LESSONS FROM THE PANDEMIC:
FAST TRACKING INDIA’S “ATMANIRBHARTA” IN HEALTHCARE

18 May, 2022

Le Meridien, Windsor Pl, Connaught Place, New Delhi – 110001
Overview

India is poised for transformation, with technological leaps at the heart of growth that is positioning our country as the world’s fastest growing economy. Despite battling through two years of the COVID-19 pandemic alongside existing health emergencies including TB and the rising incidence of non-communicable diseases, India is emerging as a premier manufacturing location and hub for modern technologies. Start-ups are booming and with health and economics bound so tightly together, it is no surprise that our medical and care delivery systems are today faced with an unprecedented opportunity.

India is known as the pharmacy of the world. We manufacture and export over 60% of the world’s vaccines, and we quickly ramped up local production of both life-saving personal protective equipment and vaccines for COVID-19. India also supported other countries by exporting COVID-19 vaccines. On the diagnostics side, however, major gaps such as high dependence on imports, increased backlog in terms of samples and overburdened laboratory personnel workforce, threatened to derail the response to pandemic. Yet the foundations are in place, as there were many success stories across the country – from “made-in-India” molecular testing systems and reagents being adapted to implement innovative service delivery models to simultaneously test for COVID-19 and TB, supporting rapid scale-up of laboratory capacity in the country. Novel means of imparting health education services also emerged, measurably improving the capability of India’s laboratory workforce, including sizeable contributions by FIND.

FIND recently convened healthcare leaders from across public and private sectors to explore avenues to capitalize on India’s focus on “atmanirbhar,” or self-reliance, and harness existing national prowess to further strengthen our health systems. India has the means to drastically improve self-sufficiency in diagnostic testing and at the same time support diagnostic needs of other low- and middle-income countries. Commitment to these goals will not only ensure future pandemic preparedness, but also enable equitable access to care for all in both pandemic and non-pandemic contexts. The meeting featured two high-level panels, the first concerned with Health system strengthening in the pandemic era and the second on Riding the “atmanirbhar” momentum to transform India’s healthcare delivery.

“Never before have we been in a situation where your aunts, uncles and grandmothers could tell you the performance of different diagnostic tests. We are having a moment for diagnostic testing right now, and to be able to realize the benefit of that for wider public health, is one of our aims at FIND.”

– Dr Emma Hannay, Chief Access, FIND

Key takeaways:

1. “Make in India” initiatives have been fast-tracked during the pandemic.
2. The government of India (GoI) has demonstrated strong political will to implement “patient centric” initiatives like the Integrated Public Health Laboratories (IPHL) and Pradhan Mantri Ayushman Bharat Health Infrastructure Mission (ABHIM).
3. The GoI is the biggest funder of innovation and (health) technology in India. However, capital from the private sector remains conspicuously absent.
4. Ambiguity around data protection, privacy and linkages, added uncertainty to the fight against COVID-19. There is a need to streamline the regulatory mechanisms, to create a conducive environment for development of innovation and transformed care delivery models.
5. Going forward, attention will be focused on the economical, public health and social fault lines that have been exposed by the pandemic.
“Make in India” initiatives have been fast-tracked during the pandemic

“The Division of Strategic Alliances at the Principal Scientific Advisor’s Office was established during COVID-19. At a time when we were clueless about the pandemic, the Division did famously well, only because of the stakeholders and partners we work with.”

– Dr Sapna Poti, Director, Division of Strategic Alliances, Principal Scientific Advisor’s Office, Government of India

• **Home-grown diagnostic reagents pivotal to building India’s capacity for COVID-19 molecular kits:** to respond to the COVID-19 crisis in India, the Principal Scientific Advisor’s Office worked towards indigenization of reagents to build capacity for COVID-19 molecular diagnostic kits. This drive was fast-tracked as a direct response to massive shortages in export commodities due to international demand. The goal of this programme, through a public-private-partnership, is to establish a strong supply chain network of Indian micro, small and medium enterprises (MSMEs) to assemble one million indigenous diagnostic kits per day. The programme is funded by several partners including the Rockefeller Foundation and executed at Bangalore Life Sciences Cluster (BLiSC).

