

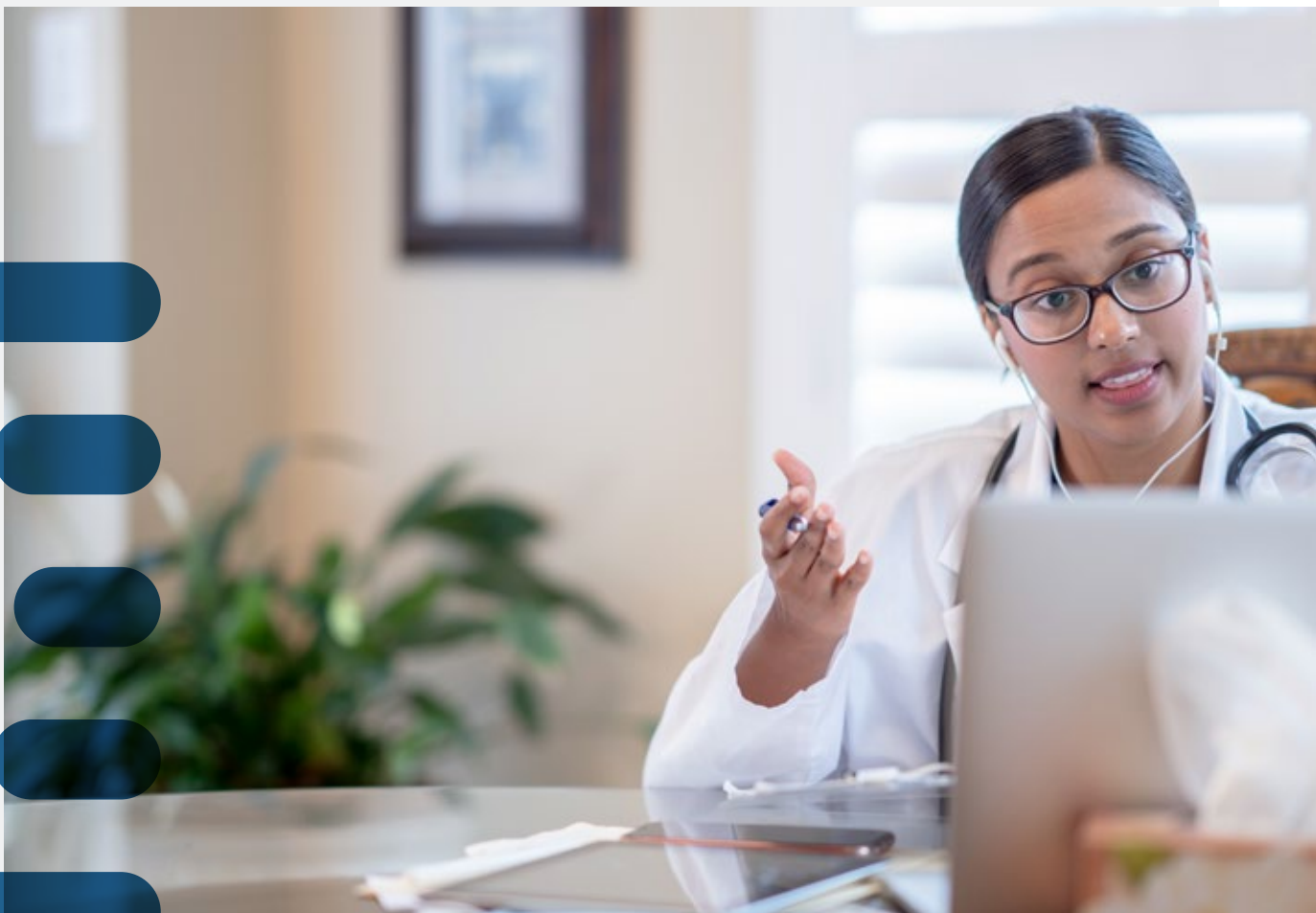
White Paper

# Overcoming Hospital Challenges with Enhanced Technology Solutions in Southeast Asia

*As the Southeast Asian healthcare landscape has been disrupted by COVID-19, hospital providers look to technology to transform their healthcare delivery*

