Acharya
Founder & CEO, Mapmygenome



Genome sequencing: The future of preventive healthcare is now

Genome sequencing has increased by leaps and bounds over the past two decades to a point where it is possible to map an individual's complete genetic makeup.

We were often told that "Prevention is better than cure". Yet, in matters of health, it is a human tendency to seek medical help only after detecting clinical symptoms. The trend is now changing as many more people have realised the benefits of prevention on quality of life and longevity. As the quest for "nirvana" continues for an increasing percentage of the population, we have seen a drastic rise in nutritionists, gyms, genomics companies and wellness centres. Post-Covid, many more people are aware of terms like immunity and prevention.

A growing population is now taking preventive steps to monitor their health or biohacking as it is popularly called. While there are some who take biohacking to extreme levels, the average person bases their efforts on blood tests, diet, exercise, and a healthy lifestyle. With the advent of Preventive genomics, this has become more personalised and predictive. With access to genome sequencing or low-cost genotyping, an average consumer can reduce the odds of disease and enhance longevity.

The major advantage of this approach to preventive healthcare is that we can not only study the progression and nature of medical conditions over a period of time, but preventive solutions can make a massive impact on the overall quality of life of the person. Genomic information makes it possible to study an individual's genetic makeup. Consequently, it can also be used as a screening mechanism to determine health conditions and improve outcomes by identifying the correct preventive solutions and also as treatment options for patients.

Genome sequencing raises the level of preventive healthcare exponentially higher because it helps in understanding a person's susceptibility to several diseases and disorders including cardiac and neural conditions. It is now being increasingly used in many countries to precisely diagnose health conditions, effectively manage symptoms and customize treatment.

Genome sequencing

Genome sequencing has increased by leaps and bounds over the past two decades to a point where it is possible to map an individual's complete genetic makeup. Whole Genome Sequencing (WGS) represents a major step forward for doctors who can use it to improve their understanding of a range of diseases. WGS has the potential to put preventive healthcare on the forefront and ensure better health for a large section of the population. Moreover, the availability of genomic information can also be used for future research on newly discovered mutations which in turn yield insights into new diseases.

How genomics can help in reducing the risk of disease

According to the American Heart Association, 80 per cent of cardiovascular diseases are preventable. Similarly, diabetes can be prevented in about 60 per cent of the cases. As the impact is that significant, it is imperative to spread awareness about these positive outcomes. Genomics plays an important role in helping individuals manage their health better.

Communicable diseases remain an area of concern, lifestyle changes in many countries including Low- and Middle-Income Countries (LMIC) have aggravated the incidence of other non-communicable diseases (NCDs) such as cardiovascular and liver diseases, diabetes, and obesity over the years. According to World Health Organization (WHO) projections, the total annual number of deaths from NCDs will increase to 55 million by 2030, if timely interventions are not done for the prevention and control of NCDs. In India, NCDs are emerging as a major threat to life with 6.3 million deaths attributed to them in 2017. NCDs have a huge monetary cost too with most estimates suggesting that they form an economic burden of 5–10 per cent of the GDP which hampers development.

Since healthcare is still largely reactive, more often than not, it adds to treatment delays which adversely impact the success of the medical intervention, besides escalating the cost of treatment. Genomic testing can help identify the diseases of which people are at risk and aid them in taking preventive steps to avoid them or start treatment at an early stage and reduce costs that would otherwise incur on experimenting with different medications.

Preventive genomics and the future of healthcare

Decades of research exploring the genetic basis of several diseases using DNA sequencing has now made it possible to identify both germline (at birth) and somatic (acquired during lifetime) mutations responsible for different diseases, thereby providing extensive detailing specific to the disease and the person that was earlier not possible. Preventive genomics is one such niche that specifically focuses on the sequencing and analysis of one person's genome, and then giving them their genomic information.

Genome sequencing

Preventive genomics eliminates a trial and error method of treatment, by allowing detection and management of risk factors for common, complex diseases such as schizophrenia and type II diabetes and rare Mendelian disorders such as cystic fibrosis and thalassemia. Genome-wide association studies (GWAS) measure and analyze DNA sequence variations in the human genome to identify risks for diseases that are common in various populations. This kind of testing has given rise to a new field called preventive genomics that aims to tailor healthcare to individual patients based on their genetic background and other biological features.

Preventive genomics can also be used to predict or confirm a genetic disease. An individual's genome makes it possible to identify genetic variants that may increase the likelihood of genetic diseases in a person. For example, it can be used to tell a woman if she carries the BRCA1 breast cancer gene and, if so, how it affects her probability of developing breast cancer during her lifetime. This gives a woman the opportunity to take preventative measures, such as enabling her to undergo mastectomy if she finds that her risk of breast cancer is high as Hollywood star Angelina Jolie did in 2013. In the Indian context, WGS can save the lives of tuberculosis patients because it will enable doctors to give the right combination of medicines at the earliest. WGS can be a game changer as India races to eliminate TB by 2025.

Potential for genomics in India

The Covid-19 pandemic exposed the limits of curative medicine and was a wake-up call to boost our preventive healthcare infrastructure by plugging the gaps. The pandemic also spurred the government to establish the Indian SARS-CoV-2 Genomics Consortium (INSACOG) to expand the Whole Genome Sequencing of SARS-CoV-2 across the country to understand how the virus spreads and evolves. The Consortium initially started with a network of ten regional genome sequencing laboratories spread across the country and has now been expanded to include 54 INSACOG Genome Sequencing Laboratories (IGSLs) that are mapped to the States and UTs for facilitating the smooth flow of samples. The aim of INSACOG is to monitor the genomic variations in the SARS-CoV-2 regularly through a multi-laboratory network.

Genomics is still in its early years in India with private players entering the field in the last decade except for pioneers like Mapmygenome, which entered the space in 2000. In 2019, the Government launched its first human genome mapping project to help researchers get closer to developing effective therapies for treating diseases such as cancer. In October 2019, research laboratories working under the Council of Scientific and Industrial Research (CSIR) announced the completion of whole genome sequencing of 1008 Indian individuals representing diverse ethnic groups in the country. The data will act as baseline information for developing various predictive and preventive medicine applications. The project called IndiGen will enable benchmarking of the scalability of genome sequencing and computational analysis at the population scale. It is expected to bring down the costs of genetic tests, carrier screening applications for expectant couples, enabling efficient diagnosis of heritable cancers, and pharmacogenetic tests to prevent adverse drug reactions.

From the desk of **Mr. Guruprasad S**

Vice President & Global Director
(Healthcare & Data Science),
Bosch Global Software Technologies Pvt. Ltd.



Despite challenges, medical device industry in India has potential for high growth

According to government data, there are 750–800 domestic medical device manufacturers in India, with an average investment of \$2.3–2.7 million and an average turnover of \$6.2–6.9 million.

The Indian medical devices industry comprises four segments – consumables and implants, diagnostic imaging, instruments and appliances, and patient aids and, others. The global medical devices market is projected to grow from \$495 billion in 2022 to \$718.92 billion by 2029 at a CAGR of 5.5%. India is the 4th largest market of medical devices in Asia. The size of the Indian market is estimated to be around \$12 billion with the sector comprising large multinationals and small and mid-sized companies.

India's import of medical devices is staggering at almost 80%, and the country is highly dependent on foreign suppliers, particularly for high-end equipment such as cancer diagnostics, medical imaging, ultrasonic scans, and polymerase chain reaction technologies. According to a draft policy of the government on medical devices, India's share in the global market is around 1.5% and the sector is still at a nascent stage in the country. During the Covid-19 pandemic, the Indian medical devices sector's contribution became more visible with the production of medical devices and diagnostic equipment such as ventilators, RT-PCR kits, IR thermometers, PPE kits, and N-95 masks.

However, local production is largely at the lower end of the technology value chain. Most local manufacturers are primarily focusing their R&D efforts on developing affordable medical devices for the lower and middle-income segments of the Indian market and operate predominantly in the low-priced, high-volume market segments.

According to the government's estimates, around 65% of the manufacturers in India are mostly domestic players operating in the consumables segment and catering to local consumption with limited exports.

Current barriers

The government's recently launched production-linked incentive (PLI) scheme in medical device manufacturing aims to encourage domestic manufacturing, attract significant investments, and reduce reliance on imports. But while the Make in India and Atmanirbhar Bharat campaigns are praiseworthy, domestic producers are still far away from reaching a level of self-reliance in order to produce top-class products. By any yardstick, India's medical devices sector has a tough road ahead for a variety of reasons.

Medical Device Industry in India

The sector is highly capital intensive with a long gestation period and requires continuous induction of new technologies and training of healthcare professionals to adapt to new technologies for rapid innovation. Medical devices undergo safety, quality, and efficacy tests through processes defined by the regulator before they hit the market for sale which means that the industry requires huge investments in scientific facilities.

According to government data, there are 750–800 domestic medical device manufacturers in India, with an average investment of \$2.3–2.7 million and an average turnover of \$6.2–6.9 million. The nature of the sector requires highly skilled personnel for its R&D so that the products pass muster under regulatory norms like MDR, IVDR, etc. These special requirements add up to require a large investment to set up a medical device manufacturing facility.

Manufacturers of medical devices in India grapple with balancing between the time-to-market, cost and quality of the product, and optimal trade-offs in the light of tightening regulatory norms for the devices. Most of the time medical devices are overpriced and are not affordable by many because of the cost overruns during the development phase. The high cost of financing also acts as a barrier to setting up a medical device company. According to AiMeD, a network of medical device manufacturers in the country, most MSMEs simply do not have access to financing to build a greenfield project or increase investment in research and development.

A price control mechanism is also a contentious issue for medical device manufacturers. The government's price control regime which is designed to bolster the use and manufacture of devices in India has resulted in substantially lowering the price of coronary stents. But price control can be a double-edged sword that can affect the quality benchmarks of high-end devices because all manufacturers cannot afford the kind of investment needed. A Parliamentary Panel on Health and Family Welfare has also mooted that all devices that are required for critical care be categorized as 'scheduled medical devices' and brought under the National List of Essential Medicines (NLEM) and fix the retail prices of those products.

Plus points

Despite the hurdles the sector faces, enabling policies like PLI, export incentives, R&D support, and incentives and support for innovation can boost the medical device industry in India. The government is aware that demand and supply-side dynamics provide an unprecedented opportunity for the manufacture of medical devices in India. It believes the Indian medical devices industry has the potential to grow at 28% annually to reach \$50 billion by 2030. The government is planning to further boost India's strengths of skilled manpower, and ease of business through its industry-friendly rules. According to the government's draft policy, import dependence on medical devices will be halved in the next 10 years.

Medical Device Industry in India

The imperatives for the medical devices industry are aligned with the objectives of 'Make in India' that include investment, innovation, skill, and infrastructure under the new manufacturing policy that seeks to boost the contribution of manufacturing to the GDP from 16% in 2013 to 25% in 2025. The Make in India vision calls for investment in capital and technology investments for setting up manufacturing facilities while India-specific innovation would help improve the accessibility and affordability of medical devices. It also calls for training and development of human resources for manufacturing, operations, and services, and best-in-class infrastructure for supporting high-technology industry.

Way forward

Since finance is a major stumbling block for many potential medical device manufacturers, adapting value engineering can help them to keep costs under control. Manufacturers will also do well to focus on critical value/features for medical devices. This requires a deeper understanding of patients and customers such as which product features they need. In many countries, manufacturers are developing strategies to attract and retain a new segment of customers who demand products that are "good enough" and competitively priced. This calls for frugality by adapting value engineering to deliver the value/features at the lowest cost.

In an increasingly connected world, medical device manufacturers need to develop a deep understanding of the end-user and create business models and scenarios that demonstrate how their new and existing devices not only improve patient outcomes but also create value for key healthcare stakeholders. Many medical device companies are reinventing themselves by adopting new strategies to harness data provided by digitally-enabled products and make their operating models relevant and sustainable.

This helps companies develop evidence of better health outcomes at a reasonable cost and gain market access. For some medical device makers, this means shifting from a product-based model to a value-based system driven by software-based services and solutions. The Internet of Medical Things (IoMT), – a connected infrastructure of medical devices, software applications, and health systems and services to deliver improved patient outcomes efficiently, can help medical device manufacturers play in role in reducing these costs.

From the desk of **Ms. Mansi Wadhwa**

Head of Growth Programs,
Medtronic India



Driving innovation through partnerships to address India's healthcare barriers

There is growing awareness of the contribution healthcare technology companies can make, toward curtailing hospital costs and improving the quality of care. The winning combination of technology companies and hospital care providers can potentially expedite expansion of healthcare capacity and adoption of new technologies.

The Covid-19 pandemic drove home the point that partnerships and collaborations are pivotal to achieving our healthcare goals through a solution-based approach. While we don't need a health crisis to realize the benefits of collective effort, there is now a growing awareness that collaboration among healthcare players is a win-win situation for all stakeholders, including patients. Healthcare players are working within an ecosystem which is striving to address the barriers around access, awareness, and inter-connectivity among networks to bring good health to the public.

Partnerships are the only sustainable way to amplify results faster. Today we are seeing a rising trend in partnerships between hospitals and healthcare technology companies, to address the needs of patients. According to a McKinsey report on hospitals in Europe and the US, there is growing awareness of the contribution healthcare technology companies can make, toward curtailing hospital costs and improving the quality of care.

The winning combination of technology companies and hospital care providers can potentially expedite expansion of healthcare capacity and adoption of new technologies. For example, deploying flexible and capital-efficient commercial models can help hospitals reduce fixed costs and improve service levels, in addition to giving medical technology companies the opportunity to service extended patient communities. For both stakeholders, operational and clinical care connected healthcare networks, making them convenient and cost-effective.

