



REIMAGINING HEALTHCARE: INDUSTRY-STARTUP INTERFACE
SERIES

COLLABORATION | INNOVATION | DIGITAL HEALTH

Addressing gaps and accelerating innovation within Indian healthcare

- How can the startup ecosystem facilitate innovation in healthcare to strengthen capacity, improve quality, and increase access?
- How critical is the need for innovative solutions specific to Indian challenges?



Overview:

To foster co-innovation and accelerate India's healthcare agenda, NATHEALTH- Healthcare Federation of India in partnership with TIE Mumbai, and with IQVIA as knowledge partners, launched the initiative **Reimagining Healthcare: Industry-Startup Interface Series on 6th August 2021**. The initiative will serve as an effective and credible interface that facilitates meaningful partnerships between the healthcare industry and the startup community.

As a curtain raiser to the industry-Startup Interface Series initiative, a one-day webinar was organized which brought together industry leaders, who shared their open innovation needs, and startup leaders, who shared best practices to foster co-innovation, resulting in an engaging discussion that was attended by close to 200 people.

Webinar Agenda:

Reimagining Healthcare: Industry-Startup Interface Series

📅 6th August 2021 ⌚ 6-8 PM IST

Time	Session and Speakers
6:00 PM	Opening Remarks & The Roadmap Ahead Mr. Amit Mookim , MD at IQVIA South Asia; President, TIE Mumbai; Innovation Forum, NATHEALTH
6:10 PM	Welcome Address Dr. Harsh Mahajan , President of NATHEALTH, and Founder and Chief Radiologist at Mahajan Imaging
6:15 PM	Keynote Address Dr. Ajai Agarwal , Director (HN & QA), Ayushman Bharat-PMJAY, NHA (National health Authority)
6:25 PM	Chief Guest Mr. Deepak Bagla , MD and CEO, Invest India
6:35 PM	Context- Research Project & Plan of Action Eshika Arora , NATHEALTH Innovation Forum Intern

Time	Session and Speakers
6:40 PM	Part 1: What the Industry expects: How do the industry members want to work with startups? Moderator Mr. Anurag Saxena , Principal and Head of Digital Health Consulting and Solutions, IQVIA-South Asia Mr. Harshad Reddy , Director - Operations at Apollo Proton Device Centre & Innovation Forum, NATHEALTH Dr. Om Manchanda , MD at Dr. Laxmi Labs Ms. Meenakshi Nevatia , MD at Stympa India Pvt. Ltd. Dr. Vidur Mahajan , Head of Product Development, CARDS & Innovation Forum, NATHEALTH (3-4 audience questions)
7:10 PM	Part 2: How Startups want to engage: What are the best practices for successful engagement between startups and corporates? Moderator Mr. Naveen Raju , Executive Director, TIE Mumbai Mr. Shashank Modhala , Executive Director, The Bengal Project Mr. Taposh Agarwal , Co-Founder and CEO, VantageAI Mr. Sushir Mathur , Co-Founder, HealthC Ms. Manisha Saini , Founder & CEO, Carewell Dr. Gul J. Nankani , Founder & CEO, Revivo (3-4 audience questions)
7:50 PM	Vote of Thanks Mr. Siddhartha Bhattacharya , Secretary General, NATHEALTH

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#ReimaginingHealthcare

COVID-19 and the need for Innovation in Healthcare

The second wave of COVID-19 led India to set a record-breaking number of Covid related deaths in a day. Cumulatively, the virus has caused 4 lakhs plus deaths in the country since March 2020. Some of the main gaps in the healthcare industry's response effort included the lack of testing capacity, unavailability of necessary medical equipment, shortage of healthcare workers, difficulty in securing doctor consultations, and inefficient management of hospital bed inventories. These gaps indicate that the Indian healthcare system is ready for intervention, for new innovations that can help the industry build capacity, increase access, and improve quality.

Identified by NATHEALTH members themselves, some of the key unmet needs of the industry currently include point of care (POC) diagnostics, remote patient monitoring (RPM) solution, digitization of operations, and employee welfare. A scan of the healthcare startup ecosystem- there are 3000 plus health-tech startups in India- will show that there exist many startups working on solutions that both address these needs and leverage the rapidly rising digital penetration in the country. However, a very small percentage of them have achieved the needed expansion to sustain their business. One important way in which startups can address this growth dilemma is to use the shoulders of established healthcare players- their brand reputation, customer base, and clinical experience- to leapfrog and achieve growth.

Unfortunately, however, there are some barriers that discourage co-innovation partnerships between healthcare startups and corporates. For example, absence of a clear corporate commitment to open innovation, difficulty faced by startups in getting connected to top corporate decision makers, cultural differences between the organizations, and the lack of credible and effective interfaces between the two.

