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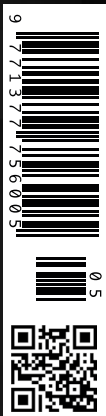
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What COVID-19 Has Taught Us: Insights on Singapore's Healthcare System and the New Normal

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Singapore is world-renowned for being a unique and technologically advanced hub, and has proved to be one of the global leaders in fighting the COVID-19 pandemic. HealthManagement.org talks with Associate Professor Wong Hon Tym, Clinical Director at the Centre for Healthcare Innovation, about the pandemic-driven progress in Singapore's healthcare.

What is your background and how did you get involved in healthcare innovation?

I'm an ophthalmologist and I previously headed the eye department at Tan Tock Seng Hospital for 10 years, during which I started dabbling in changing the way things were. Changing the way you work is innovation, and that's how I ended up in the [Centre for Healthcare Innovation](#) which goes beyond medical technology itself, and focuses on changing jobs and the way we deliver care.

I've been with CHI for about five years now. COVID-19 forced us to transform many care models into a digital or virtual format in about two or three months. The medical world has never been completely comfortable with online transactions or dialogues, although now, out of sheer necessity, we've increasingly become more accustomed to it. It's quite symbolic of how healthcare has changed – or evolved as well. Working online has become more normalised now, and as such, we're starting to recognise the pros and cons of this new normal. It's all about grappling with our own insecurities or presumptions about something that we've never tried before, jumping in and then discovering that it also has its benefits over the traditional mode of practice.

What has Singapore learned from other countries, with regard to innovation in the era of COVID-19?

It's strange because we're based in Singapore and it is a completely different world from Europe, for better or worse. We designed our annual CHI conference with a global audience in mind, incorporating a deeper understanding of where we are and where the rest of the world is, and ensuring that the content speaks to all parts of the spectrum.

Over the past year, we have liaised with our colleagues from around the world – learning about the diverse responses to COVID-19 from our Swedish, British and European colleagues

has really put things in perspective for us. We have also learned much from health leaders in Hong Kong, which has just weathered a very tumultuous year - politically, societally and medically.

Sharing experiences from this past year has really provided a better picture of how others have coped with the pandemic. You never know if you're going to find yourself in similar circumstances later on, so opening this line of communication allows us to learn leadership and personal decision-making strategies and lessons that may help participants make an important future call.

For example, a year ago, Sweden was holding firm with their herd immunity strategy. More recently, the Swedish government started having second thoughts about their strategy. It is very interesting to look back and revisit that decision-making now. Last year, our U.K. colleague discussed the push to set up the Dragon's Heart makeshift hospital in Cardiff, Wales. Since then, it has already been decommissioned – what kind of a journey is that, in less than a year, to set up and take down a field hospital!

Reflecting on the past year, what were the strengths and weaknesses of Singapore's healthcare response?

From Singapore's perspective, at this point in time last year we were still recovering from the surge in our migrant worker COVID-19 cases. We learnt many important lessons as we struggled to manage during that phase. Now there's a huge understanding that everyone must be, in a sense, taken care of in the same way as much as possible, so that the country can progress together, with every sector of our society on board. Of course, we're not right there yet, but there is good introspection and a strong affirmation for that. On a personal level, I think many Singaporeans had a real evolution in our

perspectives too, clearly realising that we have to think about every person involved in society when it comes to healthcare.

For me, a turning point – and it just crystallises everything I believe about this whole pandemic – was realising that healthcare was not the first line of defence. I distinctly recall watching a doctor on YouTube, early on in the pandemic, turning that concept on its head. She said “healthcare is not the frontline – you (referring to the layman viewer) are the first line, we are the last line, so please make sure that you do your job”. That really made it clear for us that health services are so dependent on how well society can flatten the curve, before too many patients overwhelm the hospitals.

So the reason why Singapore was and is doing well is because society (the real frontline) in general played its part: everyone listened and thought about each other. We’ve never been a highly individualistic society, and I think that strength

What has changed over the last year in terms of innovation in healthcare in Singapore?

More speed! Singapore can move fast when we want to, but there’s also the necessary tension to be safe and do the right thing, do multiple checks and go through many layers of approval. Innovation sometimes falls victim to this very high level of rigour, and ends up evolving much slower than it could have. Many good ideas have arrived at the pilot stage, but struggled to find a bigger platform and lacked the timely momentum to spread.

Telemedicine is a telling example of this phenomenon. As a concept, it was struggling to fully take off in Singapore because, we’re small and healthcare access is quite easy and quick, so there was never a strong impetus to develop it. But, as they say, COVID-19 is the best Chief Innovation Officer ever in the history of mankind. Within the pandemic, tele-

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or weakness came into play, for the better mostly. Everyone joined in and started doing the right thing. Our successes are a result of the fact that society in general behaved and listened to the experts.