The Government's National Digital Health Mission has also spurred technology platforms to provide a connected health ecosystem for healthcare providers to facilitate digital integration and eliminate the need for healthcare providers to set up their own IT systems with servers/data centres and IT professionals.

Driving innovation through partnerships

Digital healthcare has been particularly beneficial to patients with noncommunicable diseases such as diabetes, cardiovascular disease and cancer that require constant monitoring. Remote monitoring through m-health technologies and review of data from digital tools and wearables have changed the way chronic diseases are managed, with the treatment approach also moving from reactive to proactive and preventive care.

Improving access

Technology platforms enable healthcare providers to deliver services including hub-and-spoke models for cardiology and neurology facilitating specialty care consultations between large tertiary care centres and smaller rural hospitals and eliminating the need for patients to travel to far away facilities. This is particularly vital in enabling linkages between Tier II/III cities with centers of excellence that can make the difference between life and death for many patients. Recently Medtronic announced a partnership with Aster MIMS, Calicut to help create a strong network of healthcare centers that work in close collaboration to elevate stroke care in Kerala through tele-consultation, education and training support, and the latest technologies to treat stroke effectively.

Tech platforms also facilitate on-demand care, connecting care seekers to specialists across audio/video between two or more locations, remote monitoring, and in-patient care with the ability for care providers to consult with patients admitted in the hospital in isolation zone or in regular care environments.

Given India's chronic shortage of qualified medical professionals, an ecosystem of interconnected healthcare networks through new partnership models can leverage the existing resources optimally by creating a digitally driven pool of services. Healthcare is on the cusp of a change in India and connected care and enhanced collaborations will be the catalysts to drive this change.

From the desk of **Mr. Yash Prithviraj Mutha**

Executive Director,
Krsnaa Diagnostic



Ensuring affordable & accessible healthcare in India

With a country that has a population of 139 crore, ensuring that people of the entire nation receive basic healthcare facilities at affordable prices is a laborious task. However, with Government's efficient and noble initiative of National Health Mission and Ayushman Bharat Digital Mission that has set out an ambitious task of skillfully organizing and storing details about healthcare providers around the country on a digital database, accessibility to general public is expected to become uncomplicated and trouble-free. Krsnaa Diagnostics has dutifully registered its services to such an efficient cause.

Krsnaa Diagnostics, founded in 2011 charted out its journey in the healthcare industry with a simple motto of "Let's Do Good". It wanted to offer the citizens of India nothing but the promise of a good and healthy life. John F Kennedy rightly said, "Ask not what your country can do for you but what you can do for the country" and we at Krsnaa Diagnostics work towards imbibing this quote as our work mantra. In this light, a Public-Private Partnership is all about making the optimum use of financial and technological acumen of the private sector and providing public facilities throughout the country at affordable prices.

With keeping the motive of providing service to unprivileged sections of the society intact, a team of 200 and plus highly talented and dedicated radiologists, pathologists and other clinicians work tirelessly to provide evidence-based treatment to patients across the country. We have an omnipresent network of laboratories aggregating to 300+ and have 4000+ collection centers spread across the length and breadth of India from Kashmir to Kanyakumari. Krsnaa Diagnostics is one of the largest diagnostics networks with 140+ CT scan services, 38+ MRI and 1200+ X-Ray and Tele-Radiology services. We are India's first NABH tele-radiology hub which operates 24/7 and 365 days, keeping the country and its people's health at the top most priority. "The best way to find yourself is to lose yourself in the services of others" and we are on our way to discover ourselves. We also provide 2500+ test services using the most advanced state-of-art technologies.

From the desk of
Mr. Mohit Khullar
Managing Director, O3 Capital



Improving healthcare accessibility with the evolution of regional chains

there has been a marked shift in the landscape of healthcare infrastructure across the country in the last few years where the share of healthcare capacities operated by local and regional players have grown at a much higher pace

India continues to remain one of the fastest growing global economies, and if the recent estimates by IMF and other global institutions are considered as a reference, then we are a shining star even when the growth in global markets continue to moderate. While various economic reforms and strong domestic demand are catalysts for such positioning, what would define us as a real example is how successfully this larger positioning trickles down to the masses – across the length and breadth of the country. Our major industries have remained under-penetrated vis-à-vis the average global consumption patterns, whether its consumer goods, automobiles, financial products, education or healthcare. With the latter two sectors being more fundamental to the society at large, they should get paramount government and public attention. In healthcare, for once, our country is witnessing a vast transformation and some of the recent trends have been encouraging as we seek to resolve the critical issues around the 3 A's - Availability, Affordability and Accessibility.

Time and again we come across the statistics around India's bed density being 15 beds (bed count per 10,000 population) vs the global median of 29 beds and 7 physicians (physicians per 10,000 population) vs the global median of 18 physicians. While this is based on Pan-India data, what these numbers do not reflect is the skew in averages when we look at the top-tier cities vs the tier-2 and 3 cities. For instance, a tier-2 city bed density in India is 20-30 beds per 10,000 population vs 35-45 beds per 10,000 population in top-tier cities. One prominent trend observed in the recent times is the growth of regional hospital chains, which have a large chunk of their capacities located in tier-2 or 3 cities and which are gradually changing the landscape of hospital capacities in the country, thereby addressing the 3 A's very effectively. Let's first see and understand the traditional health-infra issues and then look at how these are being addressed by these regional chains.

Firstly, private players have traditionally been cautious about building capacities in the smaller cities, with the correct amount of capex per bed remaining a key question. The large private chains have been guided with a vision to improve healthcare availability in the country and have undertaken initiatives in the past to expand into smaller cities.

Improving healthcare accessibility

However, their asset quality and service levels required infrastructure investments and cost structures which were not justified by the ARPOBs and resultant margins available in smaller cities.

Secondly, doctor availability has remained a major concern while setting up the facilities in these locations. With the prominent medical colleges concentrated around key top-tier cities, and the natural tendency within the medical professionals to base themselves in such locations given better career progression, amenities for the family and general compensation levels, this gap in doctor availability in small towns vs big cities has remained a challenging healthcare subject to resolve.

However, there has been a marked shift in the landscape of healthcare infrastructure across the country in the last few years where the share of healthcare capacities operated by local and regional players have grown at a much higher pace compared to their larger and multi-regional counterparts. This transition is backed by multiple factors including government interventions, improvement in social infrastructure across the country, enhanced funding availability, evolving consumer behaviour - partly on the account of COVID. A number of these local hospital players are investing in capacity additions to further enhance their reach in the underserved pockets within regions where they have strong brand presence, market understanding and doctor relationships. And they have been able to effectively manage the issues described above and therefore, such a shift appears more permanent and sustainable in nature as opposed to being a short-term phenomenon.

Firstly, regional chains have been ahead of the curve in understanding the right infrastructure for the target region which is cost-effective and yet commensurate to the quality and complexity of treatment to be provided. While a large chain considers anywhere between Rs. 8mn – 10mn as the capex per bed for a top-tier city, these regional players typically do not go beyond Rs. 6mn - 7mn per bed. They remain focused on tertiary care models while being prudent to let go of quaternary care, for now, for which patients continue to travel to metros. High-end treatments such as PTCA, CABG, TKR are being increasingly conducted at these facilities and such tertiary care moving closer to patients is a welcome sign. The overall cost structures are also more optimal with rentals and employee expenses remaining at relatively lower levels, collectively by around 4-5% of revenue on an average compared to metros, thereby leading to better margin profiles as well.

Secondly, doctors have shown amenability to move to cities where they find high patient volumes and a good physical infrastructure. Some of these regional chains are offering strong patient volumes, suitable infrastructure, better positioning and career progression. Highly capable senior consultants from hospitals in top cities are occupying positions of department leaders in hospitals run by the regional chains and receiving strong patronage and recognition in the city. The quality of life for them and their families have also evolved significantly, with better road, rail and air connectivity coupled with good schools, malls and other social infrastructure for their families.

Improving healthcare accessibility

There are multiple other enablers, such as affordability issue getting addressed through enhanced insurance penetration where the patients shift from nursing homes to these clinical care focused establishments. There has been significant government focus on building 150+ medical colleges well spread across the country, which is gradually expected to resolve issues around medical talent. There are close to 14,000+ beds expected to come up in the next 3-4 years by the large private players alone, majority of which is targeted for the underserved cities.

What has also worked for the regional players is the access to capital via multiple avenues which have opened up over the last few years, including public listing, private equity capital and support from banks and financial institutions. Majority of the top players in the listed universe are utilising large part of this capital to build capacities in smaller cities. There have also been around 10 private equity deals in which leading funds have cumulatively invested more than USD 1 billion in regional players in the last 3 years. All state capitals and major emerging cities across the length and breadth of the country such as Indore, Aurangabad, Vijayawada, Patna, Jaipur, Ahmedabad, Tiruchirappalli, Guwahati, Kanpur, Mysore amongst others are seeing strong focus by regional chains and enhanced participation by national chains in their healthcare landscape.

We are surely witnessing a transformational phase in healthcare delivery in the country today, and the landscape in the near-term shall weigh in favour of capacities in tier-2 and 3 cities, largely driven by these regional players and the dream of creating an Aarogya Bharat is well on course to be a reality.

Keeping in tandem with the ultimate vision of NATHEALTH i.e. supporting best practices by encouraging innovation and developing healthcare infrastructure by fostering collaborations, Krsnaa Diagnostics offers testmenu across all sub-specialities like Molecular Diagnostics, Histopathology, Cytopathology, Auto Immuno Disorders, Immuno assays, Microbiology, Biochemistry, Haematology, Coagulation and Infectious Disease Testing. Our laboratories are spread across 15 states and 3 union territories in India.

Not only do we intend to serve each and every individual of the country irrespective of their class and social status, with such a vast network we also wish to generate maximum employment opportunities for our skilled youth. With a remarkable combination of affordability and quality without a compromise, Krsnaa offers diagnostics services at atleast 50-60% lower cost than its contemporaries in order to percolate every Indian hamlet while staying true to its motto. We can say it with pride that we have been able to serve more than 40 million lives in the last 5 years.

Speakers at Arogya Bharat 2023



Ms. Ameera Shah, Secretary, NATHEALTH, MD, Metropolis India

Ms. Ameera Shah is the Promoter & Managing Director of Metropolis Healthcare Ltd, a reputed chain of pathology labs with a loyal customer base across India, South Asia, and Africa. A global thought leader in the healthcare industry, she has played an instrumental role in changing the pathology industry landscape in the country; from being a doctor-led practice to a professional corporate group in an extremely unregulated, competitive and fragmented market. Over the two decades, Ms. Shah has built the organisation across the board, and has been a dynamic driving force behind the entire corporate transformation and the sustained growth of Metropolis. Due to its unique growth model and competitive advantage, Metropolis has attracted three rounds of investment by reputed private equity investors.



Prof. Dr. Atul Mohan Kochhar, MD, DNB, MNAMS, FAAD, CEO at NABH - National Accreditation Board for Hospitals and Healthcare Providers

An active practicing clinician, with a passion for quality in healthcare, a Principal Assessor with NABH, he is the Chief Executive Officer of the National Accreditation Board for Hospitals and Healthcare providers of India since December 2019.

He worked since 2003, as a Professor & Consultant in the Department of Dermatology & STD, Lok Nayak Hospital and Maulana Azad Medical College, New Delhi. He is the recipient of various state and national awards and has More than 70 publications, 4 books and many chapters and multimedia to his credit. He has delivered more than 300 presentations at National and International conferences.

He is also a Diplomate of National Board (DNB- Dermatology and Venereology), a Member of the National Academy of Medical Sciences and a Fellow of the American Academy of Dermatology.



Mr. Ashish Jain, Chief Executive Officer (CEO) at Healthcare Sector Skill Council (HSSC)

Mr. Ashish Jain is an CEO at HSSC from last 9 years and Director at Confederation of Indian Industry from 16 years. He has Key Strengths in Relationship Building, External Relations, Policy Advocacy, Communication, Strategy and Planning. He has been part of various Government-Industry Joint missions and business missions. He completed his Post Graduation (MBA - Finance & Marketing) from Institute of Management Studies(1994-1996) and has gained work experience of 20 years working closely with the government, industry, academic institutions, global standards organizations, multilateral bodies, policymakers, etc. Strong skills in Maintaining and building relations with government ministries and department, institutions, academia and media. An effective communicator with excellent people management & leadership abilities.



Mr. Ashish Rampuria, Director, Management consulting - Healthcare, PwC

Mr. Ashish has - 13 years of Professional experience with a focus on healthcare consulting. He has worked with both private and public sector clients as well as with private equity players looking to invest in this space. Ashish had led and delivered successful engagement covering growth and entry strategy, commercial due diligences, EBITDA improvement, operations transformation, market assessment, as well as feasibility studies. Ashish has also co-authored multiple thought leaderships and knowledge papers in his long consulting career. Before PwC, Ashish has also worked in Avalon Consulting and EY. His views are extensively sought by various industry participants and he has delivered engagements in multiple countries. Ashish has done his MBA [PGDM] from S.P. Jain Institute of Management and Research and B.E from Manipal Institute of Technology.

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Ms. Abha Mendiratta, Non Resident Fellow, Centre for Knowledge Development

Abha Mehndiratta, MBBS, DCH, DNB, MPH is a non-resident fellow at the Center for Global Development and is working in India on use of evidence in priority setting. She is also a Director for the Institute for Healthcare Improvement (IHI) and is supporting quality improvement work in India & Bangladesh to improve clinical outcomes of mothers and newborns. Previously, she has worked as a Consultant for the World Bank, Global Health & Development Group at Imperial College London, the National Institute for Health & Care Excellence (NICE) and ACCESS Health International. She is a pediatrician by training and completed her degree in public health from Harvard University as a Fulbright scholar.



