

**BEING  
RESILIENT**

**FUTURE OF  
HEALTHCARE  
IN THE  
ERA OF A  
PANDEMIC**

**Infosys<sup>®</sup>**  
Navigate your next

BEING RESILIENT. THAT'S LIVE ENTERPRISE.

The COVID-19 outbreak has brought unexpected challenges to the healthcare industry. Some of these challenges are complex and demand immediate attention. Others are pushing the industry towards a future that will be rooted in faster adaptation and enhanced resilience.

Right now, healthcare providers are analyzing the financial impact of COVID-19 on their revenue cycle. For them, it's crucial to identify ways to restore financial sustainability and mitigate revenue losses caused by initial prohibitions on elective treatments and routine visits. Hospitals and other healthcare professionals are also looking for ways to recognize and triage suspected patients while staying

alert and prepared to face any rapid surge in confirmed cases, even with limited resources. On the other hand, insurers are making every effort to ensure adequate coverage, no delay in payments and faster processing of outstanding claim.

The key consideration to tackle these trying circumstances is to extend the technological capabilities of providers—by moving to cloud infrastructure, supporting remote work, better analytics, and a push for more contactless and digital channels among others. While the industry is already seeing an acceleration to these technologies but that may not be enough to fight a pandemic.



## Disaster Preparedness Vs. Applied Improvisation

The US healthcare industry is fundamentally based on the in-person interactions model. Most of the clinical work processes and financial incentives have been designed largely to reinforce this care model. That resulted in the unavoidable gatherings of patients in emergency departments jeopardizing the effectiveness of social distancing and other safety protocols. Vulnerable citizens—people suffering from chronic conditions—are also forced to choose between risking exposure to the virus during in-person clinic visits and postponing needed care.

Though underprepared for a pandemic like COVID-19, the healthcare industry has immediately moved to action to combat the crisis situation. Pharmacy Benefits Managers (PBM) along with health systems have amended several processes to respond to the emergency at once. By waiving off member cost-sharing, including co-pays, coinsurance in diagnostic testing, or waiving charges for home delivery of prescriptions, they have eased the financial burden for both patients and providers. And by encouraging virtual visits, launching telemedicine, or creating new reimbursement codes for tele-appointments, PBMs have accelerated the shift to a digital-first scalable care model.

Prior to the pandemic, healthcare providers were expected to invest 15% more in digital IT services by 2025.<sup>1</sup> But, now, higher investment is foreseen along with a shorter timeline as providers feel the need to future-proof their IT infrastructure. In the pre-COVID era, a disintegrated legacy IT system coupled with stringent regulations and the pressure to maintain status-quo impeded the digital migration. But as the pandemic has outpaced healthcare industry's ability to prevent, track and contain the virus, the need for an immediate digital revolution is strongly felt across the industry.

## The Need for A New Status Quo

All the above factors are forcing the industry to scale up the system and become more resilient by unleashing the power of digital solutions. Some digital technologies and solutions—EHRs, digital therapeutics, telehealth—have been here for a decade or more, but couldn't reach the desired market penetration due to heavy regulations and lack of a supporting payment structure. In addition to these technologies, the industry also has Artificial Intelligence (AI), wearable technology and blockchain. Together, this can lead to the digital awakening of the providers, urging them to break the existing status quo and create a new one.

Industry experts are anticipating an unprecedented spike in elective surgeries, cancer treatments and other unmet health needs later in the year. As patients will return seeking treatments that have been delayed, hospitals need to be well-equipped to meet the needs. To enable care prioritization, governments are encouraging the adoption of telehealth and telemedicine services. Telehealth and other remote care facilities have been proven effective in unburdening hospitals struggling with acute resource and space crunch. Telehealth services also ensure the delivery of both synchronous and asynchronous care.

To facilitate telehealth adoption, Congress has lifted provisions that limited telemedicine services to rural areas, allowing the use of telemedicine for all beneficiaries of fee-for-service Medicare.<sup>2</sup> Clinicians need the right technology infrastructure to support these visits. The U.S. Department of Health and Human Services (HHS) Office for Civil Rights (OCR) has announced exercising its enforcement discretion to not penalize healthcare providers for using HIPAA-non compliant private communications technologies to provide telehealth services. Apart from the initial responses, this public health crisis would need a broader strategy to address reimbursement for telehealth, telemedicine, and other remote care services; and expansion of regulation.



## Key Considerations for a Sustainable, Resilient, Tech-driven Future

### Next-Gen Technologies

As governments, scientists and healthcare providers are trying to leverage every bit of data available to predict the transmission of COVID-19, the need for real-time data transfer has become imperative. The spike in telehealth care has also increased demand for bandwidth even in remote locations. Add to that the revolutionized market of wearable technology. Providers need to transfer huge amounts of data—medical imagery, high-quality videos, other large data files—to be able to respond timely and effectively.