**SHRIHARSHA SARKAR**, Senior Principal, Consulting Services, IQVIA APAC

**CHANDRASHEKHAR BC**, Director, Enterprise Mobility, Information and Tech Solutions, IQVIA APAC



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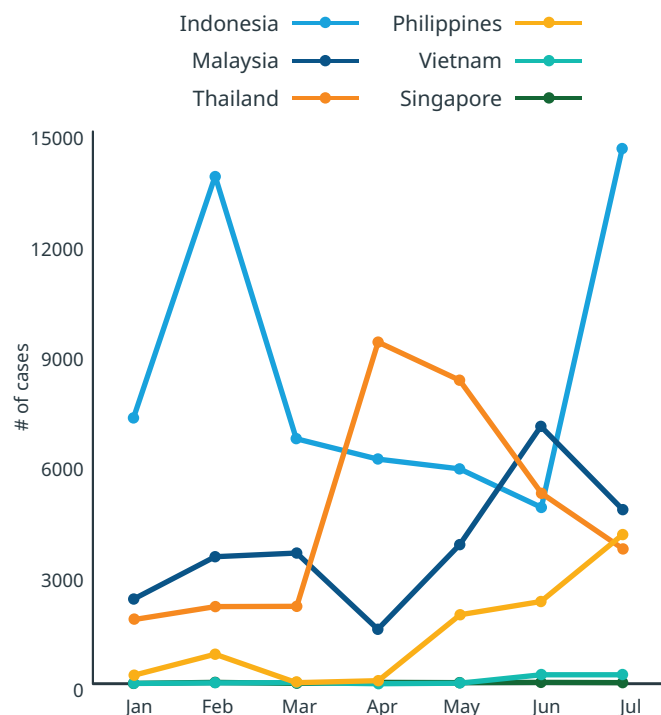
# Introduction

In this report, IQVIA Asia Pacific brings together key IQVIA experts to highlight how COVID-19 has impacted the hospital landscape in the Southeast Asia region, and how enhanced technology solutions can improve patient care and healthcare options.

## Current landscape: COVID-19 impact on hospitals

Southeast Asia has been hit hard by COVID-19 in 2021. By looking into the first half of the year, more COVID-19 cases per million people were reported in Indonesia, Thailand and Malaysia, compared to the neighboring countries in Southeast Asia<sup>1</sup>.

Figure 1: Southeast Asia daily new cases, mid-2021



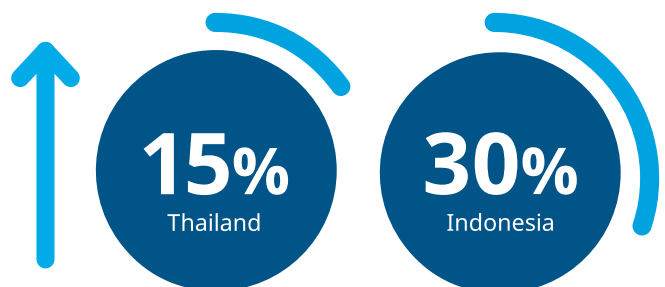
Source: Our World in Data, June 2021

*Compared to pre-lockdown volumes, the average in-patient load per month fell 54% as COVID-19 cases surged in 2021*

The pandemic has disrupted the traditional patient journey and caused a significant decline in the volumes of patients visiting hospitals in Southeast Asia.

Compared to pre-lockdown volumes, the average in-patient load per month fell 54% as COVID-19 cases surged in 2021. The sharp fall, which was seen to a lesser extent during lockdown and the rest of 2021, reflects the unwillingness of patients to go to hospital for elective procedures at a time of high levels of viral transmission.