Dr. Alexander Thomas, President, Association of Healthcare Providers India

Dr. Thomas has served the healthcare sector for over four decades, and holds positions in several national associations that address issues within the healthcare sector: he is Founder and Patron of the Association of Healthcare Providers India (AHPI), Association of National Board Accredited Institutions (ANBAI), and the Consortium of Accredited Healthcare Organizations (CAHO). He has effected far-reaching policy changes within the healthcare landscape.

He played a significant part in incorporating healthcare communication among the NABH Accreditation Standards for Hospitals (4th Edition), introducing communication skills within the MBBS and PG curricula for medical students across India, rolling back the service tax for the health sector and making assaults on doctors a non-bailable offence.



Mr. Alok Kumar, Principal Secretary (Medical Education), Government of Uttar Pradesh

Alok Kumar is a senior civil servant currently working with the Government of UP as Principal Secretary (Health & Medical Education). He has a Masters degree in Public Policy (with specialization in Health) from Princeton University in addition to a B. Tech. in Electrical Engineering from IIT Delhi. He has over 30 years of experience of working in the health sector space right from District, Provincial and the Federal Governments, including working in the offices of the Chief Minister; as well as in NITI Aayog – the premier think tank of the Government of India chaired by the Prime Minister.



Mr. Amitabh Dube, Country President, Novartis India

Mr. Amitabh Dube is Country President at Novartis India, a leading global medicines company that uses innovative science and digital technologies to create transformative treatments in areas of medical need. He is currently leading and overseeing the team in the fifth largest economy, which gives him a unique opportunity to bring in a world view of strategies that could accelerate the growth in a developing country. His strong understanding of the Indian pharmaceutical industry and the business landscape gives him the distinct advantage to steer through the complexities while staying committed to creating an impact for the patients and the society at large. His key strengths in setting up new businesses, driving stakeholder partnerships and engagement with patient groups plays a key role in creating an organization that is deeply rooted in its values and beliefs.

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Mr. Amit Mookim, VP & General Manager, South Asia, IQVIA

Mr. Amit Mookim is the VP & General Manager for South Asia at IQVIA, a Fortune 500 organization and a leading healthcare information, technology, and research company. He has 19 years of experience in healthcare, technology, analytics, and private equity advisory. Amit has successfully built healthcare businesses from the ground up, exceeding profitability goals, and driving increased revenue and market share. He is also a mentor to startups and actively promotes entrepreneurship and innovation in healthcare. Amit is a fitness enthusiast and marathon runner, having participated in 14 marathons in the last 5 years across 3 countries. He also leads one of the largest wellness programs in the country, designed for IQVIA's 13,000+ employees to promote work-life balance and wellness.



Mr. Amol Naikawadi, Joint Managing Director, Indus Health Plus

Mr. Amol Naikawadi is Joint Managing Director of Indus Health Plus since 2000 with a demonstrated history of working in the healthcare industry. Skilled in Business Development, Business strategy, Team management, healthcare and new business development. Mr. Amol Naikawadi is a Chartered Accountant by profession, Mr. Amol has effectively charted and mapped Indus's journey and swiftly drove it not only pan India but successfully steered it globally as well. He has been spearheading Indus successfully, which speaks volumes for his management and leadership skills. Mr. Amol is the proud recipient of the Asia Pacific Entrepreneurship Awards 2009, an award dedicated to top achievers who believe in "making a difference". He was also honored by the Bharat Gaurav Award at National Unity and Industrial Growth Conference in 2009. Visionary and a role model for his workforce, his passion for his endeavor is looked up to by everyone in the organization.



Ms. Anitha Niranjana, Co-Chair South Chapter, NATHEALTH, Director, GHA Global Healthcare

Anitha Niranjana is presently the Director at GHA Global Healthcare Academy. Anitha Niranjana has over 20 years of professional journey in varied co-related sectors be it hospitality, tourism, academy, or healthcare. Anitha Niranjana is also the member, Tourism Expert Committee Member a Bangalore Chamber of Industry & Commerce. She is also working as a Chairperson of Marketing Committee in Hyderabad Convention Visitors Bureaus since 2010- present. She is also Vice-President in B7 Sports since 2012- present. Anitha Niranjana is skilled in conference management, public relations, corporate social responsibility, event management, business development, marketing strategy. Anitha Niranjana is also the working on the project based on International Healthcare Tourism Congress associated with CIMGLOBAL since 2016 till present. Anitha focus on a win-win approach to bridging the academic- industry divide through best in class scholastic programs that complement the university curricula in HEALTHCARE.

Speakers at Arogya Bharat 2023



Mr. Anjan Bose, Founder Secretary General NATHEALTH and Former President, Philips Healthcare and Consumer Lifestyle

Mr. Anjan Bose is the Secretary General of Healthcare Federation of India. He is also the immediate past Chairman of FICCI Health Services Committee and was the Founder-Chairman of Medical Equipment Forum (MEF) of FICCI. He started his career as a Service Engineer with Philips Medical more than 30 years ago and has been in various important functions within Healthcare and Consumer Lifestyle industries in various countries. He has worked as a Regional Manager in the Philips Headquarters in Holland and led organizations like Hewlett-Packard Medical in South Asia and Emerging Markets in Asia. He was also a Council Member of the European Business Group. Mr. Bose is an Electronics & Electrical Communications Engineer from IIT, Kharagpur and has successfully participated in many leadership/management programs over the years including from Michigan University.



Dr. Anuradha Acharya, CEO, Mapmygenome India Limited

Anuradha Acharya is the Founder and CEO of Mapmygenome. She was awarded Young Global Leader by the World Economic Forum in 2011. Dr. Anuradha had founded Ocimum Biosolutions in 2000 and led the company through strategic international acquisitions, capital raises for equity investments and launch of several innovative products, solutions, and services. Anu currently serves as a Governing Board Member at Council for Scientific and Industrial Research (CSIR), the premier R&D Organization in India and a Governing Board Member at the National Institute for Biomedical Genomics (NIBMG). Dr Anuradha is a past President of the Hyderabad Chapter of the Entrepreneurs Organization and currently serves on the board of Association of Biotech Led Enterprises (ABLE). Dr Anuradha was recently named a "Young Global Leader" by the World Economic Forum for its class of 2011.



Dr. Arjun Dang, CEO, Dr Dang's Lab

Dr. Arjun Dang, the CEO & PARTNER of DR. Dang's Lab, is a Pathologist by training. He is also the Winner of THE HINDUSTAN TIMES TRAILBLAZER AWARD & BW 40 under 40. He has launched India's first COVID19 drive through LIVER & GI PATHOLOGIST. His objective is to make a valuable contribution in the field of Clinical diagnostics, to enhance patient care. Dr. Arjun Dang done his MD from Sri Ramachandra Medical College in Chennai and trained thereafter at Institutions such as Kings College Hospital London, Lady Hardinge, and Apollo, Dr. Arjun has a keen interest in the fields of GI and Liver Pathology apart from testing for Allergy and Food Intolerance. He has been working in the lab in various roles culminating in the current one as the CEO of the organization. Operationally he plays both a technical and a strategic role.



Mr. Arpan Malhotra, Senior Vice President, Zone India, Healthcare Strategy and Business Development, Siemens Healthcare Private Limited

Mr. Arpan Malhotra is currently in the role of Strategy and Business Development at Siemens Healthineers India since August 2022, covering the overall portfolio of Imaging as well as Diagnostics (IVD). Prior to that, he was the Country Head of Diagnostics business for India and neighboring countries for nearly four years. Before that, he was the India Finance Head for Diagnostics business as well. He has nearly nineteen years of post-qualification work experience across different Industries such as Healthcare, Energy, Metals and Real Estate; and in varied profiles ranging from Finance to Business roles. His engagements run across countries like Germany, Austria, Czech Republic, Switzerland, Australia, Japan, Korea, Turkey, Egypt and Dubai.

Speakers at Arogya Bharat 2023



Mr. Arun Agarwal, Founder, Janitri

Arun Agarwal is a biomedical engineer and entrepreneur based in India. He earned his B Tech in Electronics Engineering and M Tech in Biomedical Engineering from Vellore Institute of Technology (VIT), where he developed a strong interest in healthcare innovation. After starting his career as a patent analyst at Evalueserve in Gurugram, he founded Janitri Innovations in 2016, a medical device startup focused on improving maternal healthcare.



Mr. Ashish Bhatia, Executive Vice President, Fortis Hospital, Delhi

As an integral part of the senior management at Fortis, Mr. Ashish Bhatia handles the overall operations of all Fortis hospitals in India. Having started his career with the Tea Gardens at Assam, Mr. Bhatia has over 29 years of varied experience. Prior to joining Fortis, he was Vice President -Marketing with Hero Motors Having. Under his leadership, Fortis Escorts Heart Institute, which is amongst the world's largest standalone cardiac institutions, has received the NABH (National Accreditation Board for Hospitals and Healthcare Providers) accreditation, the highest national recognition for quality patient care and safety. He is also actively involved in the Corporate Social Responsibility program of the organization.



Mr. Ashwajit Singh, Managing Director, IPE Global Limited

Mr. Ashwajit Singh is the Founder and MD of IPE Global, the largest social sector management consultancy firm in South Asia. Headquartered in New Delhi, India with seven international offices in Bangladesh, Ethiopia, Kenya, Myanmar, Nepal, Philippines, and United Kingdom, the company offers a range of integrated, innovative and, high-quality consulting services across several sector and practices. Ashwajit is also chair, Triple Line Consulting (an IPE Global Group company), a UK based international development Consulting firm and chair, Northern chapter of NATHEALTH.



Mr. Barnik Chitran Maitra, Managing Partner, Head of Arthur D. Little India & South Asia

Barnik is the Managing Partner of Arthur D Little, India and South Asia and is responsible for ensuring a pre-eminent position for the firm in the region. He is also responsible for building Arthus Little's global competence centres in India for Artificial Intelligence, Research and Graphics . With over two decades of experience, Burnik has a proven track record of leadership ability and is also a technology expert, Silicon Valley investor, board advisor, published author and a renowned speaker at global fora. Prior to joining Arthur D Little, Burnik was a long-standing Partner at McKinsey & Company. During his 14 years at McKinsey, among other things, Barnik led the India Strategy & Corporate Finance practice, oversaw advisory for several multinationals, and served as part of the founding team and expanded McKinsey's global footprint in Asia and Africa.

Speakers at Arogya Bharat 2023



Mr. Bhaskar Guha, Managing Director & Country Manager, Fresenius Medical Care India Pvt Ltd

Healthcare and Lifesciences professional with a career spanning over 22 years with leading healthcare & MedTech multinationals like Johnson & Johnson, Becton Dickinson, Boston Scientific and currently with Fresenius Medical Care. Headed Care Enablement business in India managing Sales, Marketing and Technical functions. Building and executing a strategic roadmap to retain market share and grow profitably and currently the Managing Director of Fresenius India.



Shri C K Mishra, Former Secretary, Government of India; Mentor, Swasth Bharat Task Force, FICCI

Sri CK Mishra has been a career civil servant belonging to the Indian Administrative Service. He joined the service (IAS) in 1983 and superannuated as secretary in the Ministry of Environment Forest and Climate Change, Government of India. He led the Indian negotiations at important forums such as United Nations Framework Convention on Climate Change (Conference of the Parties (COP)) to assess progress in dealing with climate change; Montreal Protocol on Substances that Deplete the Ozone Layer and various other multilateral events. He was also the administrative head of forest and wildlife conservation efforts in India where India saw continuous increasing forest cover. His interventions and policy initiatives have brought India in the category of very few countries in the world on course to achieve that 2 degree target of global warming. Prior to this, he was secretary in the Ministry of Health and family Welfare and also held the additional charge of the Ministry of AYUSH for some time.



Mr. Chhitiz Kumar, Vice President - Philips Healthcare

Chhitiz was the founder director of HealthMaP Diagnostics Pvt. Ltd, a unique start-up Healthcare venture in diagnostics business in India. He successfully scaled up the business and exited the business in 2019. Chhitiz Kumar has over 2 decades of experience cutting across Healthcare industry and Financial Services. In his leadership journey, he has worked extensively across Indian Subcontinent, Singapore, Middle East and Turkey, crossing multiple geographies & cultures. He has been credited with creating several new business models for putting businesses on rapid growth trajectory and the turning around under-performing businesses.



Mr. Dhruv Joshi, Cofounder, CEO, Cloudphysician

Mr. Dhruv Joshi is a distinguished Co-Founder and CEO of Cloudphysician, a healthcare company at the forefront of digital tools that empower physicians to manage patient care more efficiently. Dhruv's previous experience includes being a Fellow in Pulmonary and Critical Care at Cleveland Clinic Foundation in the USA and an Internal Medicine Resident at MedStar Health. He obtained his medical degree from St John's Medical College, Bangalore, India, and completed his Internal Medicine training at the Good Samaritan Hospital in the USA. With a deep passion for leveraging technology to enhance healthcare delivery, Dhruv is excited to lead the charge at Cloudphysician and make a meaningful difference in patient outcomes.