• **Fixing the oxygen crisis to build a resilient health system:** Government of India’s initiative, Oxygen for India, catered to the rising demand for medical oxygen, by supporting hospitals to procure oxygen and related high-priority equipment, from approved manufacturers and start-ups. This initiative supported scale up of oxygen capacity by addressing logistical challenges, allowing life-saving supplies to reach extended/makeshift hospitals. It also paved the way for research and development, geared towards future pandemics. A consortium of oxygen plants was set up at an approximate cost of US$38–65 million through corporate social responsibility (CSR) funding, available across public sector units.

• **Strong political will, partnerships and funding boosts health infrastructure:** in partnership with state governments, along with funding from CSR and over 30 multilateral donors, 52 affordable, portable hospitals were set up across 18 states, within 3 months. Initiatives to boost India’s health infrastructure clearly demonstrated the power of partnerships and are the result of strong political will and rapid deployment of financial resources.

“If you look at the trajectory of the pandemic, the Government of India led the way by forming cross-sectoral, end-to-end committees, bringing several ministries together. Similar plans were replicated across states and even at the district level in the form of task forces. The government of India has truly led the way in showing what an integrated response to a public health threat emergency, such as the COVID-19 pandemic, should look like.”

– Dr Amit Shah, Deputy Director, USAID India’s Health Office

• **Point-of-care (POC) testing has the potential to combat other diseases:** the pandemic demonstrated the impact of POC testing (with high adoption of antigen tests) on patient convenience and testing time reduction. This potentially has replicability across other diseases. The current focus of GoI and health partners is on integrated approaches, including Integrated Public Health Laboratory (IPHL), and India’s National Essential Diagnostic List (NEDL).

• **An “Atmanirbhar Bharat” cannot rely on import:** the pandemic taught us the significance of an economy that relies on local manufacturing, market and supply chains. India has already begun work on a continuity plan that includes cutting down import dependence, by focusing aggressively on substitution (with local solutions) while improving safety compliance and quality, to gain global market share. Now more than ever, we are extending the national research and development prowess to serve a spectrum of other infectious diseases.

• **Trained staff, strong structures and adequate supplies are key to pandemic preparedness:** India is moving in the right direction to ensure that our healthcare workforce (staff) is sufficiently trained, the planning/spine (structures) of our healthcare system including...
transport networks, availability of resources (reagents, consumables, plastic vials) is strong, and adequate resources (supplies) are mobilized in times of crises. In an ideal health system, this network of staff, structures and supplies must be maintained and percolate down to the community level, by leveraging existing national guidelines and utilizing the Integrated Health Information Platform (IHIP) and IPHL.

“Our ability to deal with a crisis is unprecedented. For COVID-19 we have done a fantastic job. But as a system, are we designed in a way that we can predict outbreak(s) in a reasonable way? In the sphere of infectious diseases, can we say that we are predicting the outbreak(s) in a timely way? Can we develop differential ways for disease surveillance? For me, that’s central.”

– Dr Devendra Khandait, Deputy Director and India Country Lead – State Health Systems, Bill & Melinda Gates Foundation

• **Community networks must be utilized to address critical public health challenges:** the pandemic saw community members turning into true public health champions. For example, TB-affected communities played a significant role in raising awareness about COVID-19, its symptoms, testing and vaccination.

• **Take innovation from bench to market, faster:** a greater emphasis on developing indigenous technologies and encouraging grass-root innovation, have emerged as key trends. The pandemic provided a compelling opportunity for research and development institutions, academia and industry to work in unison towards a shared purpose, synergy, collaboration and cooperation. The GoI has enabled several mechanisms to provide a conducive environment for medical technology incubators to speed up the time to take an innovation from bench to market.