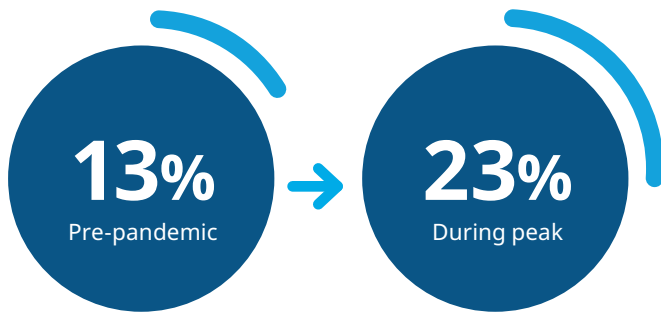
### Increase in out-patient load in 2021



In contrast, out-patient volumes, after falling during lockdown, slowly picked up during 2021 as patients used the lifting of restrictions to engage in necessary consultations and collect prescriptions. This trend is mainly seen in Indonesia and Thailand, with an increase of 30% and 15% in out-patient load in 2021, respectively.

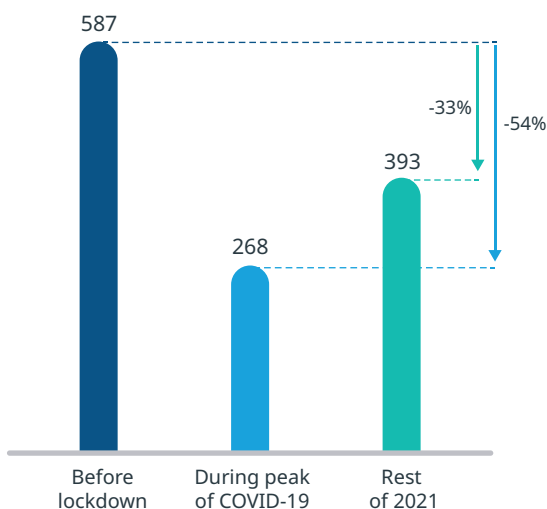
The disruption to the traditional patient journey has accelerated the adoption of digital technology. Healthcare professionals reported a 1.8x increase in remote consultations during lockdowns to curb the spread of the COVID-19. Healthcare professionals working across specialties reported increased use of telemedicine during the crisis. Generalists, pediatricians, endocrinologists and pulmonologists used telemedicine in particularly large numbers. Pre-pandemic, 13% of consumers were seen via telemedicine. The figure has risen to 23% during the second wave of COVID-19 in between 2020 and 2021.

### Consumers seen via telemedicine



The gains appear to be permanent. Use of remote consultations remained elevated after the lifting of restrictions on face-to-face interactions. Both consumers and healthcare professionals showed a high willingness to continue using the technology after the crisis abates.

Figure 2: Average in-patient load per month in SEA



Source: IQVIA Regional WellTrack Report, June 2021; IQVIA analysis

### Shift towards non-F2F HCP consultations

#### Change in average caseload of non-F2F consultations relative to pre-COVID-19 lockdown (%)

**~1.8x** Increase in non-F2F consultations during COVID-19 lockdowns compared to pre-COVID-19

Source: IQVIA WellTrack Regional Report, April 2021; IQVIA analysis

## IT solutions to drive evolving models of care

Adopting digital services makes it easier and quicker to triage patients, thereby accelerating access to healthcare, while also sparing consumers from the risks associated with visiting facilities in person. At the same time, telemedicine, remote care and digital health can play a critical role in the shift away from provider-centered care and toward a healthcare ecosystem focused on the patient.

However, there are challenges to technology enablement, such as interconnectedness and scalability which will need to be overcome.