Speakers at Arogya Bharat 2023



Mr. Daljit Singh, Past President NATHEALTH, Former President, Fortis Healthcare

Daljit Singh is a Strategy Advisor, Management Consultant, Mentor to Start-ups, and a Life and Executive Coach. He is currently Chairman-Malar Hospitals and an Advisor to a number of organizations. During his tenure of 17 years with Fortis Healthcare, he has held the office of President, Chief Executive Officer and has led the Company's Strategy, Organizational Development and Projects Functions. He has 45 yrs of rich management experience in the corporate sector. Daljit is an acknowledged expert and thought leader in the domain of Healthcare. He has represented Fortis at Industry forums like the World Economic Forum, Nathealth, CII and FICCI and led several healthcare related committees. He has held the office of President of Nathealth (Healthcare Federation of India) and has been an active participant on the World Economic Forum platform and was on the Steering Boards constituted by the Forum to guide a number of major Global projects, including "Scenarios for Sustainable Health Systems", "The Healthy Living Charter", and "Health Systems Leapfrogging". He was on the Forum's Advisory Board on "The Economic Burden of Non-Communicable Diseases in India" and on the Global Agenda Council on Ageing.



Ms. Divya Jain, Bio Angels

Ms. Divya Jain is a business and technology professional with experience of more than seven years across various industries ranging from startups, information technology, EdTech to the automobiles industry. She has a deep understanding of business strategy & development and has worked across the board from early-stage startups to big corporations. She specialises in curating brand relationships and strategizing & executing campaigns that are authentic. Presently, she is the Senior Manager at BioAngels, a partnership between BIRAC, an enterprise of the Department of Biotechnology, and IAN, India's single largest horizontal platform for seed and early-stage investing.



Mr. Gautam Khanna, Chief Executive Officer, Hinduja Hospital

Mr. Gautam Khanna is the CEO of P.D.Hinduja Hospital and MRC, Mumbai and is also the head of Hinduja College of Nursing . He is on the Board of two private hospitals and a Managing Committee Member of a Degree College in Mumbai. Currently, he is the Co-chair of FICCI Health Services Committee and President of AOH (Association of Hospitals) Mumbai and the National Leader of the Services Provider Forum (Hospitals) for NATHEALTH ,India. Mr. Khanna is an experienced business leader who holds a rich experience spanning over 30 years. During this stretch of time , he successfully managed diverse businesses and created sustainable stakeholder value in domestic and internationally challenging environments at Hinduja hospital and 3M. He has effectively led culturally disparate teams across APAC Region and Latin America , based out of the USA and in India.

Speakers at Arogya Bharat 2023



Mr. Gautam Chakraborty, Senior Health Finance Specialist, USAID

Mr. Chakraborty has been the Innovative Health Financing lead at USAID India since 2016, where he managed the USAID's \$9 million Development Impact Bond on Maternal Health and \$60 million healthcare loan-portfolio guarantees with banks and financial institutions. He obtained his MBA degree in 1995, with a specialisation in Finance and has 25 years of health financing and health systems experience in India. Before joining USAID, he assisted the Government of India in financial planning and budgeting for the country wide urban health initiative called National Urban Health Mission. He had also contributed in improving a major pan-India public-private partnership on Emergency Response System (ERS) under the National Health Mission. Currently in USAID, he is exploring innovative financing options like blended finance and impact bonds, to leverage private capital for primary healthcare in India for sustainable health and development impacts.



Mr. Girish Krishnamurthy, MD and CEO, Tata Medical and Diagnostics

Girish Krishnamurthy is the Managing Director and CEO at Tata Medical and Diagnostics Ltd. (Tata MD). A high growth CEO, who in addition steered several companies as Board of Director, Advisor and Mentor.

With over three decades of rich multi domain and entrepreneurial experience across key sectors like Healthcare, Software Products, IT Services, Skill Development, Education, Manufacturing, Retail and Airlines. Girish has successfully led multiple transformational initiatives globally. A large-scale operation and execution specialist with in-depth experience of managing business with high growth.



Mr. Girish Raghavan, VP, Digital Engineering & Technology, GE Healthcare

Girish Raghavan is currently the Vice President of Digital Engineering and Technology at GE Healthcare. He is A technologist of topnotch quality with engineering skills having experience in long term business strategy devising and creating product engineering organisations which help businesses in product modernization. He has also written extensively on the intersection of technology and healthcare, with a focus on harnessing the potential of AI to transform Indian healthcare infrastructure.



Dr. Harsh Mahajan, Immediate Past President, NATHEALTH & Founder & Chief Radiologist, Mahajan Imaging

Dr. Harsh Mahajan is the president of Indian Radiology and Imaging Association (IRIA) and also a consultant to the International Atomic Energy Association, Vienna, Austria. He is currently the chief radiologist at Mahajan Imaging Pvt. Ltd., the company he founded, which has 7 radiology and nuclear medicines centres in and around New Delhi. Dr. Harsh Mahajan graduated from Maulana Azad Medical College, New Delhi in 1982, after which he went on to do his Post-Graduation in radio diagnosis from the prestigious PGIMER, Chandigarh. He was awarded one of the highest civilian National honours of "Padma Shri" in 2002 for his contribution to the field of radiology and imaging.

Speakers at Arogya Bharat 2023



Shri Rao Inderjit Singh, Minister of State, Ministry of Corporate Affairs Government of India

Shri Rao Inderjit Singh is an Indian politician from the ruling Bhartiya Janata Party and is presently a minister in the Indian government. He graduated with B.A (Hons) from the Hindu College, Delhi University and went on to earn a degree in Law (LL. B.) from the faculty of Law, Delhi University. Singh is currently a member of the 17th Lok Sabha representing the Gurgaon Lok Sabha constituency in Haryana and is Minister of State Independent charge looking after the Ministries of Planning and Statistics & Programme Implementation & MoS Ministry of Corporate Affairs in the central government. Earlier he has served as MoS External Affairs and MoS Defence & Defence Production from 2004 to 2009 and from 2014 to 2016. A member of Parliament serving his fifth term, he was also earlier elected to the Haryana Vidhan Sabha 4 times and served as minister in Haryana looking after Forest & Environment, Technical & Medical Education and Food & Civil Supplies at various times in his career.



Mr. Indranil Roy Choudhury, Group CEO, Apex Kidney Care

Mr. Indranil is Group Chief Executive Officer at Apex Kidney Care Pvt Limited and Vice President of Dialysis Service Providers Association of India. He has 28 years of experience in Leadership positions in healthcare across pharmaceuticals, diagnostics & service industry. He has significantly contributed in enhancing patient experience in both clinical and non-clinical parameters. He has been partnering with policy makers and Govt sector stakeholders to ensure sustainable PPP project models which can deliver desired outcomes in the healthcare sector. His area of interest include technology enabled implementation of systems & processes.



Dr. K Hari Prasad, President, Hospitals Division, Apollo Hospitals Enterprises Limited

Dr. K. Hari Prasad serves as President of Hospitals Division at Apollo Hospitals Enterprises Ltd. and serves as its chief executive officer of the Central Division. Dr. Hari Prasad has been employed with Apollo Hospitals since the year 1999. Prior to holding the designation as aforesaid in the Company, he served as vice president- medical of Apollo Hospitals Enterprise since 2003. He has previously served as Apollo Hospitals Enterprise consultant Anaesthesiology and critical care and director of emergency services. He has a total work experience of 19 years. Dr Hari Prasad received his bachelor's in medical and surgery degree from Kasturba medical College.

Speakers at Arogya Bharat 2023



Dr. K Madan Gopal, Sr. Consultant [health], NITI Aayog

Dr. K Madan Gopal is a public health professional with MBBS , MD qualification and has been working on issues related to Health Systems Reforms and Strengthening in India for around 30 years. He has worked on a variety of projects across sectors in India and abroad for providing and managing programmatic, technical, and operational areas. During his career span, has held many leadership positions and demanding roles. Currently working with NITI Aayog [National institution for transformation India] the Apex policy think tank for the Government of India, as Senior consultant [health] and is contributing to various health sector transformative programs including the covid pandemic response.



Mr. Kabir Mahajan, Associate Director, Mahajan Imaging & Labs

Kabir Mahajan, Associate Director of Mahajan Imaging & Labs, India's leading medical imaging provider. With a passion for medical imaging, AI, and quantitative imaging, Kabir has been leading the expansion, development of strategic partnerships, and new initiatives to optimize finances at Mahajan Imaging. He is also a co-founder of Guillotine Rock Band and Mahajan Imaging Education & Research Academy (MIERA), a research and training institute focused on the medical imaging industry. Kabir's expertise and experience in the healthcare industry have made him a valuable asset to the organization.



Shri Kiran Gopal Vaska, Executive Director, IT policy and Coordination, National Health Authority (NHA), Government of India

Kiran Gopal Vaska is the Executive Director (IT) at the National Health Authority (NHA) for Pradhan Mantri Jan Arogya Yojana (PM-JAY) and Ayushman Bharat Digital Mission (ABDM). Prior to joining NHA, he has extensively worked in energy & power, public health, commerce and industries in the state of Madhya Pradesh. He has implemented government initiatives and coordinated the efforts of various international organizations in order to improve healthcare service delivery in the state. He is a 2008 batch IAS officer in the Madhya Pradesh cadre and held several administrative posts during his career. Mr. Vaska holds a Bachelor's degree in Computer Science from IIT Bombay and Master's degree in Public Administration in International Development from Harvard Kennedy School. He was also the recipient of the Joint Japan-World Bank Graduate Scholarship.



Mr. Krishnan Ramchandran, Managing Director & Chief Executive Officer, Niva Bupa

Mr. Krishnan Ramchandran is an industry veteran and a well-recognized name in the health insurance industry and last served as the CEO of Apollo Munich Health Insurance. Krishnan is an Engineer and a MBA from IIT Madras and IIM Calcutta. Krishnan brings with him over 23 years of extensive experience across Health Insurance, Healthcare & Life Sciences industries. He is known for his focus on core institution building with varied experience in transforming health insurance operations, driving a high growth distribution strategy and leveraging technology for enabling business growth. His diverse experience across domestic and international markets, coupled with his track record of delivering consistent and profitable growth is a guiding force for NIVA BUPA.

Speakers at Arogya Bharat 2023



Mr. Kshitij Vijayvargiya, Managing Director & Partner, Boston Consulting Group (BCG)

Kshitij is a leader in Healthcare practice of BCG in India. Over the last 15 years, Kshitij has advised healthcare organizations – providers, pharmaceutical companies and diagnostics & devices companies - on topics of strategy, cost, operational excellence and change management. He has worked extensively with large philanthropy groups, operating in the healthcare space towards goals of immunization, nutrition and prevention of communicable diseases. He has also supported public sector efforts towards addressing health challenges of the country and in rolling out initiatives at scale. Kshitij is a mechanical engineer by training and holds a post-graduate diploma in management from IIM, Calcutta.



Mr. Manish Sardana, President, PolyMedicure Limited

Manish Sardana is currently serving Poly Medicure Ltd. as President for the domestic business. He is also involved in creating go direct strategy for few selective international markets.

A pharmacy and a business graduate, Manish has a career spanning 25 years. He has been in the leadership teams serving a few med tech and pharma majors. His keen business understanding, and general management skills have enabled him to drive transformation in multiple therapeutic segments across B2B & B2C business models and across geographies.



Mr. Mayank Bathwal, Chief Executive Officer, Aditya Birla Health Insurance Company

Mr. Mayank Bathwal is Chief Executive Officer at ABHICL, a joint venture between the Aditya Birla group and MMI Holdings of South Africa since August 2015. He also serves as Director on the Board of Directors for Aditya Birla Wellness Private Limited. Mayank has been responsible for setting up the latest venture of Aditya Birla Capital Limited in the health insurance space. With his expertise and experience, the health insurance business has entered the Indian health market with a differentiated business model, developed an efficient multi-channel distribution system leveraging the increasing digital opportunity. Mayank has a rich experience of nearly 24 years in the industry. He joined the Aditya Birla group in early 1994 and has worked closely in various units and projects of the group including fertilizer and copper smelting units, financial services business and power projects.



Mr. Mohit Khullar, Managing Director, o3 Capital

As the Managing Director, Mr. Mohit Khullar leads the Healthcare practice at o3 Capital, a mid-market investment bank, providing financial and strategic advice in the field of Corporate Finance and Alternate Asset Management. Prior to joining o3 Capital, he co-founded a healthcare technology business, Nerve24 and has over 15 years of experience, having worked with Equirus Capital and Standard Chartered Bank before starting his entrepreneurial venture. He holds an MBA degree from IIM Lucknow and completed his graduation from Delhi Institute of Technology.

Speakers at Arogya Bharat 2023



Mr. Mukul Bagga, Founder & CEO, Digibridge Healthcare Pvt. Ltd

Mukul Bagga has over 3 decades of experience in the healthcare industry across sectors like pharmaceuticals, diagnostics & medical devices. Mukul is currently MD for Medicom Healthcare India - a UK based multinational specialty pharmaceuticals company. Prior to this, he was MD at Quest Diagnostics India Pvt. Ltd. Quest Diagnostics is the world's leading provider of pathology/clinical laboratory testing, information and services. He has over 2 decades' experience in commercial leadership roles at companies like Johnson & Johnson, Ranbaxy & Novartis. Mukul has done his graduation & post-graduation in pharmaceuticals from Mumbai University and MBA from Pune University.



Ms. Nanki Lakhwinder Singh, Founder and CEO, Protribe Senior Care Services

Nanki has been a part of the financial services industry in various roles in India and Overseas for over a decade. Finally she went on to establishing a boutique transaction advisory firm specialising in healthcare. It is in this capacity, Nanki realized a growing need for Senior Care and a gap in operational expertise available in India to serve almost 150 million population growing at 3.8% annually.