All this is possible only when the industry has near-instantaneous data transfer speeds. And 5G is the disruptor that can dynamically transform the industry and how it functions. In the next few years, big data-powered AI will also reach the next level, enabling easier and faster real-time patient data analysis. These advances will not only add value to patient care, but also help pharma companies in identifying promising drug targets, accelerating drug development, and eventually reducing the cost of medications. Augmented Reality (AR), Virtual Reality

(VR) as well as robotics are also going to be highly impacted by 5G. In the war against a highly contagious virus, these technological advances powered by 5G can prove to become the ultimate weapons for the healthcare industry protecting the lives of frontline workers.

### Future Leaders of Change

COVID-19 has forced providers, payers and pharma companies to work remotely. In March 2020, Microsoft Teams saw a huge surge in users, from 12 million to 44 million within 7 days, spawning 900 million meetings and calling minutes.<sup>3</sup> Telehealth services have also seen a rapid adoption rate. That makes Chief Information Officers (CIOs) the central of a strong technology backbone that is required to support the transformation and ensure business continuity. While every other industry needs CIOs more than ever, healthcare needs them the most right now.

As CIOs will continue to gain bigger strategic responsibilities even in the post-COVID era, building a flexible framework that allows healthcare stakeholders to operate efficiently will become a key concern for them. And as the new leaders of change, they would require to break the silos in order to bring agility and better responsiveness to tackle

similar unforeseen crises in the future. This changing landscape puts a great emphasis on the need for digitization and collaboration but an even greater emphasis on security and privacy.

### A System That's Interoperable

Transformation of the healthcare industry will depend heavily on healthcare business and clinical systems working together to share data to connect, communicate, and collaborate more than ever. Now as the industry is rapidly moving towards value-based care that calls for increased accountability, the need for interoperability rises to a strategic imperative. The recent regulations by the Department of Health and Human Services (HHS) are expected to further enhance data exchange and improve COVID-19 response.<sup>4</sup>

Data is critical to combat viruses and diseases. To make data accessible to all the stakeholders, Centers for Medicare & Medicaid Services (CMS) along with the Office of the National Coordinator for Health Information Technology (ONC) has already issued new rules. Though the enforcement of new rules has been postponed until July 2020, payers are required to comply with the new requirements.



## New Model of Chronic Care

Retail clinics have been here since 2013, but it is only the COVID-19 pandemic that has brought this care delivery model into the limelight. Walmart has recently opened its doors for drive-through testing. CVS Health, Walgreens, Kroger, Rite Aid have soon followed suit.<sup>5</sup> Retail clinics can be effective in delivering care services for minor ailments, vaccinations, symptom checks, etc. Partnership with these retailers can enable healthcare providers to improve access to primary care, expand their patient base, reduce costs, and focus on patients with chronic health conditions. In a time when countries are struggling with a shortage of physicians, retail clinics can act as additional care access points. Moving into the future, these care sites are highly likely to find their niche and emerge as the go-to option for flu shots and other low acuity care.

## A Sustainable Supply Chain

The pandemic has also disrupted the traditional supply chain. As the demand for essential medicines and medical equipment is surging, companies are scrambling to meet

the immediate requirements. A social supply chain can effectively solve the challenge by incorporating social data, network and demand charts. Through monitoring social data, companies will be able to identify areas with a growing demand for specific products and alter their distribution plan accordingly to meet the need. A social supply chain also enables companies to identify risks and mitigate time delays and losses.

As the world grapples with COVID-19 and its far-reaching impact, the need to build resilience has become the core focus for the global public healthcare system. At present, the industry is fighting the battle converging its past knowledge and expertise with the technological advances of the present time. But moving forward, the world needs a future-ready system, one that will be capable of withstanding an insurmountable global healthcare crisis. And with that, a new era of healthcare is upon us, a future in which technology will make healthcare accessible to one and all, regardless of age, geographical location, or socioeconomic status.



## About the Authors



**Venky Ananth**

Senior Vice President and Global Head,  
Healthcare, Infosys



**Ray Wang**

Principal Analyst, Founder and Chairman  
Constellation Research INC

## References:

- <sup>1</sup> COVID-19 prepares healthcare providers to accelerate shift to telehealth, Everest Group
- <sup>2</sup> Covid-19 and Health Care's Digital Revolution, NEJM
- <sup>3</sup> Microsoft announces new Teams features as usage skyrockets nearly 40 percent in a week, The Verge
- <sup>4</sup> HHS Publishes New Health Data Interoperability and Patient Access Rules, Foley
- <sup>5</sup> COVID-19 Lights the Way for Retail Health Clinics, Patient Engagement Hit

For more information, contact [askus@infosys.com](mailto:askus@infosys.com)

**Infosys**<sup>®</sup>  
Navigate your next

© 2020 Infosys Limited, Bengaluru, India. All Rights Reserved. Infosys believes the information in this document is accurate as of its publication date; such information is subject to change without notice. Infosys acknowledges the proprietary rights of other companies to the trademarks, product names and such other intellectual property rights mentioned in this document. Except as expressly permitted, neither this documentation nor any part of it may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, printing, photocopying, recording or otherwise, without the prior permission of Infosys Limited and/ or any named intellectual property rights holders under this document.