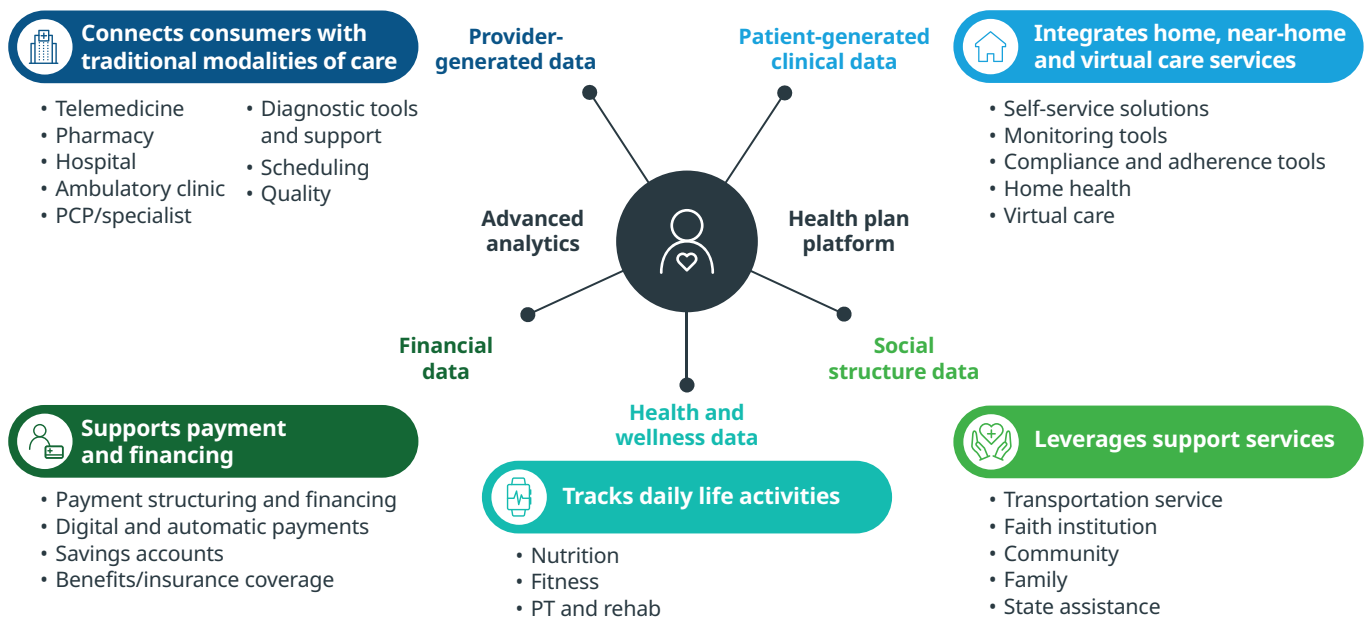
The data providers generate by connecting with patients digitally complements the financial, clinical, social structure and wellness data gathered by other parts of the consumer-centered ecosystem.

By combining the data with advanced analytics, hospitals can improve patient care and the services they provide.

In the new ecosystem, having a sophisticated information technology is critical. Having started out using simple client server patient registry and billing systems, hospitals have embarked on a digital transformation that has seen them adopt mobile and cloud computing and now intelligent tech and internet of things devices. COVID-19 further emphasized the need for healthcare to embrace technology driven, non-traditional models of care.



Figure 3: The future of the health system





## Challenges to adopting a new healthcare ecosystem

However, there are challenges to technology enablement across Southeast Asia, which will need to be overcome.



**INTERCONNECTEDNESS** - Systems for virtual care management, clinical mobility, AI-driven automation and at-home healthcare today are largely siloed, and will need to be connected in a live, continuously updated ecosystem.



**DATA SHARING** - Data sharing is inefficient and held back by concerns over privacy. The situation can be improved by re-educating users on ecosystem changes.



**LEGACY SYSTEMS** - Old systems are ill suited to the new healthcare environment, in part because they are made for single stakeholders. Gaps in internet and mobile penetration are also causing scalability issues.



**COST** - The cost of product ownership is rising in relation to enhancements, changes, configurations and interfaces. Amid high costs for creating user-friendly ecosystems, all stakeholders will need to agree on the investment.



**FLEXIBILITY** - Legacy systems lack the flexibility to receive new updates. Some stakeholders lack the flexibility to move to new systems. Both problems are hindering the move to a new healthcare ecosystem.

# Key areas of healthcare transformation

Hospitals in Southeast Asia need new technology to adopt the non-traditional models of healthcare delivery that will extend the provision of care beyond their brick-and-mortar facilities.