• **Focus on “Make in India” and cost-effectiveness:** The cost advantage of “Make in India” products is evident. The raw materials or the products are available at low prices. Coupled with in-house manufacturing, low-cost, high-quality “Made in India” products can now be offered to domestic and international markets. For example, the initial cost of molecular (RT PCR) tests in May /June 2020 stood at US$60, but within a year, the cost was brought down to US$5.

**Spotlight: a fragile healthcare system where fault lines in diagnostics and delivery are rampant**

“**I can always argue that the government is the largest funder of innovation and technology in India. I can also argue that risk-capital from the private sector is conspicuously absent. There are pretty much no VCs (venture capitalists).”**

– Srinivas Ramanujam, CEO, Villgro Foundation

• **Shades of grey in India’s data protection, privacy and governance mechanisms:** one of the biggest struggles for all businesses is to handle responsibilities regarding data privacy and protection, where the guidelines are still being developed and new challenges are being faced every day.
  • When the pandemic hit, there was confusion regarding data ownership, usage and rights. Critical questions were raised, including whether data should be made open to researchers or even commercialized.
  • The pandemic warranted a range of stakeholders in various locations to share data and collaborate on its analysis to unlock insights. However, in India’s case, data sharing was ad-hoc.
  • **Lack of capacity:** constraints in trained workforce, availability of equipment and quality reagents, became quickly apparent as soon as the pandemic hit us. The onslaught of the virus saw human resources working overtime, breakdown of supply chains exposing glitches in industry-hospital supply lines and a mismatch of the
healthcare system’s capacity with overwhelming patient turnout. Further, diagnostic manufacturers are often limited by availability of ancillary products (enzymes, probe, primer, medical grade plastics), which are often imported. During the pandemic, manufacturers had to identify local alternatives - a process that was time intensive and reflects the general challenges faced by innovators in India.

- **Where is the private sector?** Gol through the Department of Biotechnology and other verticals, remains a large funder of incubating small sized innovation and technology companies in India. However, risk-capital from the private sector remains conspicuously absent. This is because of uncertainties around regulatory processes, long & confusing go-to-markets pathways, exorbitant cost of funding innovations as well as massive expenses companies must bear to navigate the regulatory landscape.

- **A difficult regulatory environment:** While the pharmaceutical regulatory environment is well understood and established, the diagnostics landscape is continuously evolving. This is because there are a multitude of digital as well as non-digital health technologies warranting changes in the regulatory environment. However, the regulatory changes are slow to materialize, leaving a difficult landscape to navigate.

- **Accessibility:** given India’s diverse geographical landscape, and varying population density, access to healthcare services remains hindered and uneven. The pandemic has highlighted the challenge of access significantly.

Exploiting opportunities and bringing incremental changes to strengthen our health system

“India’s exciting transformation journey has technology at its heart, and this is already paying dividends for diagnostics. (That said though), diagnostic innovation accelerated by the pandemic has spanned not only new testing technologies but also innovations in manufacturing, operations research, policy development, epidemiological modeling, data management tools and supply chains.”

– Dr Bill Rodrigues, CEO, FIND

- **Establishing Integrated Public Health Laboratories (IPHL):** IPHLs should be leveraged to link clinical management and surveillance. An IPHL has a role in early detection of diseases and surveillance, by monitoring laboratory parameters.

- **Operationalizing India’s Health and Wellness Centres:** under Ayushman Bharat, the Gol is aiming to establish 1,50,000 Health & Wellness Centres (HWCs) to deliver comprehensive primary healthcare, which is universal and free to users, with a focus on wellness and delivery of services closer to the community. There is now an opportunity to operationalize HWCs as mediums of healthcare delivery.

- **Provisioning quality biobanks:** by establishing and implementing strict quality criteria as well as linking these up so that researchers, clinicians, scientists and even start ups can have access to high quality, well characterized samples. This will help in fast tracking the regulatory approval processes for their products.