This realization and a long term vision inspired Nanki to enable a strategic collaboration with Genesis HealthCare Inc. which is now Protribe Seniors. As the CEO and Founder of a sunrise sector initiative, Nanki understands the straddle between operations, management, strategy, capital requirements, government liaising and developing symbiotic business relationships while keeping a view and handle on revenue growth. Nanki has also been featured in the Top 20 Women most influential women in Health Care in India.



Dr. Narayan Pendse, Vice President - Medical Strategy & Operations, Fortis Healthcare

Dr Narayan Pendse is VP-Medical Strategy & Operations at Fortis Healthcare. A qualified Radiologist with a Masters in Public Health, Dr Pendse ventured into Public Health after 15 years of Clinical Radiology practice at leading hospitals. He worked at the WHO HQ at Geneva, Switzerland and provided technical assistance for health systems strengthening to multiple countries. At Fortis, Dr Pendse has held portfolios like Quality & Patient Safety, Accreditations, Medical Process Standardization, Clinical Governance, and digital transformation projects. He currently leads the Medical IT function and is Chair of the EMR Implementation Project amongst other responsibilities. Dr. Pendse is also associated with organizations like NABH, CAHO and AHPI.

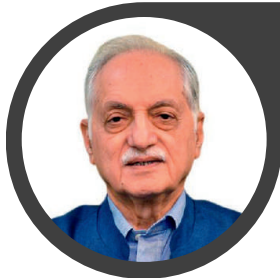


Mr. Narendra Varde, Managing Director of Roche Diagnostics India and Neighboring Markets

With a total of 17 years of experience in Micro-Finance, IVD, Medical Devices, Pharmaceuticals and Diagnostics across different geographies, he has demonstrated agility in adapting to different market dynamics with strong decision-making. Under his leadership, Roche Diagnostics India has become #1 in the IVD segment providing the largest test menu to laboratories.

He has enjoyed successful stints in the UK, Singapore, China, Switzerland, and Poland. He holds an MBA from HEC Paris Management School (École des hautes études commerciales de Paris). He is an active spokesperson for a number of industry associations and professional organizations such as FICCI and others. He is also on the governing council of NATHEALTH & the Vice-Chair at Asia Pacific Medical Technology Association (APACMed).

Speakers at Arogya Bharat 2023



Dr. Narottam Puri, Principal Advisor, Quality Council of India; Advisor (Medical Operations), Fortis Healthcare; Advisor-Healthservices and Medical Value Travel, FICCI; Hony. Professor, Indian Medical Association; Co-Founder, Centre for Design and Innovation

Dr. Narottam Puri is a pioneer in the field of Healthcare Quality and Patient safety. He has been recognized for his unstinted, long service to Healthcare Quality and to QCI and NABH. He has been associated with NABH since its inception and has served as Chairman of NABH for four years (2010-2014). During this tenure, he also served on the Governing Board of Quality Council of India and was an invited member on board of IRDA. Dr Narottam Puri completed his MBBS in 1968 from University of Delhi, standing first in Eye and ENT. He then pursued his master's degree in otorhinolaryngology (ENT) from University of Delhi standing first & was elected a Fellow of the International College of Surgeons (1981).



Mr. Neeraj Jain, Country Director - PATH India & Director - PATH South Asia

Neeraj has over 30 years of extensive leadership experience in strengthening organizations. Prior to joining PATH, Neeraj led WaterAid India through a dynamic phase of transition as its Chief Executive. Neeraj was also associated with the Children's Investment Fund Foundation, where he brought his extensive experience from the corporate sector to work for child development, with a focus on nutrition, early learning, and child survival in the perinatal period. Additionally, Neeraj is a member of CII's Nutrition and Public Health committees and a member of the Management committee of the Food Fortification Resource Centre (FSSAI). Neeraj is on the Boards of the non-profit organizations - Digital Green, Social Alpha and Arogya World.



Dr. Om Manchanda, Managing Director, Dr. Lal PathLabs Ltd.

Dr. Om Manchanda is the Managing Director of Lal Pathlabs Ltd.(LPL). Dr. Om Manchanda has successfully led the transformation of PL in last nearly 16 years from a small business to the professionally run India's largest medical diagnostics company. He also successfully led the IPO of the company in the year 2015, the first company to be listed in the diagnostics space in India. His career spans over three decades across industries like FMCG, Agri-Inputs and Consumer Healthcare, He is spent nearly a decade with Hindustan Unilever where he started his career as a management trainee in the year 1990. He has done MBA from IM Ahmedabad and is also an alumnus of Harvard Business School. He is graduate in veterinary sciences.



Mr. Prabhat Sinha, Director Government and Public Affairs, Health Policy, Patient Advocacy, Public Affairs, CSR

Mr. Prabhat leads the Government and Public Affairs function at Boehringer Ingelheim India and is part of the India leadership team. He believes partnerships impacts health system strengthening and has 21+ years of progressive learning experience in strengthening health care systems. As part of the corporate affairs team at pfizer, novartis, novo nordisk and eli lilly worked with industry associations, public health institutions for improving access to care in the non communicable disease domain. He has worked with International Development Agencies, Sightsavers and care in the past after starting professional journey working with Government of Uttar Pradesh Women Development Corporation.

Speakers at Arogya Bharat 2023



Mr. Pankaj Sinha, Investment Officer at IFC - International Finance Corporation

Mr. Pankaj Sinha is an Investment Officer within the PPP Transaction Advisory Services department based in New Delhi, India. At the International Finance Corporation, he has been working on providing advisory solutions on structuring and procuring infrastructure on PPP basis across sectors such as solar energy, urban infrastructure and transportation, health and education in India and Bhutan. Prior to working with IFC, he worked with CRISIL (a Standard & Poor's Company) in their Infrastructure Advisory group on PPP projects in coal/mining and thermal power sectors. He also worked for over 12 years in an integrated steel company (SAIL) in India in the area of consulting on feasibility studies and implementation of mineral projects. Mr. Sinha holds an MBA degree from Birla Institute of Technology, Ranchi, India and is a mining engineer.



Dr. Pavan Choudary, Chief Executive Officer & Managing Director, Vygon

Since 1998, Mr. Pavan Choudary has served as the CEO and Managing Director of Vygon India Pvt. Ltd., a leading French Multinational Corporation in Healthcare. Prior to this, he held senior positions in Marketing and Advertising at large Indian and foreign MNCs and has authored The Rx Factor, a seminal work on healthcare marketing and strategy. He Chairs the Medical Technology Association of India (MTAI), is a Trustee with the Lal Bahadur National Memorial Trust, an Independent Director with Transasia Bio Medicals Ltd and sits on the Advisory board of Executive Access Pvt Ltd. He is an author, Life Coach, TV host and Columnist and he has also written for publications such as Huffington Post, Firstpost, Business Standard, Express Healthcare, Deccan Herald and Economic Times.



Dr. Pranav Mohan, Lead - South Asia, Health & Education Investments Unit, Private Sector Operations Department Asian Development Bank

Dr. Pranav Mohan has had a diverse experience of working with the World Bank, IFC, and Asian Development Bank, and led projects at the highest levels of governments and private sector. He has worked extensively on Private Equity Investments, Corporate Finance, Merger & Acquisitions, Investment Banking, Public Health Policy, Public Private Partnership (PPP), and Sovereign Lending and Technical Assistance projects in the health and life sciences sectors across Asia. His work includes a focus in Public and Private Health Sectors, Life-sciences, Health Insurance, Biologics, Health Technology, Medical Education, and Education Sectors. Prior to joining IFC, he worked in Religare Enterprises where he advised the Fortis Healthcare group on multiple Mergers and Acquisitions and divestiture deals across Asia.



Mr. Prashant Sharma, Managing Director, Charnock Hospital

Mr. Prashant Sharma is the Managing Director of Charnock Hospital. He is the Managing Director of SKM group, under whose leadership and dynamism the group has drawn by leaps and bounds after he joined in 2008. He is an MBA from ISB (Indian school of Business) Hyderabad, India. Also have a degree in Healthcare management from Harvard Business school, Boston, USA. His other educational immersions are in Kellogg School of Management (Chicago, USA), Wharton School (Philadelphia, USA), Insead (France), FDC (Brazil). He is co-chairperson for CII Healthcare Committee for Eastern India and Eastern Regional Council Member of CII (Confederation of Indian Industries). He is also co-chairperson of ICC National Expert Committee for Healthcare and executive committee member of ICC (Indian chamber of Commerce). He is also a member of AHEI (Association of Hospitals of Eastern India), NATHEALTH, BCCI, FICCI, ASSOCHAM, etc.

Speakers at Arogya Bharat 2023



Dr. Prashanth Rajagopalan, Director, MGM Healthcare

Dr Prashanth Rajagopalan is the Founding Director of MGM Healthcare, a 400 bed world class tertiary care hospital in Chennai, which serves both the local communities as well as patients coming in from across the globe to seek value care with the highest medical standards.

A doctor by education, he went on to pursue a Master's in Public Health Leadership and Management at Johns Hopkins University, USA, besides also being the youngest Harvard Macy fellow. His interests are in the intersection of healthcare, education and technology in healthcare .



Dr. Prathap C. Reddy, Founder President NATHEALTH, Founder Chairman Apollo Hospitals

Dr. Prathap C. Reddy, Founder President NATHEALTH, Founder Chairman Apollo Hospitals Dr. Prathap C Reddy, the visionary Founder-Chairman of Apollo Hospitals is widely acknowledged as the architect of modern Indian healthcare. He is best described as a compassionate humanitarian who dedicated his life to bringing world-class healthcare within the economic and geographic reach of millions. The institution that he envisioned and built - Apollo Hospitals, steered a revolution and marked the birth of private healthcare industry in India.

In 2014, Dr. Reddy champion of pilot in population health in his native village through the Total Health Foundation, which provides comprehensive health for a population of over 70,000. Dr. Prathap C Reddy was conferred the 'Padma Vibhushan', the second highest civilian award by the government of India and acknowledgement of his untiring pursuit of excellence in Healthcare.



Dr. Raajiv Singhal, Founding Member, Managing Director & Chief Executive Officer, Marengo Asia Healthcare

Dr. Raajiv Singhal, Founding Member, Managing Director & CEO of Marengo Asia Healthcare is a seasoned global professional with a deep and diverse experience in healthcare spanning over two decades in business management in India, Asia and Africa. His portfolio features a kaleidoscopic repertoire of experiences and achievements include acquisition, post-acquisition integration, and financial turnaround of several healthcare companies around the world with hands-on knowledge and experience of the M&A spectrum. Dr. Raajiv Singhal is recognised for the phenomenal growth orchestrated across organisations that he has spearheaded across his corporate, strategic and operational roles. Academically, Dr Singhal holds an MBBS and MS (Gen Surgery) degree from the prestigious Armed forces Medical College, and additionally, Healthcare Management program from IIM Ahmedabad. His interests span over reading books on diverse topics, music and travelling.



Mr. Rahul Ranganathan, CEO, NuGenomics

Rahul Ranganathan, Co-Founder and Chief Executive Officer at NuGenomics is a man on a mission. A mission to get people to 'manage' their health better with an intuitive analytic platform powered by genomics. He is an entrepreneur and a scientist diving deep into the world of Genomics, speaking the language of genes, questioning basic assumptions and uncovering answers to a longer, better and healthier life. Rahul's desire to seek out the new had him pursuing an MBA in Human Resources Management/Personnel Administration at XLRI Jamshedpur.

Speakers at Arogya Bharat 2023



Dr. Rajeev Sharma, VP, Tata 1MG

Dr. Rajeev Sharma, Vice President Medical Affairs at TATA 1mg, is a doctor from Bangalore Medical College and Research Institute who started 3 cross National firms, and has been part of leadership at Cure.fit. He is an MBA from Indian School of Business and IESE. He has expertise in building systems and processes of clinical excellence as well as productising new technologies. Dr. Sharma has been leading products and programs in healthcare technology and has served in the leadership of Indian IT firm Tech Mahindra as well as Healthcare IT firm AINQA.



Mr. Rajib Kumar Sen, Senior Advisor, NITI Aayog

Mr. Rajib is an Indian Economic Service Officer of 1993 Batch, currently holding charge of Senior Adviser, NITI Aayog, looking after Micro, Small, and Medium Enterprises, Health, Women & Child Development, and Education Vertical. Over a career spanning almost 30 years, he served in the Ministry of Finance (Department of Economic Affairs, Department of Expenditure, Department of Investment and Public Asset Management), Ministry of Defence (Department of Defence and Department of Defence Production), Ministry of Education (Department of School Education), Ministry of Micro, Small and Medium Enterprises, XIIth Finance Commission and the erstwhile Planning Commission. I have also worked in the state of Goa (Finance Department).



Dr. Rajiv Yeravdekar, Provost, Faculty of Medical Health Sciences at SYMBIOSIS INTERNATIONAL UNIVERSITY

Dr. Rajiv Yeravdekar has graduated from the prestigious B. J. Medical College, Pune in 1985, securing top honours in General Surgery, Obstetrics & Gynaecology. He then pursued Masters in Obstetrics & Gynaecology in 1989 & was awarded the Gold Medal by Pune University. On completion of his deputation at Ministry of Health, Sultanate of Oman from 1992-1996, he conceptualized & set up the Faculty of Health Sciences (FoHS) at the Symbiosis International University. Mr. Yeravdekar have been a former member of Board of Governors, Medical Council of India (MCI), Central Supervisory Board-PCPNDT, Govt. of India, Governing Council of Consultancy Development Centre (CDC), DSIR, Ministry of Science & Technology, Govt. of India, Maharashtra Medical Council (MMC) & Maharashtra Nursing Council (MNC) Govt. of Maharashtra. He is also associated with various other professional organizations like FICCI, CII, IMA, FOGSI, ISCCM, SEMI, IHCQF, MCCIA, etc. Rajiv Yeravdekar has also been nominated by the Hon'ble Governor of Maharashtra and Chancellor of the Universities in the State as the Chancellor's Nominee on the 'Senate of the Maharashtra University of Health Sciences' (MUHS).