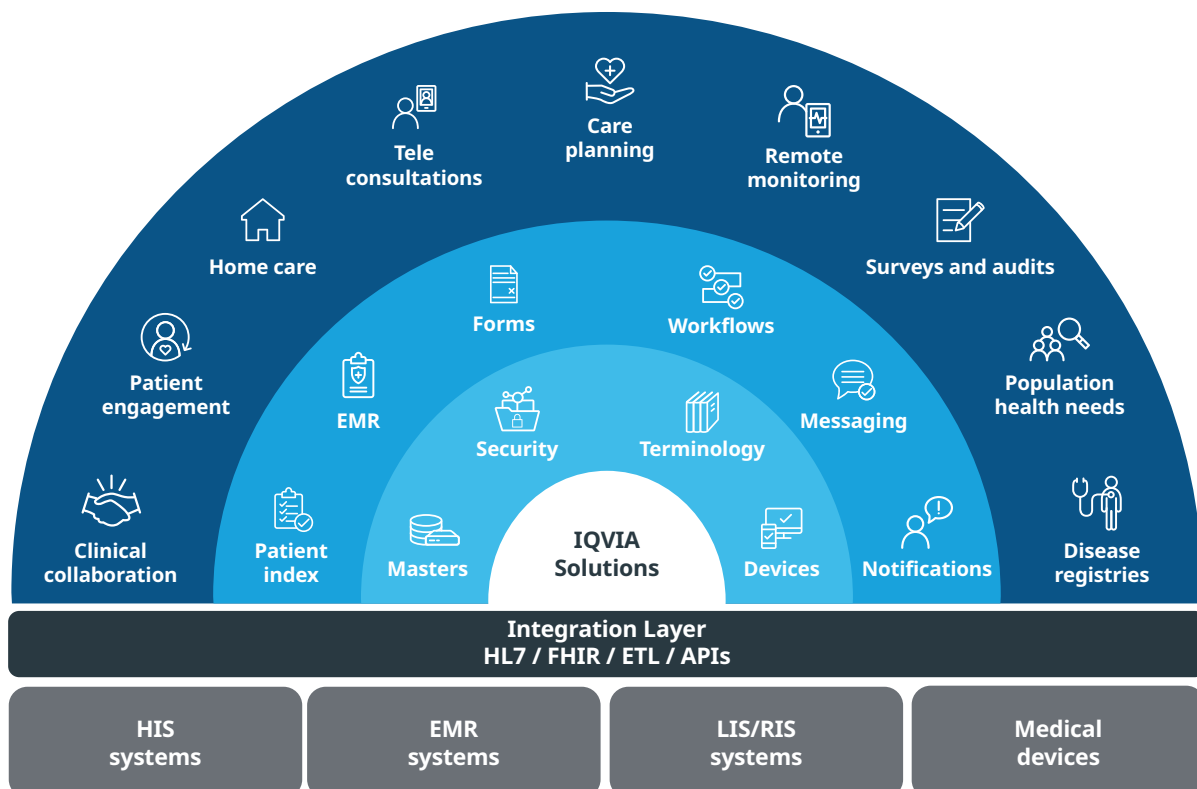
**VIRTUAL CARE MANAGEMENT**  
 Done well, virtual care management boosts patient engagement and ensures timely access to care. Hospitals need to do more than just offer teleconsultations. True virtual care management is more about how patients are monitored remotely and how continuity of care is achieved as patients are discharged and treated at home. Integrated systems that ensure continuity of care from in-patient to out-patient, and home care to virtual care, are the future of healthcare.