- **Building health technology clusters that foster innovation:** clusters have the power to bridge public and private stakeholders, provide access and guidance to innovators on regulatory, manufacturing and data related processes.

“I think certainly health security has come to the forefront in the last two years. There is an important role for India to play and (indeed) India is stepping up to the plate. Some of the innovations such as the Integrated Public Health Laboratory, are a significant step forward in our ability to train personnel who can detect diseases as well as improve diagnostic capacity and know the true picture of the disease at the district, sub-district, state and national levels.”

– Dr Runa Gokhale, Associate Director for Science and Programs, Division of Global Health Protection, CDC India
Annexure 1:

Agenda

Wednesday May 18, 2022
9.30 AM - 2.00 PM
Le Meridien
(Windsor Pl, Connaught Place, New Delhi, Delhi 110001)

Lessons from the pandemic
Fast-tracking India’s “atmanirbharta” in healthcare

The SARS-CoV-2 pandemic rages on for the second year in a row and its future trajectory remains unclear. History reinforces that similar threats are likely to surface time and again: more than six influenza pandemics and epidemics have struck over the last 100 years. Despite initial hiccups, India’s health infrastructure and systems demonstrated significant growth in the last 2 years.

The current meeting aims to deliberate on key questions and draw strength from India’s COVID-19 experience to discuss strategies to strengthen India’s health system.

9:00 – 9:30 AM | Registration

9:30 – 9:35 AM
Introduction & context setting
Dr Sanjay Sarin, Vice President Access, FIND

9:35 – 9:45 AM
FIND’s global strategy
Dr Emma Hannay, Chief Access Officer, FIND

9:45 – 10:00 AM
Snapshot: FIND’s current work in India
Dr Sarabjit Chadha, Regional Technical Director India & SE Asia, FIND

10:00 – 10:15 AM
Inaugural keynote address
Dr Sapna Poti, Director, Strategic Alliances in the Principal Scientific Advisor’s Office, Government of India

10.15 – 11.15 AM
Panel 1: Health System Strengthening (HSS) in the pandemic era

12.00 – 12.15 PM
Harnessing the power of partnerships to close diagnostic gaps in support of “atmanirbharta”
Dr Bill Rodriguez, Chief Executive Officer, FIND

12.15 AM – 1.15 PM
Panel 2: Riding the “atmanirbharta” momentum to transform India’s healthcare delivery

1.15 PM
Vote of thanks, followed by lunch
Ms Vinita Sethi, Board member, FIND India and SVP & Chief Public Affairs at Apollo Hospitals

Panelists:
1. Dr Taslimarif Saliyed, Chief Executive Officer, C-CAMP
2. Dr Shirshendu Mukherjee, Mission Director, Program Management Unit, DBT-BIRAC-BMGF-Wellcome Trust
3. Ms Rachana Trigpathi, Chief Executive Officer, Huawei Lifesciences
4. Ms Rashmi Pimpale, Chief Executive Officer at Research and Innovation Circle, Hyderabad
5. Mr Srinivas Ramanujam, Chief Executive Officer, Villgro Innovations Foundation
Moderator: Mr Chapal Mehra, Director, Pi Consulting
Annexure 2:

Panel 1: Health system strengthening in the pandemic era

The COVID-19 pandemic has spurred investment and innovation across India's health system, driving advances from integrated service delivery and community engagement to modern technology development. This panel will highlight lessons learned from these efforts, and how can they be replicated, scaled or leveraged to bring sustainable, long-term change.

Moderator:

Dr Emma Hannay,
Chief Access Officer, FIND

Dr Emma Hannay supports FIND’s efforts to expand access to effective diagnostic testing. She has been leading FIND’s COVID-19 response, including the creation of the ACT-Accelerator Diagnostics Partnership, co-convened by FIND and The Global Fund. She is a public health doctor with a focus on global health strategy and delivery. Her work has been centred at a global level on organizational strategy in global health, and at a country level in implementing health system reforms in complex operating environments. Emma holds a medical degree from the University of Auckland, New Zealand and a Master of Public Health from Harvard University.

