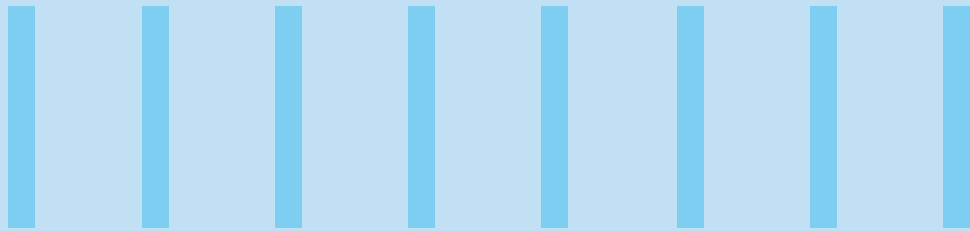




DIGITAL HEALTH: PARADIGM SHIFT IN CARE DELIVERY



The powerful waves of pandemic catapulted the healthcare and life sciences industry on the path of digitization like never before. Technology adoption accelerated as organizations began rethinking ways to provide remote patient care, such as telemedicine, and virtual counselling. However, there still exists a wide gap for the industry to bridge—resistance to tech adoption, building digital capabilities, integrating tools in the chaotic healthcare system, reducing costs, scalability, care delivery, data security and its optimal use, to name a few. Determined to overcome these hindrances, the industry is taking a great leap forward in this digital journey with the dominant goal to enhance real-time experience for patients as well as caregivers.

Infosys Marketing organized the first-ever LIVE Healthcare and Life Sciences industry client-executive conclave, steered by the theme 'Digital Health: Paradigm Shift in Care Delivery.' The virtual panel discussion was led by Roshan Shetty, Head of Life Sciences, Insurance, and Healthcare at Infosys. The distinguished speakers sharing their perspectives were Brendan Scullion, EMEA Sales & Operations Director, Assima; Ruthy Kaidar, Director Healthcare, Central & Eastern Europe, Microsoft; Prof. Asif Ahmed, Executive Chairman & CEO, Mirzyme Therapeutics and Prof. Alastair Denniston, Consultant Ophthalmologist/Hon Professor at University of Birmingham.

The discussion focused on understanding their perspectives of building a collaborative ecosystem with a common goal—better experience. The panel discussed a multitude of points that can shape the future of healthcare and improve care delivery.

Data is the Key

The changing healthcare paradigm leaves plenty of room for innovation using data. The industry is flooded with a massive amount of data from various sources including personal and public health data, sensors and imaging data, voice information, and data from health chatbots. A holistic view of this data and unlocking of actionable insights from it can work wonders in experience enhancement and exceptional care delivery. For instance, artificial intelligence (AI) is being used to improve diagnostics, and augmented reality (AR) and virtual reality (VR) are assisting in surgeries. However, the healthcare industry is fragmented and it is essential to break the data silos.

“On one hand, the latest technologies like mobile can aid streamlining of patient and caregiver engagement, on the other, they

can empower teams within the healthcare organization to better coordinate and communicate. Furthermore, technology will not only help in data collection, but also in structuring and analysing them, using AI for visualization and better prediction,” stated Ruthy. Pandemic has accentuated the need for error-free, real-time data, highlighting that the world requires a healthcare system with technical capabilities to offer data without delays. Today, a range of technological tools is available in the market to help access and analyse data. But it is imperative for the healthcare and life science organizations to implement tools that are not just conceptually perfect but are also fully functional in an unpredicted and chaotic health environment. The scalability of such tools is a critical element to factor in while partnering with a technology provider.



The Need for Collaboration, Trust & Accessibility for All

Today, unlocking the value of data is a critical necessity, but one organization or institution alone is not completely capable of mastering it. Prof. Alastair advocates for an ecosystem approach to harvesting the power of data as a society and achieve digital health. He emphasized that working as an ecosystem will strengthen collaboration between healthcare and technology partners, patients, and academia—that are driven by a common goal of accelerating patient care. This closely-knit ecosystem will share data and implement the best technology to deliver better care and produce new medications. “We can only achieve digital advancement by bringing together the best of each world to deliver fantastic care to our patients,” remarked Prof. Alastair.