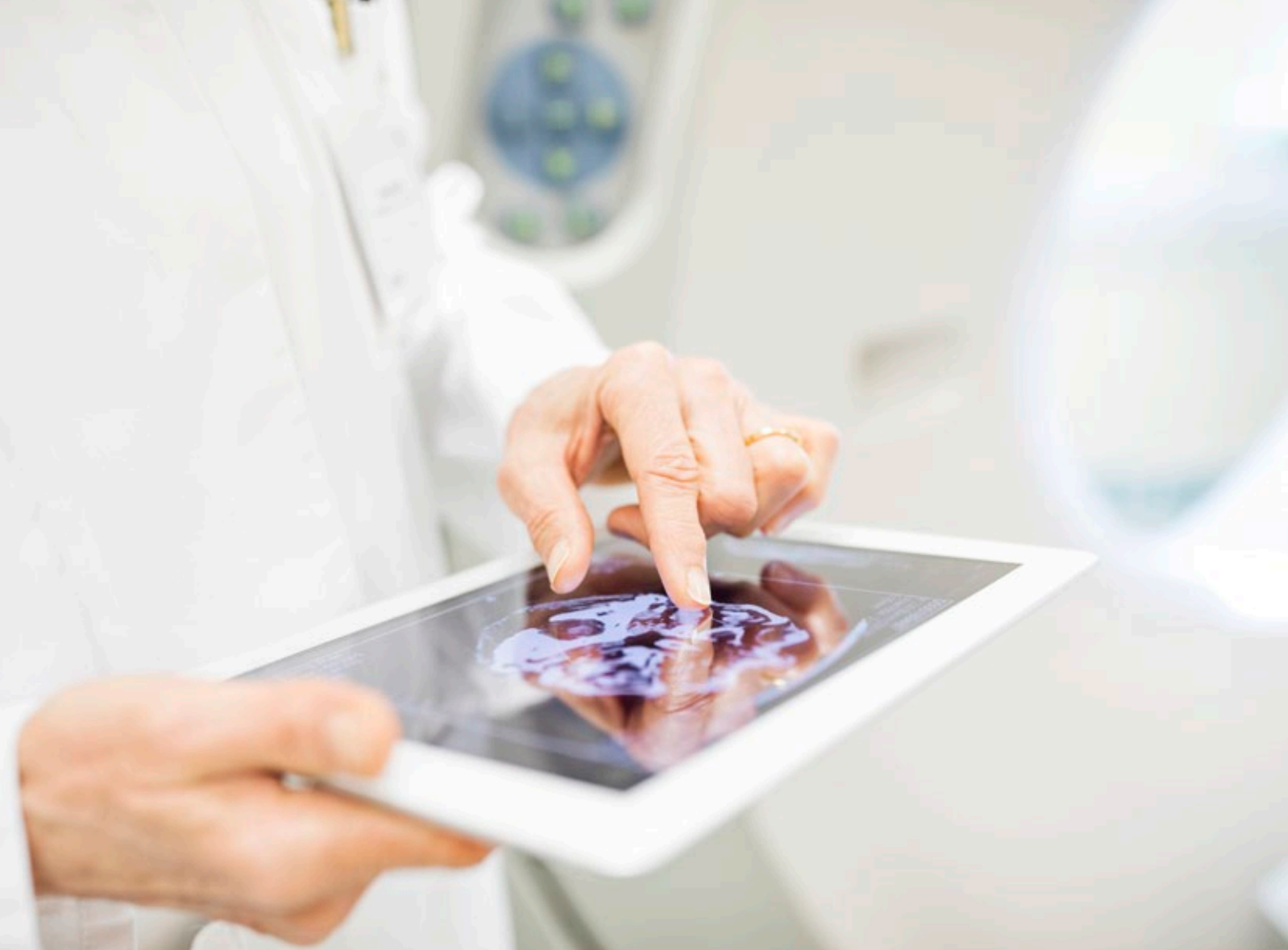
**CLINICAL MOBILITY**  
 Healthcare professionals want to access information anytime, from anywhere. Ready access to data increases the productivity of care teams and improves response times. Yet, information is still often shared via handwritten notes, SMS or WhatsApp

messages, communication mediums that do not give anytime, anywhere access and have privacy issues. Switching to a secure environment will give teams clinical mobility and reduce redundant paperwork.

**AT-HOME HEALTHCARE**  
 Providing hospital-level care at home will bring multiple benefits. At-home healthcare could reduce falls and re-admissions, drive efficiency with skill-based planning and utilize spare staff capacity with intelligent scheduling. Delivering that vision will require robust technology to manage your skill set versus the services that are offered to the patient.

**AI-DRIVEN AUTOMATION**  
 Growth in computing capabilities and healthcare databases are creating opportunities to intelligently automate healthcare. How do we use artificial intelligence to identify patients in need? How can we use predictive analytics and process automation to find and manage bottlenecks in the patient journey? Hospitals that answer those questions stand to improve the patient experience and other aspects of their operations.