Keynote speaker:

Dr Sapna Poti,
Director, Strategic Alliance Division in the Principal Scientific Advisor’s Office, GoI

Dr Sapna promotes Scientific R&D and innovations for social impact and addresses industry problems through industry, foundations and government channels. This includes engaging science & technology institutes and the entire start up ecosystem to meet national missions and priorities including COVID-19, doubling farmers’ income, Make in India, water mission and waste management. Dr Sapna is a PhD from IIT Madras with a dissertation in Enterprise Resources Planning (ERP)and has around 26 years of experience in Industry, Consulting and Government. A 2015 Chevening Awardee, Dr Sapna is also a member of the Board of studies of skill development and educational institutes and has authored several national and international journal papers.
Speakers:

Dr Amit Shah,
Deputy Director, USAID India’s Health office

Dr Amit Shah provides oversight to USAID’s health investments across India. He has been instrumental in building strategic partnerships and alliances with a range of stakeholders to enhance developmental impact of USAID health programs. He is also responsible for planning and effective deployment of 200+ million USD of emergency COVID-19 funding received from US Government to support Government of India and various states in responding to the pandemic. Dr Shah is a medical doctor and a development sector professional with 20+ years of experience, having worked in diverse settings and roles. He has completed his post-graduation in Obstetrics and Gynaecology from Mumbai, India and Master’s in Health Policy Planning and Financing from the London School of Economics and Political Sciences, U.K (United Kingdom).

Dr Devendra Khandait,
Deputy Director and India Country Lead – State Health Systems, Bill & Melinda Gates Foundation

Dr Devendra is a medical doctor and trained public health specialist with 24 years of management and leadership experience as well as in the fields of health system strengthening, immunization, infectious diseases, human resource for health, disease surveillance, maternal and child health, nutrition and polio eradication. Currently, Dr Devendra is focused on working in the states of UP (Uttar Pradesh) and Bihar to strengthen health systems in a sustainable way. He has authored more than 25 research papers in peer reviewed journals and is passionate for NGOs which work towards upliftment of tribal populations, especially in Melghat, Maharashtra.

Dr Navin Dang,
Founder and Chairman, Dr Dangs Lab

Dr Dang is known for offering pioneering quality in the field of diagnostics in India. A recipient of Dr B C Roy National Award for his contribution in the socio medical field and Global Association of Physicians of Indian Origin Award (GAPIO) 2021 for excellence in diagnostics, Dr Dang has been actively involved in the fight against COVID-19 by providing world class testing services. An alum of Delhi University, P.G.I (Chandigarh) and AIIMS (New Delhi), Dr Dang has authored several research papers and is a governing council member of Initiative for Providing Affordable and Quality Tests for Tuberculosis (IPAQT), a member of Expert Group on TB Prevention and Control under Global Coalition against Tuberculosis, as well as several other prominent national level committees.

Dr Runa Gokhale,
Associate Director for Science and Programs, Division of Global Health Protection, CDC-India

Runa Hatti Gokhale, MD MPH is the Associate Director for Science and Programs with the Division of Global Health Protection in the India Country Office of the U.S. Centers for Disease Control and Prevention (CDC). In this role she oversees several aspects of CDC India’s global health security portfolio, including laboratory strengthening, emergency management, and disease surveillance. Runa has completed medical training in Internal Medicine and Preventive Medicine. She received an undergraduate degree from Brown University in Providence, RI, an MD from Jefferson Medical College in Philadelphia, PA, and an MPH from Emory University’s Rollins School of Public Health in Atlanta, GA (General Assembly).
Dr Ramya Ananthakrishnan, Director, REACH

Dr Ramya Ananthakrishnan is a medical doctor with a postgraduate master’s degree in Community Medicine. She has been working since the last 19 years in the field of tuberculosis. She currently heads several initiatives across the country, including public private partnership models, community systems strengthening, case finding initiatives, empowerment of TB survivors and their engagement in improving quality of TB care and quality of TB services, adopting innovative approaches to TB control etc. She is the Member of the National Technical working group on partnerships, TB PPM (Public Private Mix) Learning network, WHO (World Health Organization) PPM subgroup and Task Force Lead, Community engagement, New Diagnostics Working Group of the Stop TB partnership. She has several scientific publications and has represented REACH in several international and national expert forums.