The webinar started with an opening remark from **Mr. Amit Mookim, Managing Director, IQVIA, South Asia and President, TiE Mumbai** also representing **NATHEALTH Innovation forum**.

- He said that the Healthcare Sector is witnessing a slew of investments creating potential opportunities. The onset of COVID-19 has fueled up digitization in every sphere.
- In rural areas, digital adoption has increased up to 300%. To overcome India's multitude of healthcare challenges, augmenting health infrastructure and digital health are the prime focus areas. Forums like TiE and NATHEALTH will play a key role in bringing all the stakeholders together.
- The upsurge of digital adoption by providers and the ability to improve the access driven by technology are important parameters. Many healthcare unicorns are born out of India, which is very encouraging for the Startup sector. This has the means to catapult the Healthcare Industry forward.

- The National Digital Health Mission will revolutionize and build maturity in the Indian Healthcare landscape. There will also be a big push towards a seamless data exchange which is important to drive the Healthcare across the segment and create continuous pathways which is missing today.
- There is immense opportunity to re-imagine this sector with disruptive technologies such as artificial intelligence, internet of things, healthcare aggregators that are key to improving access to quality care. There is a need to develop citizen centric and consent based digitized health data and maintaining transparency of information is crucial to ensure better patient outcome.

In his welcome address, **Dr Harsh Mahajan, President, NATHEALTH and Founders & Chief Radiologist, Mahajan Imaging** said that the initiative will serve as an effective and credible interface that facilitates meaningful partnerships between the healthcare industry and the startup community.

- The Industry-Startup Interface Series has brought together top industry leaders who shared their open innovation needs and startup leaders who shared their best practices to foster co-innovation for an insightful conversation
- It is the need of the hour to innovate in the healthcare system in India especially in the post-COVID era. Less capacity of testing, inadequacy in skilled healthcare workforce, infrastructural insufficiency and inefficient management is some of the gaps that exist in the Indian healthcare ecosystem.
- As we prioritise the accessible and affordable healthcare ecosystem in India, the conversation needs to be driven towards expanding India's health infrastructure by harnessing technologies and innovations through an active and meaningful collaboration between the start-up community and industry.
- Through this partnership between industry and the startup community, the hope is to ensure birth of many more unicorns. To ensure these gaps do not hamper the efforts, industry needs to increase the pace to address them. The process of innovation needs to be sustainable.

The chief guest for the webinar was **Mr. Deepak Bagla, MD, CEO, Invest India** and elaborated on the following points in his address:

- The healthcare will be one of the most disrupted sectors for the next few years. In the past one and half years, the healthcare as an industry has grown up from 220 billion to 280 billion.
- Invest India team is working on 818 business requests related to pharmaceuticals, 653 business requests related to medical devices, and 889 business requests related to overall health. But what is interesting is that in the past 24 months there have been business requests from over 86 countries that are looking for partnerships or to invest or start a business in India.
- There is a growing interest in investing in pharma and healthcare segment from all over 29 states and union territories. A large number of MSMEs are showing interest in this sector. There are

funds that are exclusively for startups – every one of them is looking at medicine and health as a center pillar of their strategy. A large number of women are a significant part of these funds.

- Innovation, startup and industry have to work together. How fast each of the companies, stakeholders and startups can adopt and adapt to change is going to decide if it has the ability to be the global leaders in the spectrum of your business segment.
- The other two elements that are seeing a huge growing interest are about digitization – it will be a significant driving force. Another element is Wellness and Ayush – in the past 12 months exports of some Ayush products have increased almost 800%
- The old forms of medication have taken off even in the western course of USA. Public sector units in India, that have a large amount of land at their disposal, are looking very actively to partner globally to promote medical tourism. Skilled manpower will be very important. Number of venture capital funds are looking at skilling in a big way. Some of the biggest sectors that are seeing or will see enormous growth in near future are: e-pharmacy, e diagnostics, telemedicine, robotics and 3D, AI and data analytics, Virtual Reality
- Being the disruptors and initiators, finances won't be a constraint for a federation like NATHEALTH and TIE but the challenge is to ramp up fast. Suggestion to both the industry and the startup is that companies need to go back to their business models and expand on multiple business x's, not just one or two.
- The partnership is critical. Setting up of emergency hospitals, R&D centers and commercialization of these R&D centers all of these are happening at a fast pace, and NATHEALTH with its industry connect ecosystem, can really bridge the existing gap in the healthcare industry.

Ms. Eshika Arora, Intern, NATHEALTH Innovation Forum presented a report based on an extensive research undertaken with various healthcare providers highlighting the potential for co-innovation between the industry and the startup ecosystem to address the gaps in healthcare capacity, quality, and access.