Mr. Rajnish Gupta, Associate Partner, India Tax and Economic Policy Group

He has a degree in Chemical engineer from IIT Delhi and a MBA from IIM Bangalore. In the past 30 years, he has gained wide experience in a diverse range of public policy issues including developing and evaluating options relating to policy reforms. He covers the overall macro-economy, policy and regulatory design, pricing issues, competition issues and economic impact of policy and trade issues. He has worked on policy issues across sectors such as healthcare, energy and decarbonisation, infrastructure, mining, telecommunications, media, power, etc. He has also extensive experience in making policy recommendations to a variety of regulators including CCI, SEBI, TRAI, CERC, DGH and RBI.

Speakers at Arogya Bharat 2023



Dr. Rana Mehta, Partner and Leader Healthcare PwC India

Dr. Mehta has more than 21 years of experience in strategizing, planning, commissioning and operations of over 75 hospitals and Healthcare systems around the world. He has worked on numerous assignments to develop customized health care solutions to suit client needs within political, socio economic, geographic, and demographic imperatives. His extensive client experience, which includes some of the largest integrated health systems and payers in Asia, Middle East and Africa has allowed him to Pioneer innovative solutions that improve quality and cost for all stakeholders in the delivery system- patients ,providers and payers. He travels and speaks extensively at leading Healthcare Care forums and management schools across the world.



Dr. Ranjan Roy Choudhary, Special Advisor - Healthcare Technology, National Health System Resource Centre, NHM, MoHFW- Recipient of Vishisht Seva Medal

Dr. Ranjan is an experienced Doctor with Indian Air Force since 1986, Skilled in Healthcare Consulting, Strategic Planning, Research, HR Management, and Hospital Operations. Experience in implementation of Hospital Information System, medical stores automation, medical records & telemedicine. Expertise in providing integrated healthcare delivery at remote & peripheral IAF medical units in the Central & Eastern Theatre .



Dr. Ratna Devi, Director, Patient Academy for Innovation & Research

Dr Ratna Devi is currently CEO of DakshamA Health. She is also the Director of Patient Academy for Innovation and Research- PAIR. She is currently Chairing ISPOR Global Patient Council. She is founder of IAPG (Indian Alliance of Patient Groups) and Founding Board member of Healthy India Alliance- India NCD Alliance and APARDO (Asia Pacific Alliance of Rare Disease Organisations). She has also chaired the Board of International Alliance of Patient Organisations- IAPO. Apart from this, she is committee member of some prestigious organizations, like Our Views Our Voices NCD Alliance.



Dr. Rishubh Gupta, General Manager, Baxter India

Dr. Rishubh Gupta is the General Manager of Baxter India and has been associated with the company since 2014. He is responsible for driving Baxter's business growth in India, in line with the company's mission of saving and sustaining lives. Appointed as Baxter India's General Manager in October 2021, Rishubh is a seasoned commercial leader with a proven track record of effectively turning around businesses by combining a strategic approach that places a strong emphasis on the customer, execution, culture, and people. Rishubh joined Baxter in 2014 in the Medication Delivery division (India) and then moved to the APAC region to drive development and innovation across critical geographies and business units. He held a range of positions and was accountable for key assignments and projects across numerous markets in the areas of change management, medical technology, pharmaceuticals, digital transformation, and global integration. Rishubh earned a master's degree in hospital administration from the Tata Institute of Social Sciences and a bachelor's degree in dentistry from Sudha Rastogi College of Dental Sciences and Research.

Speakers at Arogya Bharat 2023



Mr. Rizwan Koita, Co- founder Citiustech, Koita Foundation

Mr. Rizwan Koita is an entrepreneur and philanthropist with a passion to leverage emerging technologies and business process innovation to have a meaningful social impact. He has a Bachelor's Degree in Electrical Engineering from IIT Bombay and a Master's degree in Electrical Engineering and Computer Science from MIT- ranked at the top in both programs. Under his leadership, Citiustech has become one of the fastest growing Healthcare technology companies, with over Rs. 2,500 Crores in revenues, over 6,500 technology professionals and serving more than 120 leading Healthcare organisations worldwide. As a global leader in Healthcare digital transformation, Citiustech is recognized for its expertise in next-gen enterprise applications, interoperability, data, analytics and AI/ML.



Ms. Ruma Banerjee, Vice President, Neotia Healthcare Initiative Limited

Ms. Ruma Banerjee did her post-graduation in Hospital management from Calcutta University (IISWBM). She also completed her Post Graduate Diploma in Medical Law & Ethics [National Law School of India University, Bangalore]. In her current stint with Ambuja Neotia Group, Kolkata as Vice-President of Neotia Healthcare Initiative Limited, she leads the Projects and Business Operations of the healthcare vertical. She started her career with Bhagirathi Neotia Women & Child Care Center, Kolkata in the year 2001 after completion of her post-graduation in Hospital management as junior Executive operations. She was quickly selected by the management to head the administration of the flagship hospital. She was assigned with the responsibility of setting up Genome The Fertility Centre in the year 2006 which at present has 6 centres spread across West Bengal and Chhattisgarh.



Mr. Rupak Barua, Group CEO, AMRI

Mr. Rupak Barua is a name well-known in the healthcare sector of India. Before taking up the mantle as leader of AMRI Hospitals Ltd, Mr Barua headed the BM Birla Heart Research Centre, India's 1st NABH accredited hospital, as Chief Executive Officer. Before that he led overall operations at Eastern India's first corporate hospital, Calcutta Medical Research Institute (CMRI), as the Chief Operating Officer (COO). He also played a pivotal role in transforming CMRI from a Trust-run hospital to a truly corporate healthcare service provider of prestige and repute. Mr Barua is currently the Secretary of the Association of Hospitals of Eastern India (AHEI) and Co-Chairman, Healthcare Sub-Committee of the Confederation of Indian Industries (Eastern Region).



Dr. Ravi P. Singh, Secretary General, Quality Council of India

Dr. Ravi P. Singh is the 4th Secretary General of Quality Council of India an independent organization under Department for Promotion of Industry and Internal Trade, Government of India. He heads the National Accreditation body which has the mandate to improve the quality of products, processes and services in all sectors including education, healthcare, skills training, manufacturing etc. Prior to being appointed as Secretary General, Dr. Singh served IGNOU as the Director of Regional Services Division and then as the Senior Regional Director in Delhi. Dr. Singh was formerly the founder Vice Chancellor of Sharda University at Greater Noida. He joined this position on lien from Punjab Technical University where he worked as Dean from 2003-2009.

Dr. Singh started his career as an Assistant Director in All India Council for Technical Education in 1996 and continued as Deputy Director till 2003. He held various important positions like Regional Officer of the Northern Regional Office at Kanpur during 1996-1999 and later as the Regional Officer of Eastern Regional Office at Kolkata during 2000-2001.

Speakers at Arogya Bharat 2023



Dr. Sameer Gupta, Director, Metro Hospitals

Dr Gupta is a highly skilled cardiologist who specializes in Interventional cardiovascular and peripheral procedures. He completed his “Medicine residency” at Penn State University, “Cardiology Fellowship” at the University of South Florida and an “Interventional Cardiology” fellowship at The University of Chicago. He then went on to pursue additional training in “Vascular Medicine and Endovascular Intervention” at Albert Einstein College of Medicine in New York. In 2013, he was awarded the status of “Extraordinary Ability and Achievement” by the United States government. Dr Gupta has authored multiple abstracts, journal articles, book chapters and presented at multiple national and international meetings.



Mr. Sanjeev Malhotra CEO, Centre of Excellence for IoT & AI, NASSCOM

As a head of the NASSCOM Center of Excellence – IoT & AI spanning three locations in Bangalore, Gurgaon and Ahmedabad, Sanjeev is currently building the innovation ecosystem with startups, corporates, Govt. and Academia focusing on emerging technologies like IoT, Artificial Intelligence, Robotics etc. and its application in Manufacturing, Auto & Transport, Healthcare etc. India is becoming a hub of innovative digital solutions covering the entire gamut of industries and powering the digital strategies for global companies.



Mr. Sanjiv Navangul, Managing Director and CEO, Bharat Serum and Vaccines Ltd.

Mr. Sanjiv Navangul is a respected pharmaceutical/healthcare management professional. Under his leadership, a host of global pharmaceutical companies have achieved operational success. His mentorship and contribution towards a value based culture is widely acknowledged by Business leaders. In his diverse career span of 30 years, Sanjiv has experienced entrepreneurship and also served on a board of Johnson and Johnson Pvt. Ltd. India and Fulford India. Sanjiv has been the winner of various industry awards on Public Health, Marketing and Diversity. He has served as the vice president of OPPI(Organisation of Pharmaceutical Producers of India), been Chairman of AMCHAM Pharma Committee(American Chamber of commerce).



Dr. Saurabh Pokhriyal - Nephrologist, Co-founder & Director Vitus Care

Dr. Saurabh Pokhriyal has been in active Nephrology and Transplant Medicine for over 23 years. Over the last 17 years, he has been instrumental in setting up the Department of Nephrology & Renal Transplant Medicine, including the Dialysis Units, at leading hospitals in Delhi NCR, including Medanta – The Medicity, Fortis Healthcare – Fortis Vasant Kunj and Fortis Memorial Research Institute (FMRI), Gurgaon and more recently at Manipal Hospital Dwarka. Currently, he is the Director and Head of Department for Nephrology & Renal Transplant Medicine at Manipal Hospital Dwarka in Delhi.

Speakers at Arogya Bharat 2023



Mr. Saurabh Suneja, Principal - National Investment and Infrastructure Fund (NIIF)

Mr. Saurabh has over 16 years of experience across 12 countries in Asia and Africa. His experience includes work in the areas of public private partnerships, regional infrastructure planning, developing and advising on policies and regulations related to infrastructure, contract management and negotiations, feasibility assessments, risk analysis, investment strategy, bid and transaction advisory, and capacity building. He joined NIIF in 2018 and is a part of the Strategic Initiatives and Policy Advisory team. At NIIF, his role spans across developing investment themes for large projects, closely working with several stakeholders to explore joint initiatives and contributing to infrastructure finance related policy matters. He also works with NIIF's portfolio companies for business expansion initiatives. Prior to joining NIIF, Saurabh worked as a Director of the PPP Unit at the Ministry of Finance in Namibia. During his three-year stint with the Ministry, he coordinated PPP policy and regulatory actions in the country and the efficient review and approval of PPP projects. He extensively engaged with multiple government ministries and other public bodies to assist in bringing credible PPP projects to market.



Ms. Sheena Chhabra, Senior Health Specialist, Health, Nutrition and Population Global Practice, South Asia Region, The World Bank

Sheena Chhabra is a Senior Health Specialist with the World Bank's Health, Nutrition and Population Global Practice based in New Delhi, India. At the World Bank she leads the technical advisory services on National Health Financing Programme that supports Government of India's flagship Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (PM-JAY) and NITI Aayog-MoHFW-World Bank Annual State Health Index, and operations related to India's Enhanced Service Delivery Program and the Uttarakhand Health Systems Development Project. Prior to joining the World Bank in 2016, Sheena headed the Health Systems Development Division of USAID/India (United States Agency for International Development). Before that, she was a Senior Project Director at the Social and Rural Research Institute (SRI) and a Lecturer at Lady Irwin College, Delhi University.



Ms. Shambhavi Sharan, Manager, Tax & Economic Policy Group, Ernst & Young LLP

Shambhavi is a Manager at the EY Tax and Economic Group and has 10 years of work experience. She is a product of Miranda House and Delhi School of Economics. An economist by training, her research work spans policy work in the domains of healthcare services, agriculture, textiles, trade, exhibitions and physical infrastructure industries. She has worked as a Young Professional at NITI Aayog (Government of India), under Prof Ramesh Chand, Member, NITI Aayog. At EY, she has contributed economic analysis to various thought leaderships such as Study on Dialysis delivery in India and Study of embedded taxes in healthcare services sector for NATHEALTH. She has written numerous economics research-based articles, which have been published both in newspapers and academic books.



Mr. Shaurya Tayal, Director, RAHI Care

Mr. Shaurya An Tayal is the Director at RAHI Care, which provides affordable & accessible quality renal care through a network of dialysis centres across India, making quality treatment more accessible beyond Tier 1 cities. Prior to this, he was an analyst at Goldman Sachs, where he was responsible for initiating coverage on 11 stocks including Bharti Airtel, Reliance Comm., Idea Cellular, Tata Comm., Zee Ent., TV18, ENIL, and Suzlon Energy. He was responsible for analysis, modelling and interpretation of key industry developments.

Speakers at Arogya Bharat 2023



Mr. Shishir Agarwal, Managing Director, Terumo India Pvt. Ltd.

Mr. Shishir Agarwal is a Managing Director of Terumo India Pvt. Ltd. Since Mar-2019. He has worked in various fields - Sales & Marketing, National Sales Director, BU Director - Ethicon, BU Director - Ethicon Endo-Surgery, Vice President - LifeScan (Diabetes Care), Country Director - Ethicon, Russia & CIS. Mr. Shishir did MBA from Cardiff University / Prifysgol Caerdydd in 1997.