Panel 2: Riding the “atmanirbharta” momentum to transform India’s healthcare delivery

“Atmanirbharta” is driving transformation across many sectors and industries. This panel explored how the healthcare sector can harness this momentum, through advances in areas from technology and artificial intelligence to local manufacturing.

Moderator:

Mr Chapal Mehra, Public Health Specialist

Chapal Mehra is a public health specialist, writer and commentator. He works on issues of health, particularly infectious diseases, development, gender and human rights. He has worked extensively with communities, the media and civil society to advocate on key issues in health and development.
Speakers:

**Dr Taslimarif Saiyed,**  
CEO (Chief Executive Officer) and Director, C-CAMP (Centre for Cellular and Molecular Platforms)

Dr Taslimarif Saiyed is the CEO and Director of C-CAMP. His initial training has been in neurosciences, where he received his PhD from Max-Planck Institute for Brain Research, Germany and followed it up by postdoctoral training at University of California San Francisco (UCSF). At the same time, he also underwent training in management for Biotech and Innovation from QB3 at UC Santa Cruz, UC Berkeley and UC San Francisco. He has also completed a biotech management program for biotech executives at Wharton School of Management. In the Bay area, he served as a Management Consultant with QB3 New Biotech Venture Consulting and in an individual capacity, he also consulted for many biotech firms in the US. Dr Saiyed is an Adjunct Faculty at Indian Institute of Technology (IIT) Madras and Amrita Institute - School of Biotechnology. He also heads the Discovery to Innovation Accelerator program at C-CAMP. He is actively involved in promoting innovation in life science / healthcare by supporting translation of discoveries to application, entrepreneurship and technology development.

**Dr Shirshendu Mukherjee,**  
Mission Director, Program, Management Unit, DBT-BIRAC-BMGF-Wellcome Trust

Dr Shirshendu Mukherjee is a trained Medical Microbiologist, bringing 3 decades of experience to academic institutes, pharma companies and national, international philanthropic and government funding agencies, to support the innovation ecosystem in India and beyond.

Apart from serving as the Mission Director of the Grand Challenges India, Dr Mukherjee also heads the intellectual property, technology transfer and communications division at BIRAC. Dr Mukherjee also leads the NBM (National Biopharma Mission) a joint initiative of World Bank- Department of Biotechnology (DBT), as well as Mission Covid Suraksha- an initiative of Government of India. Dr Mukherjee holds Ph.D. in Microbiology and is a Law graduate.

**Dr Rachana Tripathi,**  
CEO, Huwel Lifesciences

Dr Rachana, a Ph.D. in cancer biology has vast experience in development and commercialization of diagnostic assays. Worked at Indian premier Institutes like IISc and CCMB for doctoral studies and has international exposure at NIH (National Institutes of Health) during her Ph.D. studies. After working at Reliance Lifesciences for a brief period she founded RAS Lifesciences in 2008, which was subsequently acquired by a French multinational. She has more than 15 years of experience in cloning, expression, and purification of recombinant enzymes and assay development.