- It also described how NATHEALTH and TIE Mumbai can create a forum that can overcome some of the typical barriers to collaboration between the two ecosystems.
- Industry leaders want to address patients needs by increasing pace and quality of innovation and the problem areas include Point of care diagnostics through cost effective devices, RPM solutions, digitization and operational efficiency, employee training and welfare. In these areas, industry is looking for partnerships with startups.
- Industry will collaborate with startups basis on their credibility, innovativeness, scalability and sustainability.
- Some of the barriers towards a successful partnership between the industry and the startups include communication barriers, absence of full-time commitment from the industry, lack of credible facilitator.

Panel 1: What the industry expects and how does the industry want to work with start-ups

The panel was moderated by **Mr. Anurag Saxena, Head of Digital Health Consulting & Solutions, IQVIA – South Asia** and panelists included:

- **Meenakshi Nevatia, VP & MD, Stryker India Private Limited**
- **Harshad Reddy, Director, Apollo Homecare**
- **Om Manchanda, Managing Director, Dr. Lal Pathlabs Ltd**
- **Vidur Mahajan, Associate Director, Mahajan Imaging Private Limited**

Areas for intervention:

- Both the industry and startups are struggling to find out ways to collaborate with each other and maximize the potential.
- COVID was a wakeup call for the industry and in this post-pandemic era, information tracking has become very crucial and, in this area, now startups are playing a significant role. The industry, along with the support from the startups can think to develop a system for patients to identify where to go, what process to follow etc by themselves and there should be no confusion.
- OR integration – As COVID has restricted travel, there is a need to develop connected operation theaters where a surgeon can guide and supervise surgeries remotely from one operation theatre to other. It is a good technology and each time it comes along with some real time data, a startup can take on the data part of it as our focus is only on technology side of it.
- Industry has a very vague idea, startups can really pitch in generating and executing constructive ideas with the help of disrupting technologies.
- Cost effective genetic service is an area where startups can really contribute as the need is huge and affordability is an issue. Augmented reality and virtualization are another area that can be explored further in order to provide medical education to our patients and this area demands co-innovation in a faster pace
- Healthcare players are sitting on tons of data, most of the players do not know how to deal with it as the data is not readable. Data is available but disorganized. Data analysis and organizing the data and utilizing the data is something where startups can contribute
- Patient behaviour is changing. Patient behavior has changed and once COVID settles it might come back to normal but post covid landscape will be different. Patients want to access healthcare on the go. They want to access healthcare staying in their comfort zones (Home, office etc) and technological intervention is crucial to expand the traditional model of healthcare delivery. Technology therefore is another area where startups can work
- Healthcare is very fragmented business. Going forward, areas like diagnostic will see more fragmentation as there are different parts of this diagnostic business – one is collection, another one is logistics, the third one is testing, and the fourth area is reporting. Startups can tap in these

fragmented areas; they can just pick up one area and contribute the business to grow in a more seamless manner.

- Integrated ecosystem: Full stack model is emerging and therefore, nowadays, all healthcare facilities are coming under one roof. Startups can tap in this area and support organizations which are moving towards this direction.
- Clinical excellence in terms of efficiency, lower turn around time and accuracy can be achieved with the help of data science and some other emerging technologies
- Remote access of healthcare service needs to be accelerated as the rural and semi urban areas don't have the access to quality healthcare service.
- Research and policy making in the area of public health – In this area, startups can really contribute because here traditional players might be feeling handicapped. COVID has triggered the innovation in terms of data flow. Startups can really come forward and expand this further for the future of public health.
- Working with a lot of startups have its own issues, industry needs to adopt an integrated manner while working with startups. There is a requirement for the industry to look at long term strategic partnership to walk the path together and grow together along with the startups.
- Caring Research is building a two-way platform where there is analytical ecosystem on one side and on the other side there is the provider ecosystem. So Caring Research is the integrators that not only allows to access and integrate but also helps to assess different types of AI solutions.
- Caring Research has worked with 30-35 deep science research groups. One crucial thing that differentiates between startups in terms of achieving success is that the need is to pick up the problem before picking up the technology. Don't force fit technology into problems
- One cannot build clinical solutions outside of a clinic. That is where forums like these are powerful to give a firsthand experience to the patients in terms of sitting with the doctors, getting valuable insights because one visit to the doctor can't clear all the road blockages and it must be a recurring system for patients to visit the clinics or the hospitals.
- Automation innovation and financial innovation need to be taken seriously in order to reduce the day-to-day repetitive jobs of healthcare employees.
- Someone has to build a data flow engine so that repeatability of diagnostics does not happen

Panel 2: How start-ups want to engage: What are the best practices for successful engagement between start-ups and corporates

The Renal Project working in the area of dialysis management; V Engage working in the area of teleconsultation and telemonitoring; Meradoc working in the area of telemedicine access; CancerX providing clinical support for oncology and Bynocs which provides a software to accurately diagnose binocular vision anomalies and works for related therapies – were the five start-ups that participated in

the event and shared successful collaborative model with the industry that have been implemented so far.