## Choosing the right solutions for your needs

Vendors have developed hundreds of solutions to address specific aspects of the transformation of healthcare. The challenge for hospitals is to identify the right solutions for their needs. In trying to meet that challenge, hospitals can look to three principles



### Proven solutions work better

Technology should help solve a problem. Identifying solutions that are already solving the problems you face in similar care settings increases the chances of choosing an effective technology.



### It's a partnership, not just software

Impactful rollouts are just as important as the software itself. Factor the pedigree of the vendor and their ability to support the deployment of technology into decisions about which solution to use.



### Enhance what works

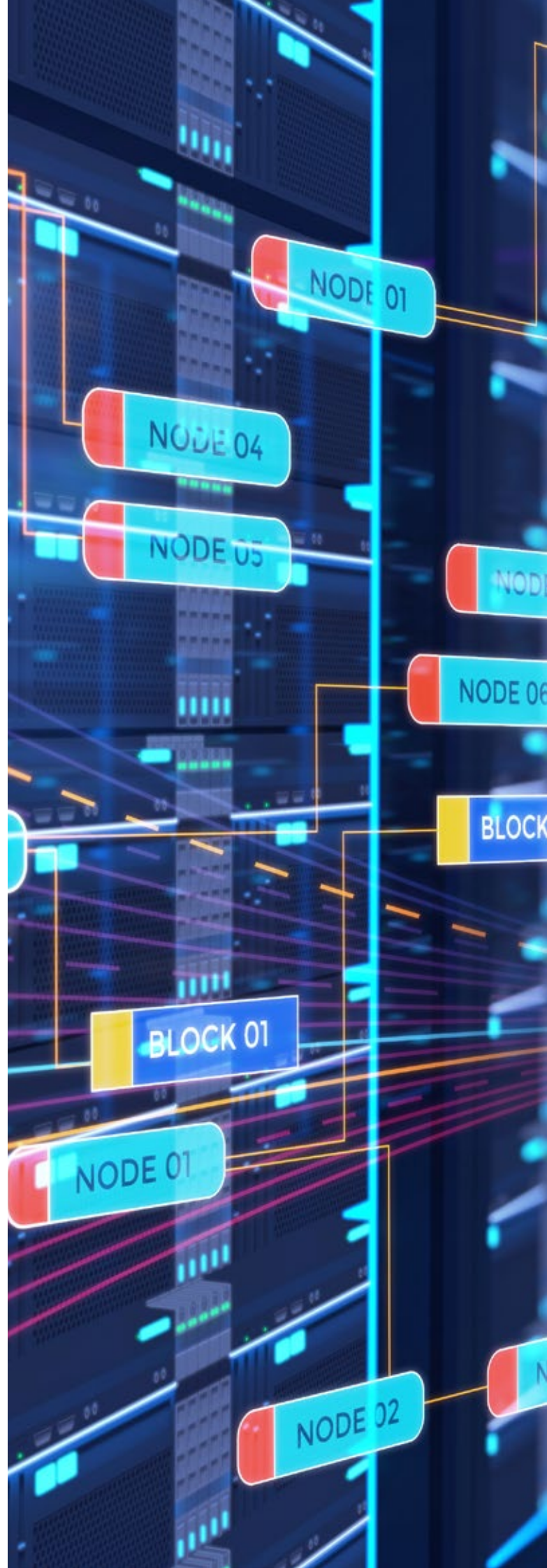
You may already have the basis of the right solution. Enhancing what you already have, rather than starting from scratch, results in faster, cheaper and more effective technology deployments.



## Conclusion

COVID-19 has reshaped the provision of healthcare in Southeast Asia. The near-term consequences of the pandemic are challenging for hospitals, but the crisis has also shown the path to a new, better way of providing care to patients. At IQVIA, we believe in an intelligent, workflow driven care management solutions enabling care beyond boundaries.