Needless to say, trust is the cornerstone of any ecosystem. For instance, “We are aware of the opportunities that AI brings to the table, but there are concerns around decisions being made without human involvement. This issue at hand can be addressed solely by communicating the benefits of the various tools used to make decisions. This will not only grow the understanding between the patients and care providers, but also build an unshakable trust,” explains Prof. Alastair. In fact, a colossal change will take place when the organizations start trusting partners outside the healthcare system. “Healthcare organizations also need to work closely with tech companies that they trust, and most importantly, they need to trust the technology and educational institutions,” emphasized Brendan.

The ecosystem approach is a gateway for everyone to access real-world data and technology. In fact, according to many studies, there is a significant shift in the patient paradigm. They are now proactive, rather than reactive, and are ready to play an active role in their treatment and the technologies being used.

It is crucial at this point to develop platforms that allow the organizations and stakeholders to conduct open and transparent conversations about the use of

data. Ruling out the preconceived notion about the commercial use of data, they need to inform people that data sharing is paramount for the advancement of care delivery.

Prof. Alastair shared an interesting use case scenario where data sharing has benefitted the ecosystem. In the UK, an organization named Health Data Research UK (HDR UK) is helming the national conversation about data sharing. The organization brings together people who are comfortable as well those who are critical about sharing data, and works with innovators, researchers, and health systems to build models based on shared data. Governance is ensured by patients and the public, who scrutinize the process and advice improvements. Another instance of the success of such an initiative is INSIGHT, an NHS-led partnership that makes routinely collected eye data available for health research. It is one of the best examples of a safe and trusted environment, where researchers use large, anonymised sets of patient data in an ethical way. “Sharing of data allows learning as a society and enables the healthcare organizations to conduct research and expedite innovations that drive benefits back to the people,” stated Prof. Alastair.

A trustworthy platform is the need of the hour, which allows data to be shared and utilized in the most secure way, while implementing analytics and AI tools in a guarded and inclusive fashion. “This will not only create an ecosystem that delivers better experience but also a trusted and honest experience,” noted Ruthy.

The Way Forward

As the adoption of technology is fast-tracked, the onus is on the industry to sustain this momentum of digitization. With the detection of the new COVID variant, Omicron, it is certain that we are not yet out of the woods. It has also highlighted that the industry is not completely ready to fight back as either the technologies being used are not flexible or the adoption of new technologies require learning and training of people, which is time-consuming. To proactively respond to these situations, the healthcare and

pharma organizations need to infuse agility in their DNA as they operate alongside the data-driven flexible systems and applications.

However, while embracing technology and adopting agility, the industry must not overlook an important component of society—the people. “There is a vast group of people who are not technologically powered, and we must not leave them behind when making technological decisions. At each step forward, we need to ensure that digital divide by no means intensifies health inequalities,” enunciated Prof. Ahmed.

Prof. Alastair brought to the spotlight an interesting concept called health data property, which is about a greater representation of the population during clinical trials. While adopting technologies like AI, organizations need to make certain that the systems or applications are not trained only on highly selective patient groups but display a diverse representation of the population that the industry is serving. “Regulators play a significant role here and in the pandemic phase, the value of shorter clinical trials, application of real-world data and active public participation to improve results is being recognized. We cannot go back to the old ways,” stated Prof. Ahmed

Technology can serve as an enabler to bring together various stakeholders from within as well as outside the industry including NGOs, which can ensure that healthcare is accessible to all. As highlighted by Roshan “Consortium-based model is the key to deliver effective patient care. Efficient collaboration between technology partners, healthcare providers, industry and academia will pave the path for successful digitization”. At the same time, technologies like AI, ML, advanced analytics, and RPA can help derive actionable insights to make real-time decisions without pressurizing the healthcare ecosystem. If the industry is to reach a stage where organizations can reap the full potential of technology and the power of data to enhance experience, it needs to vigorously address the challenges that prevail and make smart and cost-effective investments in digital health.



Eminent Speakers



Roshan Shetty
(Moderator) Infosys UK Head & Regional Head – Head of Life Sciences, Insurance Healthcare for EMEA



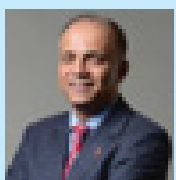
Prof. Alastair Denniston
Consultant Ophthalmologist/ Hon Professor, University of Birmingham



Ruthy Kaidar
Director, Health Industry Sector, Central & Eastern Europe at Microsoft



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