Dr. Shravan Subramanyam, President, NATHEALTH

Dr. Shravan is the vice president and CEO of GE Healthcare - India and South Asia region and Managing Director of Wipro GE Healthcare. Dr. Shravan has been heading the charge of building and delivering on commercial outcomes, strategic growth objectives, and the localisation and technology strategy for Wipro GE Healthcare in South Asia.

In addition to a degree in medicine from Madras Medical College, Dr. Subramanyam also holds a Masters' Degree in Health Administration from Cornell University, where he previously served on the alumni board.

Dr. Subramanyam is an active voice at industry bodies such as FICCI & NATHEALTH, and recently stepped down as the President of the Swiss Indo Chamber of Commerce (India). He was named in Economic Times' 40 Under Forty List of India's Hottest Business Leaders 2018.



Dr. Shri Vinod Kumar

IAS, Director of Medical Education, Government of Andhra Pradesh

Dr. Vinod Kumar V is an officer of the Indian Administrative Service (IAS) belonging to 2015 batch. He did his MBBS from Bangalore Medical College and Research Institute, Bengaluru and he hails from Davanagere, Karnataka



Dr. Shubnum Singh, Principal Advisor Health Policy Confederation of Indian Industry (CII) & Board Member, Healthcare Sector Skills Council

Dr. Shubnum is an alumna of Lady Hardinge Medical College, Delhi and has Four decades of rich experience in the healthcare sector spanning across roles such as a Practicing Clinician, Healthcare Management & Administration, Healthcare Capability Building/ Skilling and Healthcare Policy & Governance. She graduated from Lady Hardinge Medical College Delhi, India. Dr. Shubnum works closely with a varied set of stakeholders in her current capacity as Advisor CII National Health care council and Governing Board member of Health Sector Skills Council and Life Sciences Sector Skills Council. She is a Founder Member of Max Healthcare Institute and Founder Chair of the Health Management Program at the Max Institute of Healthcare Management Indian School of Business (ISB).

Speakers at Arogya Bharat 2023



Mr. Siddhartha Bhattacharya, Secretary General at NATHEALTH - Healthcare Federation of India

Siddhartha Bhattacharya has over 25 years Leadership Experience in Health systems PPP Digital Health Technology Products and Services Consulting. He has global work experience cutting across Private Sector, Government, PPP and not for profit in industries that thrive on rapid scale, change and globalization with high innovation potential. He completed his graduation from Kellogg School of Management NATHEALTH - Healthcare Federation of India (2005-2006) and before this he has done MBA - Marketing from Washington University in ST. Louis- Olin Business School. He has volunteer experience at CASA of Travis County. Mr. Bhattacharya was also Executive Partner of GVK EMRI (Dec 2010 - Dec 2014) and Country Director, India at Access Health International (Jan 2015 - Dec 2018).



Dr. Sonia Trikha Khullar, Director General of Health Services, Haryana

Dr. Sonia Trikha is Director General Health Services, Haryana. She is an Ob/Gyn specialist and holds a Master's in Public Health from the London School of Hygiene and Tropical Medicine. Over the last 26 years of her professional career, she has worked extensively in the fields of RMNCH+A, HIV AIDS, and health systems strengthening across public and non-profit sectors as well as international organizations such as UNICEF and WHO. Given this eclectic background, Dr. Sonia possesses a unique repertoire of skills as a clinician, public health practitioner, administrator, and manager.



Dr. Soumya Swaminathan, Chief Scientist at World Health Organization (WHO)

Dr Soumya Swaminathan is Chief Scientist at the World Health Organization (WHO). She received her academic training in India, the United Kingdom of Great Britain and Northern Ireland, and the United States of America. She previously served as WHO's Deputy Director-General for Programmes. A pediatrician from India and a globally recognized researcher on tuberculosis and HIV, she brings with her 30 years of experience in clinical care and research and has worked throughout her career to translate research into impactful programmes. Dr Swaminathan was Secretary to the Government of India for Health Research and Director General of the Indian Council of Medical Research from 2015 to 2017. From 2009 to 2011, she also served as Coordinator of the UNICEF/UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases in Geneva.



Mr. Srikant Srinivasan, Head Service South Asia, GE Healthcare

Mr. Srikant Srinivasan has spent twenty two years in GE Healthcare leading the services function of GE Healthcare, South Asia. He is also a Co-Chair at NatHealth, South India Region Chapter. He has completed his Mechanical Engineering from Nagpur University and an Executive Management Program at The University of Chicago Booth School of Business.

Speakers at Arogya Bharat 2023



Mr. Sumeet Aggarwal, Managing Director, Midmark, India

Sumeet joined Midmark (India) in August 2016, which is India's leading manufacturer of medical furniture, boasting a deep sales and technical support network and a wide range of product portfolio. Midmark India supplies to both the Private and Public sectors across India and also a pioneer in delivering quality healthcare solutions.

Sumeet Aggarwal's last role was General Manager in the CEO's office at Fortis Healthcare, where he led the new business venture vertical in India. Before moving to India, Sumeet was based out of Fortis Healthcare, Singapore as a General Manager for Business Development & Strategic Alliances and Director in the Executive Chairman's office.



Mr. Sunil Thakur, Treasurer-NATHEALTH and Partner, Quadria

Mr. Thakur is a Partner with Quadria Capital, an Asian healthcare focused private equity fund with managed assets of over \$2.2 billion. Sunil has an extensive healthcare investment and transaction experience across the Asia-Pacific market and has been involved in some of the landmark deals in the healthcare space. In his career spanning 19+ years, Sunil has led and executed multi-billion-dollar deals across M&A and Capital Raise. Sunil serves on the board and committees of various healthcare companies and a few prestigious institutions. Sunil is on the governing council of NATHEALTH and a member of CII - National Committees on pharma and Biotechnology. Prior to Quadria Capital, Sunil has worked with Religare Capital Markets and PB Gilts at various senior positions. He has a masters degree in International Business from Delhi School of Economics.



Dr. V K Paul, Hon'ble Member (Health), NITI Aayog, Government of India

Dr. Vinod K Paul is a globally recognised medical scientist and a public health exponent. The Government of India appointed Dr. Paul as a member of NITI Aayog in August 2017. He has played a pivotal role in the formulation of key initiatives such as Ayushman Bharat-PMJAY, Ayushman Bharat Health and Wellness Centre Scheme and Poshan Abhiyan. Dr. Paul has over 400 scientific publications and an h-index of 62 to his credit. He was featured among the world's top 2% scientists in the field of pediatrics, according to a study conducted by Stanford University in 2020. He is a fellow of all three science academies of the country. Dr. Paul is a recipient of a pre-eminent Dr B R Ambedkar centenary award for excellence in biomedical research by ICMR.



Mr. Vidur Mahajan, CEO - CARPL.ai

Mr. Vidur Mahajan, is the Chief Executive Officer of CARPL.ai, the world's pioneering end-to-end platform for testing and deploying medical imaging AI solutions. With a background in medicine and an MBA with dual majors in finance and healthcare management from the Wharton School of Business, Mr. Mahajan is a perpetual student of healthcare technology adoption. He has published over 120 academic and conference papers in AI and imaging across the globe and previously served as the head of Mahajan Imaging, India's premier radiology chain. Under Mr. Mahajan's leadership, CARPL.ai has partnered with more than 60 leading research groups spanning academia, industry, and startups, cementing its position at the forefront of the medical imaging AI industry.

Speakers at Arogya Bharat 2023



Dr. Anupam Sibal, Group Medical Director, Apollo Hospitals

Dr. Anupam Sibal is eminent Paediatric Gastroenterologist in Indraprastha Apollo Hospitals. He has 25+ years of great experience in Gastroenterology and Hepatology. He has also served as member of Executive Council in Asian Pan Pacific Society of Pediatric Gastroenterology Hepatology and Nutrition and also serving as Member of Andhra Pradesh Chief Minister's Advisory Committee since 2014.



Dr. Indu Bhushan, Ex-CEO, Ayushman Bharat

Dr. Indu Bhushan served as the Chief Executive Officer (CEO) of National Health Authority (NHA) and Ayushman Bharat – Pradhan Mantri Jan Arogya Yojana (AB - PMJAY), 2021. As the founding CEO, he led the design, development and the rollout of the scheme and oversaw its implementation in the country. He also led the implementation of another flagship scheme: National Digital Health Mission (later renamed Ayushman Bharat Digital Mission). Dr. Bhushan is an ex-Indian Administrative Service (IAS) officer (1983 batch, Rajasthan cadre). He holds a PhD in Health Economics and a Master of Health Sciences from the Johns Hopkins University, USA. Thereafter, he worked as Senior Economist with the World Bank Group prior to moving to the Asian Development Bank (ADB) in 1997. Until his appointment as CEO, NHA, he served as Director General, East Asia Department of ADB.



Mr. Jaxay Shah, Chairman, QCI, Founder & CMD Savvy Infrastructure Pvt. Ltd, Director (Founding Member), ONDC

Mr. Jaxay Shah is the Chairman of the ASSOCHAM Western Region Development Council. He is the former Chairman of the Confederation of Real Estate Developers' Association of India (CREDAI), the apex body of private Real Estate developers in India, representing 11,940 developers through 23 states and 204 city chapters. Under his leadership, CREDAI joined the 'National Mission of Housing for All' by launching more than 375 Affordable Housing Projects comprising 250,000 units by CREDAI member developers across the country. He played a key role in CREDAI's Skill Development program, which now trains more than 1,00,000 construction workers every year. He was also involved in the CREDAI Clean City Mission which focused on a pan-India vision for Solid State Management. He was instrumental in establishing CREDAI Women and Youth Wing as an endeavour toward gender equality in real estate.



Ms. Roli Singh, Additional Secretary, Ministry of Health and Family Welfare, GoI

Roli Singh is the additional secretary ministry of health and family welfare in Government of India. She is the alumna of Welham girls school and ladies Shri Ram College. She has her past careers spanning almost 28 years in civil service including health medical education, women and child important position in the department of personnel and training the HR and capacity building she has also held faculty position at the previous civil services training institution Lal Bahadur Shastri National Academy of Administration Mussoorie.

Speakers at Arogya Bharat 2023



(Prof.) Dr. Mahesh Verma, Vice Chancellor, CGS IP University, New Delhi, Chairman NABH

chairperson of the National Accreditation Board for Hospitals and Healthcare Providers (NABH). NABH is a constituent board of the Quality Council of India (QCI). Dr Verma is a recipient of Padma Shri as well as Dr. B. C. Roy award. He has also received the National Science and Technology award. He is currently the vice-chancellor of Delhi's Guru Gobind Singh Indraprastha University, and Professor Emeritus at Maulana Azad Institute of Dental Sciences. He is the president of the India chapter of the International Association for Disability and Oral Health and the Indian Academy of Restorative Dentistry. He is also the president-elect of the International Association of Dental Research, India Division, and the Indian Society of Dental Research.



Dr. Samapti Guha, Professor and PhD Coordinator Centre for Social Entrepreneurship, Tata Institute of Social Sciences, Mumbai

Dr. Samapti Guha is working as a Professor at the Centre for Social Entrepreneurship, School of Management and Labour Studies, Tata Institute of Social Sciences, Mumbai. She is a Development Economist and has done her PhD in Economics from Jadavpur University in 2004. After her PhD, she worked in Indian Institute of Dalit Studies, New Delhi and Institute of Rural Management Anand (IRMA), Gujarat. In 2006, she was selected as Sir Ratan Tata Fellow at the London School of Economics and Political Science, UK for her Post Doctoral Study. She along with his colleague Prof. Satyajit Majumdar set up Social Incubation Centre at the Centre for Social Entrepreneurship, School of Management and Labour Studies, Tata Institute of Social Sciences, Mumbai supported by UGC in 2011. She has mentored more than 50 social start ups. Her areas of research are Microfinance, Women Entrepreneurship, Micro enterprises, Social Entrepreneurship, Financial Inclusion and Development Economics.



Dr. Rajani Ved, Director, Health, India Office, BMGF

Dr. Rajani Ved is Director, Health at the India Office of the Bill & Melinda Gates Foundation. In this role, she is responsible for developing and executing the strategy to support the foundation's health goals in India. She is a public health physician, technical advisor and implementation specialist with nearly 30 years of experience working on community-based health services delivery, health systems strengthening and in scaling up. Her areas of expertise include the design and evaluation of large-scale health policy and programs, implementation research, and scaling up, particularly in maternal, reproductive and child health, primary health care, community health workers and civil society action. She has worked with national and state governments, research institutions, aid agencies and grassroots community organizations. At the Harvard T.H. Chan School of Public Health, Dr. Ved is a Lown Scholar.

Speakers at Arogya Bharat 2023



Dr. Vijay Agarwal, President, CAHO

Dr Vijay Agarwal graduated (1968) and obtained post-graduation (1973) in Paediatrics from the prestigious Maulana Azad Medical College, New Delhi, India. Over the last four decades, besides being a paediatrician of repute, he has played a key role in making an impact in improving the state of Healthcare in India. He played a key role in driving national programs such as Pulse Polio Program. He was Founder Chairman of Nursing Home Forum of Delhi Medical Association from 1992 to 2002. During this period, he worked towards giving direction to Biomedical Waste Rules and helped in creating the Centralized Waste Management Facilities.



Mr. Vikram Vuppala - Founder & CEO - NephroPlus

Vikram Vuppala is Founder & CEO of India's largest dialysis network - NephroPlus. After spending 10 years in the US healthcare industry, his passion to redefine healthcare delivery in India prompted him to found NephroPlus in 2010. He has expanded NephroPlus to Asia's leading dialysis network of 300+ centers in 175 cities across 4 Countries.