Technology has a critical role to play in connecting the circle of care and empowering patients to take an active role in managing their health, supporting improved outcomes and reducing care delivery costs. Challenges and limitations to implementing hospital technology can be overcome with the right partnership.



# About the authors



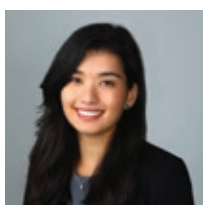
**SHRIHARSHA SARKAR**  
Senior Principal,  
Consulting Services, IQVIA APAC

Shriharsha (Shri) is a Senior Principal in the APAC Consulting team based out of Singapore. He has led engagements across Asia Pacific covering market entry, growth strategy, pricing, market access and commercial excellence for clients across Pharmaceuticals and MedTech sectors. Shri has over 12 years of consulting experience in life-sciences, delivering projects across South East Asia, South Asia, and broader APAC region. He has advised senior business leaders on cross-region strategy and implementation planning projects. Prior to IQVIA, Shri has previously worked with Ernst & Young (EY) in their life-sciences consulting practice in India. Shri holds an MBA from NITIE in Mumbai and a BSc in engineering from University of Mumbai, India.



**CHANDRASHEKHAR BC**  
Director, Enterprise Mobility,  
Information and Tech Solutions,  
IQVIA APAC

Chandra leads the business unit for enterprise mobility and digital health solutions for providers at IQVIA. Chandra is a veteran and a proven business leader in the HCIT industry with over 20 years of experience. He was the founder and chief executive of Bionworks Technologies, a pioneer in care management and patient engagement solutions where he successfully led the team to transform digital experiences across large private and public sector hospitals in India, Middle East and UK. Prior to his entrepreneurship journey, he held delivery roles for CSC, iSOFT and IBA health rolling out HIS related solutions to hundreds of healthcare facilities globally. Chandra holds an engineering degree from Bangalore university.



**RUTHIE BURR**  
Enterprise Marketing Lead,  
IQVIA, APAC

Ruthie is responsible for regional enterprise marketing, go-to-market activities, and Thought Leadership at IQVIA Asia Pacific. Ruthie works across IQVIA's clinical and commercial solution areas, as well as IQVIA sub-brands (Consumer Health, MedTech, Technologies and Biotech). She brings strategy consulting and market research experience, having worked with leading pharmaceutical companies on market assessment, brand health and competitive landscaping projects across the region. She holds a BSc in Biomedical Sciences from The University of Warwick, UK.

# About IQVIA Asia Pacific

IQVIA (NYSE:IQV) is a leading global provider of advanced analytics, technology solutions, and clinical research services to the life sciences industry. IQVIA creates intelligent connections across all aspects of healthcare through its analytics, transformative technology, big data resources and extensive domain expertise. IQVIA Connected Intelligence™ delivers powerful insights with speed and agility — enabling customers to accelerate the clinical development and commercialization of innovative medical treatments that improve healthcare outcomes for patients. With approximately 70,000 employees, IQVIA conducts operations in more than 100 countries.

With regional headquarters in Singapore and offices in 15 countries, IQVIA Asia Pacific provides technology-enabled services and solutions to meet the growing and rapidly changing needs of clients, both local and multinational, operating in Asia Pacific. IQVIA is committed to advancing healthcare by offering evidence-based insights and deep domain expertise in thought leadership, with the aim of improving understanding and accelerating innovation within the healthcare ecosystem. To learn more, visit [www.iqvia.com/locations/asia-pacific](http://www.iqvia.com/locations/asia-pacific).

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1. COVID-19 Data Explorer.  
<https://ourworldindata.org/explorers/coronavirus-data-explorer?zoomToSelection=true&time=2020-03-01..latest&pickerSort=asc&pickerMetric=location&Metric=Confirmed+cases&Interval=7-day+rolling+average&Relative+to+Population=true&Align+outbreaks=false&country=IDN~SGP~VNM~PHL~MMR~THA>.

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**CONTACT US**

[iqvia.com/contactus](https://iqvia.com/contactus)

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**LOCATION**

79 Anson Road #19-01  
Singapore 079906  
[iqvia.com](https://iqvia.com)