As such, the Singapore healthcare system was not pushed past the brink. Unlike in other countries, we experienced an almost surreal calm by comparison. We were of course inundated in our screening centres and containment facilities as a result of the migrant worker situation. Our wards and ICUs were also under strain from this prolonged status of alert, preparing for the worst. But that disastrous storm never really happened.

Healthcare workers were also pushed out of our comfort zones professionally and psychologically. We were re-deployed all over the system. I wasn’t doing my regular job and stopped seeing non-urgent eye patients for several months. Along with many others, I was rostered to support the National Centre for Infectious Diseases, fearing that the worst would happen, but it luckily it didn’t. It’s clear to see now that that was due to how well-managed the “outside” was.

The unfortunate situation that the U.S., Italy and Spain, for example, found themselves in was in great part due to COVID-19 just overwhelming societies which were unable to completely transform the way they lived, worked and behaved fast enough or cohesively enough, whatever the reason; thus their last line of defence was tragically breached as well.

medicine approvals were sped up, projects got fast-tracked, and as we approach a critical mass of telemedicine projects, we can do better evaluations because there is more data. And with more data, there’s more confidence. That is a good snowball effect.

Now increasing numbers of medical departments, doctors, nurses in Singapore are getting involved with telemedicine and virtual visits in some form or other. From speaking remotely to a patient or looking at a patient’s images through a screen, it has been a huge paradigm shift for us and our patients.

The other thing that we have recognised over the past year is the need to actively ensure that sectors of the population are not left behind. The elderly, for the most part, are not digitally savvy, yet we are continuously inundating them with digital apps. We’ve got to make sure that each technological advance includes more humanistic design and development. There is, as well, a need to include the economically, socially and physically disadvantaged people from our society in these innovations. I’m an ophthalmologist, so I do know that many of my patients are struggling, now even more than ever, because there’s greater dependence on technology. If you are requiring a smartphone for people to organise their life and their medical appointments, there are big sectors of the community that may not be able to participate.

What are your overall expectations for the future of innovation in healthcare?

I feel like the goal and theme of the coming years should be 'Creating a better normal for healthcare'. The idea is that we are already creating a new normal, but true innovation implies that a new normal can't simply be new and the same or worse; it must be improved – thus, a better normal. In order for this true innovation to really materialise, we must challenge ourselves to go beyond the near future and imagine progress much higher than what we have ever experienced. Can telemedicine be even better in some respects than regular medicine? Can home care beyond the brick-and-mortar hospitals be actually better than the care that we're delivering now to our patients? That's the challenge that we must set, and I

behind. We all move together, and when we design healthcare, when we innovate for healthcare, it's not just about the average Joe or Jill, it is about society as a whole. That's what I hope for, that sort of new realisation.

We must retain some elements of the old normal, like the human contact that many of us miss terribly, not just with our patients, but also each other. Some services and care pathways cannot do without face-to-face contact, so I hope that they can regain as much of that old normal as possible, while the rest of us will make newer methods like telemedicine more mainstream.

Finally, I hope that by this time next year we will see even more of healthcare focusing on care becoming even more accessible to patients within their communities and homes,

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hope that this idea resonates and results in breaking a lot of old presumptions that we've been holding on to.

One clear way we can innovate in healthcare is to reach outside of our field and collaborate with innovators from completely different areas of industry. For example, how might a clothing company designer approach personal protective equipment design? Or what if the head of a transport company were in charge of the vaccination programme? How would they run it differently from us? How about inviting a video game designer who started moving into the augmented reality field to use all the equipment they have – their head-phones, goggles – to see if they can design a better experience for our patients?

In the future, we need to challenge ourselves to look outside of the box and bring imagination and new mindsets into healthcare, allowing us to break free of some traditions and improve our overall care. I think that would be a good thing.

Has COVID-19 improved (or will it improve) Singapore's healthcare delivery or made the system worse?

That's a question for the minister, not for me! But I hope that through this pandemic we have learned to be more versatile as a healthcare system and as such, are able to utilise the best of the new normal while retaining some of the best of the old normal. This pandemic has thrown a spotlight on the cracks in our system and hopefully, in the new normal, there will be more appreciation for healthcare workers and a society that's more considerate of all sectors, ensuring that we don't just look after our own immediate community, but also those who are on the fringes, and those likely to be left

so that we can remain connected, wherever and whoever we are.

Conflict of Interest

None. ■