These startups highlighted the need for better collaboration between the industry and the startups in order to pace up the momentum of innovation in healthcare. The emphasis was on digitization taking a front seat during COVID and how with the help of technology, Indian healthcare has been able to deliver health services in remote parts in the country.

Captured below are their focus areas and support required:

Shashank Moddhia, The Renal Project

- Dialysis management is a 3.1-billion-dollar industry, however, it does not penetrate everywhere in the country. This is what The Renal Project aims to do.
- The Renal Project has 21 micro centers across the country and have been incubated by Niti Aayog. It is a well rated facility in just 18 months. When the organization was growing, they realized it has to be centrally monitored or there won't be any control. Everything has to be digitized, backbone of software was required
- Computer vision and telemedicine was necessary since data and technology makes it easier for the doctor. Therefore, the project Vidhur was born. Strategic partners are required in certain areas to prove capacities and design solutions

Tapesh Kumar Agarwal, V-engage

- Patients take a lot of time to recover at home, this can lead to unwanted outcomes which can be avoided if there is a continued connect with the hospital
- Patients try to manage chemo at home, v-engage does not work on devices, but builds the psychology. Patients need a human to talk to them, a virtual nurse who can talk to them everyday is what they provides
- WhatsApp is very convenient to speak to a virtual nurse and it is used by the organization. They support multiple languages. They monitor the patients everyday and whatever they speak, they make data out of it. It has just been 8 months

Sudhir Mathur, MeraDoc

- MeraDoc got into the business because of the trends that were seen and change in consumer behavior was seen. Everyone wants a unique personalized service and it wasn't available
- There was change in pharmacies structure. However, follow up with the patients was missing. There is a care team that is required in addition to having the doctor, hence, MeraDoc was born
- Optimal utilization of infrastructure is an aim for MeraDoc. Integration of systems will be at the core and empowering the GP will also be looked at

- The key is to find partners to run a sustainable and commercial model. It is a GP and a patient centric model. It will help families and communities. It uses artificial intelligence to improve decision making

Manisha Soin, CancerX

- CancerX provide clinical support for oncology. They help clinicians make better decisions with the help of artificial intelligence. Algorithms help with treatment basis on patient history. It therefore, shortens the treatment time.
- Summarize is one way of addressing the challenges – a concise summary is provided in a few seconds, consultation time reduces
- CDS – clinical decision support helps the clinician make better decisions during treatment. They have supportive care protocols which helps with OPD management
- Only patients who need certain intervention come to the hospital. Standardization is done through a skeleton structure that is provided

Dr Gul Nankani, Bynocs

- It is a new generation cloud-based software for management of computer vision syndrome (CVS) and amblyopia which affects 56 million people in India alone
- It is a one-of-a-kind software that comprehensively manages binocular vision anomalies
- Since the pandemic, everything has become digital and therefore eyesight and vision is disrupted
- Hence, Bynocs has created games that give results in 6 weeks. The clinical examination is done by the doctor and then the patient connects to bynocs and the process is done remotely
- 30 are required for amblyopia. They have 475 centers across the world

The interaction between the industry leaders and the entrepreneurs charted a way forward for Indian health sector to expand the infrastructure and ensure better patient outcome with the help of artificial intelligence, IoT, big data analysis, telemedicine and teleconsultation.

Mr. Siddhartha Bhattacharya, Secretary General, NATHEALTH in concluding remarks said that it is the need of the hour to innovate in the healthcare system in India especially in the post-COVID era. The onset of coronavirus has fueled the digitization in every sphere. There is immense opportunity to re-imagine this sector with disruptive technologies such as artificial intelligence, internet of things, healthcare aggregators that are key to improving access to quality care. As industry prioritises the accessible and affordable healthcare ecosystem in India, the conversation needs to be driven towards expanding India's health infrastructure by harnessing technologies and innovations through an active and meaningful collaboration between the start-up community and industry.



NATHEALTH has been created with the vision to “Be the credible and unified voice in improving access and quality of healthcare”. Leading healthcare service providers, medical technology providers (devices & equipment), diagnostic service providers, health insurance companies, health education institutions, healthcare publishers and other stakeholders have come together to build it as a common platform to power the next wave of progress in Indian healthcare. NATHEALTH is an inclusive institution that has representation of small & medium hospitals and nursing homes. It is committed to working on its mission to encourage innovation, help bridge the skill and capacity gap, help shape policy & regulations and enable the environment to fund long term growth. NATHEALTH aims to help build a better and healthier future for both rural and urban India.