**Ms Rashmi, Pimpale,**  
CEO, Research and Innovation Circle

Rashmi Pimpale is the CEO of Research and Innovation Circle of Hyderabad (RICH), an initiative of the Telangana state government and the nodal agency of Hyderabad S&T Cluster of Principal Scientific Adviser to Government of India, which facilitates the process of taking research to market by fostering collaboration between industry, entrepreneurs, start-ups, and academic and research institutions for an effective innovation ecosystem. Prior to RICH, she has worked in the pharmaceutical sector for over 12 years in R&D and Intellectual Property management roles. She holds a post-graduate degree in pharmaceutical sciences from Pune University and MBA from Indian Institute of Management, Ahmedabad.
Mr Srinivas Ramanujam,
CEO, Villgro Innovations Foundations

Srinivas is an incubator focused on making for-profit social enterprises, create impact at scale and become financially self-sustaining. He comes with two decades of experience across financial services, consumer goods, agribusiness and industrial sectors. Most of his corporate career has been in new product development and business model innovation. Srinivas is passionate about design thinking and helps social enterprises develop a stronger understanding of their working environment and to create social impact. A particular area of interest for him and Villgro is to help start-ups focused on primary healthcare, to succeed. He is an engineer and an alum of IIM Calcutta.

Vote of thanks:

Ms Vinita Sethi,
Board member, FIND India, SVP and Chief Public Affairs, Apollo Hospitals

Ms Vinita works actively with the industry and the government to accelerate the growth of an inclusive healthcare ecosystem and is engaged with policy advocacy forums at Ministries and think tanks. Focusing on opportunities to collaborate across industry, reinvent & transform healthcare, she engages with global stakeholders at the World Economic Forum (WEF), and is also Secretary Public Affairs Forum of India (PAFI).

Vinita completed her master’s in economics from the Delhi School of Economics (1985-87), followed by master’s in international relations from the International University of Japan (1987-89). Vinita has published several papers and articles and has been acknowledged by the Niti Aayog for her contribution to the “Strategy for New India @75”. Currently she is Member, Advisory Board- WomenInTech Delhi Chapter; one of co-conveners of the Women’s Mentorship forum in FICCI-FLO led “Empowering the Greater 50% initiative” and is also working on digital inclusion programmes for women in education & financial literacy across the country.

Video address:

Dr Bill Rodriguez,
CEO, FIND

Dr Bill Rodriguez joined FIND as Chief Executive Officer on 1 July 2021. A physician and entrepreneur, he has extensive experience across both private and public sectors, founding his own diagnostics company, Daktari Diagnostics. Bill is a highly respected figure in the global health community, serving as advisor to the World Health Organization, Bill & Melinda Gates Foundation, national governments on global HIV, tuberculosis, Ebola and COVID-19, as well as numerous established and start-up for-profit and not-for-profit social enterprises focused on global health. Bill is a graduate of Brown University and the Yale University School of Medicine and trained in infectious disease medicine at the Brigham & Women’s Hospital in Boston, where he served as chief medical resident.
Dr Sanjay Sarin joined FIND in September 2015 as Head of Country Operations for India and Head of Access Programme for Asia Pacific. He has close to 20 years’ experience in health policy, market development, and business management with specialization in the development of strategic initiatives for driving access in emerging markets. In his current role, he is responsible for providing leadership for strategic plan development and implementation of current and planned operations in FIND in India, ensuring continued engagement with partners and donors at local and international levels and leading the resource mobilization efforts in the AP region. Dr Sanjay holds a doctorate from PGIMER, Chandigarh, India.

Dr Sarabjit S Chadha joined FIND India in September 2018 as the Regional Technical Director, FIND for the India and South-East Asia region. He is a clinician by training, with over 15 years of experience in clinical and programmatic management of Tuberculosis (TB), including drug-resistant TB. His other areas of expertise and interest are vector-borne diseases, infection control, and health system strengthening. Dr Sarabjit provides technical assistance on the management of drug-resistant TB to several countries in the region, including Bhutan, Bangladesh, India, Indonesia, Myanmar, Nepal, Sri Lanka, India, Indonesia, and Timor Leste. He also facilitates international courses on Clinical Management of Drug-Resistant TB; TB Prevention and Care; and TB Operational Research. He has over 40 publications in international peer-reviewed journals.