Ms. Visalakshi Chandramouli, Managing Partner- Tata Capital Healthcare Fund

Ms. Visalakshi Chandramouli is the Founding member and head of Tata Capital Healthcare fund, an India dedicated Healthcare and Life Sciences Private Equity fund . She has spend over twenty-eight years across Healthcare Private Equity , eEuity Research and Pharmaceuticals R&D operations. Vishalakshi has successfully led the fund raise of Tata Capital Healthcare Funds I and II with commitments in excess of USD 200 MN from international and domestic institutional investors and corporates. She is actively involved in portfolio management through presence on Board and other commitments of investee companies. Under her leadership Tata capital Healthcare Fund has delivered a robust performance track record for which the Fund has been awarded 'Healthcare Investor of the Year' for three consecutive years, 2018, 2019 and 2020 by Venture Intelligence.



Mr. Vivek Srivastava, Co-Founder & CEO, HCAH

Dr Vivek founded three businesses in the Healthcare and education space. He founded Nova IVF business in 2009 which was later sold to AHH for ~US100M. He founded HCAHH in 2012. Dr. Vivek is building India's largest out of hospital ecosystem to deliver best in class health outcomes and quality of life while increasing access and affordability. He enables his patients to live well by working with their doctors, empowering them and their family members while leveraging technology and data. Dr Vivek is trying to create a dent in the health care infrastructure which is woefully inadequate for the rising healthcare demands of the country. Prior to HCAH, he started the Burman Family Holdings, the family office of Dabur promoters. He did 7 Investments such as DMI finance, EXPERIAN etc. 4 of them had follow on rounds.

Speakers at Arogya Bharat 2023



Ms. Vrinda Mathur, Secretary, NATHEALTH & Senior Principal, Financial Institutions Consulting, Asia, IQVIA

Ms. Vrinda Mathur leads the Financial Institutions Consulting practice for select Asian markets at IQVIA. She specialises in transaction support services and financial due diligence, financial modelling support for global and sector focused private equity funds in the hospitals and life-sciences industry. She has over 20 years experience in advisory and management consulting exclusively in the Healthcare and Life Sciences segment covering pharmaceutical companies, hospitals and medical devices companies and has advised healthcare and pharmaceutical companies in their strategy and growth plans through the organic or inorganic route.



Mr. Yash Prithviraj Mutha, Executive Director at Krsnaa Diagnostics Ltd.

Yash Mutha is an Executive Director and Board Member at Krsnaa Diagnostics Limited a diagnostic chain in India having its presence in 13+ states pan India. Since joining Krsnaa Diagnostics, Yash has been the driving force in the organizational transformation of Krsnaa Diagnostics into a corporate by focusing on change management in corporate functions such as strategy, finance, operations, technology led initiatives and innovations, investor relations, stakeholder management, etc. Yash has led successful rounds of fund raise of Krsnaa as well as has been instrumental in getting Krsnaa Diagnostics listed on the stock exchanges in August 2021, leveraging Krsnaa's unique and differentiated business model. Yash is qualified as a Chartered Accountant from The Institute of Chartered Accountants of India, Certified Fraud Examiner (ACFE - USA) and Certified Information System Auditor (CISA).



Ayushman Bharat Health Account (ABHA)

ABHA

ABHA Banao Digital Ho Jao!



Ayushman Bharat Health Account or ABHA is a 14-digit unique health identifier to link, access and share health records.

How to create ABHA:

Scan the QR code OR visit abha.abdm.gov.in

- 1 Click on 'Create ABHA number'
- 2 Generate ABHA using Aadhaar
- 3 Authenticate Aadhaar and Mobile number using OTP*
- 4 Create ABHA address
- 5 Click on submit to generate your ABHA and download it

*In case your mobile number is not linked with Aadhaar, you can visit the nearest ABDM registered health facility to create ABHA by biometric authentication instead of OTP.



Healthcare Professionals Registry (HPR)

HPR is a comprehensive repository of all healthcare professionals involved in the delivery of care across all systems of medicine

How to create HP ID



- 1 Scan the QR code or visit <https://hpr.abdm.gov.in> to apply for HP ID using Aadhaar or Driving License



- 2 Fill the registration form using personal, registration and work-related details



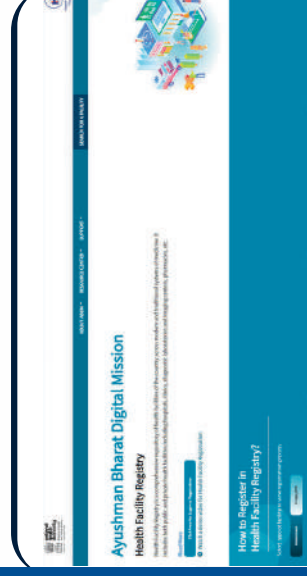
- 3 Review and submit the form to for verification



HFR

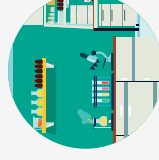
Health Facility Registry (HFR)

HFR is a comprehensive repository of all the health facilities of the country across all system of medicine including hospitals, clinics, diagnostic laboratories, imaging centres, pharmacies etc., that help connect and deliver various healthcare services digitally across India.



How to create facility ID:

- 1 Scan the QR code or visit facility.abdm.gov.in
- 2 Log in to HFR as a Facility Manager using the HP ID
- 3 Fill the registration form
- 4 Enter the facility details and complete the form
- 5 Review and submit the form for verification



Why should you register yourself and your facility on ABDM?



Easy sharing of records:

Easy storage and consent-based sharing of health records of patients



Easy Information Exchange:

Smooth exchange of information among patients, healthcare professionals and health facilities



Quality of healthcare:

Easy access to health history of patients, leading to quicker diagnosis, and organised consultation



Increased visibility:

Easy reach out to healthcare professionals and facilities



Teleconsultation:

Easy access to patients remotely



Time efficient:

Easy registration for patients saving time and efforts

Personal Health Record (PHR)

Personal Health Record is an electronic application through which individuals/patients can maintain and manage their health information in a private, secure, and confidential environment, within the ABDM ecosystem.

Benefits of PHR App



Record linkages



Consent management



Records sharing



Record storage



Search for healthcare professionals



AYUSHMAN BHARAT DIGITAL MISSION (ABDM)

Ayushman Bharat Digital Mission (ABDM) is an initiative by the Government of India (GoI) to achieve a seamless exchange of health information among various stakeholders of the healthcare sector.

ABDM aims to build the digital health backbone of the country necessary to bring all stakeholders together in one common ecosystem.

Main Components of ABDM



Ayushman Bharat Health Account (ABHA)
Unique Health Identifier for all individual called as Ayushman Bharat Health Account



Healthcare Professionals Registry (HPR)
Updated and verified registry of verified public and private healthcare professionals for all systems of medicine



Health Facility Registry (HFR)
Updated and verified registry of verified public and private health facilities like hospitals, labs, pharmacies, etc.



Personal Health Record App (PHR App)
One-click access to patient's own health records through ABDM enabled apps like ABHA app, Arogya Setu, etc.



Unified Health Interface (UHI)
UHI is an interface for seamless exchange of information among users. It allows different applications to interact and exchange information.



Helpline - 1472 (Toll Free)



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(Formerly W Pratiksha Hospital)
250 BEDS

K. K. Patel Super Speciality Hospital, Bhubaneswar
(Managed by Marengo CIMS Hospital)
200 BEDS



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Krsnaa Diagnostics: Revolutionizing Affordable and Quality Diagnostics Services Across India

From public-private partnerships to tele-radiology reporting hubs, Krsnaa Diagnostics continues to make healthcare accessible to millions.

Krsnaa Diagnostics is one of the fastest growing and differentiated diagnostics service providers of radiology, pathology and tele-radiology. We provide quality and inclusive diagnostics services at disruptive rates across various segments, currently serving annually more than 10 million lives.

Established in December 2010, with an aim to improve medical diagnostics to world class levels and introduce a whole spectrum of services at affordable rates, Krsnaa's journey has been remarkable. It nurtured the philosophy of "Let's do good", as a promise to ensure that every associated person contributes to the well-being and good health of the society.

With an indigenous maxim of providing healthcare services with a combined mantra of affordability and quality, Krsnaa began operating 12 centres in Himachal Pradesh under Public Private Partnership in 2013 and by leveraging the experience today has grown exponentially to more than 1300 centres pan-India including 140+ CT Scans, 38+ MRIs, 1200+ X-Ray Centres, 300+ Pathology Labs and 4000+ Collection Centres as India's largest player in Public-Private-Partnership space in Diagnostics. Krsnaa also has strategic tie-ups with various private hospitals and medical colleges. Krsnaa has its presence in more than 15 states and 3 union territories such as Himachal Pradesh, Jammu & Kashmir, Uttar Pradesh., Rajasthan, Meghalaya, Manipur, Madhya Pradesh, Maharashtra, Karnataka, Odisha, Tamil Nadu, Punjab, Andhra Pradesh, Tripura etc. forthcoming.

Krsnaa has one of India's largest tele-radiology reporting hubs in Pune with capability to scale and process tele-reporting of X-rays, CT scans and MRI and serves patients in remote locations through which we reports around 6 million radiology images annually. Krsnaa is supported by a well-qualified and trained workforce comprising of radiologists, pathologists, microbiologists and over a number of qualified professionals including clinicians, technicians and operators striving to deliver nothing but the best to do GOOD. Not only that, it is also Asia's fastest growing healthcare and wellness brand.

It is praiseworthy that during the appalling pandemic, Krsnaa introduced 'The Covid-19 Test Bus' based on indigenous technology, a vehicle first of its kind in the world with onboard AI- based tele-radiology and contactless sample collection. We conducted more than one million RT PCR tests.

The year 2021, saw another milestone accomplishment of Krsnaa turning into a public listed company on the Indian stock exchanges. With this, Krsnaa's ultimate vision is to resonate with each Indian citizen as the leading, reliable and accessible name in the world of diagnostics by providing quality healthcare at competitive rates.

Terumo - A market leader in trans-radial intervention in Indian healthcare

Established in 2013, Terumo in India is market leader in trans-radial intervention and has a strong presence in percutaneous intervention segment

TERUMO, founded in 1921, with headquarters in Tokyo, Japan, is a leading medical devices organisation with over 24,000 Associates across the world (Website: www.terumo.com). The 98 year old company operates in India through two subsidiaries – Terumo India Pvt. Ltd, based out of Gurgaon, Haryana which contributes to society through Cardiovascular and General hospital business and Terumo Penpol Limited, based out of Trivandrum, Kerala which operates in the area of Blood management business.

Established in 2013, Terumo in India is market leader in trans-radial intervention and has a strong presence in percutaneous intervention segment. We market products for cardiac and vascular surgery which are used every day in a wide range of essential procedures, from coronary artery bypass grafting to valve replacements and heart transplants, from aortic aneurysm repair to surgeries for peripheral artery disease. We address the needs of the pharmaceutical industry through high quality prefilled syringes and needles.

We have established state of the art Terumo India Skill Lab at Gurgaon, which addresses the training needs of healthcare practitioners. In India, Terumo has an established field force and widespread distribution network.

Terumo Penpol Private Limited is the market leader in India in the field of equipment and disposables for the Blood Transfusion industry. Established in 1985, Terumo Penpol pioneered the manufacturing of disposable blood bags in India. It is today a part of the Whole Blood Transfusion Business Unit of Terumo BCT, Lake Wood, Denver USA-one of the largest transfusion company in the world, owned by Terumo Corporation Japan, the world leader in Medical Disposables.

Terumo Penpol today has one of the largest manufacturing facilities for blood bags in Asia and the largest in India with an annual production capacity of 30Mn blood bags. The company employs a workforce of around 1500 people. “Contributing to Society through Healthcare” is both Terumo’s starting point and unchanging corporate mission. To fulfil the mission, we provide a stable supply of the highest quality medical devices and services to patients and medical settings across India, while working proactively at solutions to the wide variety of challenges in healthcare.

Our Associates are charged with not only marketing and production of medical devices, but also in work processes as well. With this spirit, we will continue our pursuit of new value to realize our mission of “Contributing to Society through Healthcare”.



Dr. Lal PathLabs has proven itself to be India's foremost diagnostic lab chain

Dr. Lal PathLabs is supported by a National Reference Laboratory in New Delhi, a Reference Laboratory in Kolkata and 275 other clinical laboratories backed by a nearly 4,100 strong manpower

Dr. Lal PathLabs is India's foremost network of diagnostics labs with 277 clinical labs, nearly 4731 patient service centres and over 10,599 pickup-up points offering a range of diagnostic services. Dr. Lal PathLabs Ltd. enjoys the trust of over 27 million patients every year and is the preferred diagnostic chain for walk-in patients, pre-employment and employee diagnostics for corporates and caters to hospitals, through an agile B2B model.

The robust network, built on reliable transport of biological samples, their processing and timely and accurate reporting, is supported by a National Reference Laboratory in New Delhi, a Reference Laboratory in Kolkata and 275 other clinical laboratories backed by a nearly 4,100 strong manpower.

Dr Lal PathLabs offers an exhaustive range of Pathology, and a super-specialized menu of tests like high-end Molecular Diagnostics, Cytogenomics, Transplant Immunology, Transmission Electron Microscopy and more. Recently, Dr. Lal PathLabs Limited joined hands with the leading US based multinational and launched comprehensive precision oncology and high-end onco-pathology service and would continue to partner with global providers of the largest and most advanced diagnostic solutions.

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