

Healthcare sector must embrace technology to address future needs

Transforming healthcare towards the future

LOKE WAI CHIONG

Unsurprisingly, healthcare has been identified by the Committee on the Future Economy (CFE) to be a key growth cluster in areas of scalable technology, wearables and solutions in predictive analytics and disease prevention, and has been earmarked for an Industry Transformation Map (ITM).

For healthcare in Singapore, similar to other developed and emerging economies, the pressure to ensure accessibility, affordability, quality and sustainability, while leveraging technology if possible, will be as great, if not greater, in the coming year.

This will likely be reflected in today's Budget 2017 announcement.

As healthcare moves into the future, the quest for quality and affordability continues to be the key driver for transformation.

There are four shifts in the global arena which could directly support this move, perhaps even changing the way we think about these issues.

WELLNESS FOCUS

Traditional healthcare is often said to be more "disease-care" than "healthcare", with healthcare systems focusing on caring for the sick, expanding and improving infrastructure, and figuring out long-term financing for healthcare in an ageing population.

Increasingly, both medical science as well as consumers are recognising that prevention is better than cure, especially for chronic diseases.

In Singapore, this is evident from the momentum and traction that various programmes – such as War on Diabetes and National Steps Challenge, launched by the Health Ministry and Health Promotion Board respectively – have been gaining.

There has also been a plethora of health and wellness apps – from nutrition apps to fitness trackers monitored by wearable sensors – that support this shift.

Such technology not only

monitors and offers insights on a person's physiological status, but also recommends nearby healthy eateries and food selections, fitness-related events as well as exercise facilities.

This places personal health and preventative care rightfully back into the individual's hands, shifting the outcome towards a more active and healthier community.

AUTOMATION AND SCALE

When it comes to technology adoption, parts of the healthcare industry lag far behind other industries such as banking and consumer businesses.

Those businesses have gone digital and virtual, providing greater access and convenience in terms of transactions, record-keeping and payments.

Healthcare's resistance to transform is likely bolstered by concerns about patient data privacy, a dependence on highly specialised skills, professional ethics and a traditional emphasis on the human touch in the practice of medicine.

But, signs of disruption away from traditional face-to-face interactions are already apparent.

In Singapore, all hospitals have gone digital to a large extent, and the Government is encouraging nursing homes and GP (general practitioner) clinics across the island to follow suit.

With an Electronic Medical Record system, real-time Integrated Health Information Systems and an automated in-patient pharmacy already implemented, the next step for hospitals will be widespread telehealth services for discharged patients and the elderly in the community.

Robotics customised for the healing environment can improve patient care while relieving manpower shortages, and provide a better working environment.

With everything including life-support systems hyper-connected in the Internet of Things (IoT), cybersecurity will become of utmost importance.

ASSET-LIGHT APPROACH

Even though the Singapore Government is building up essential infrastructure to cater for a rapidly ageing population, the future of healthcare for the elderly must be predominantly community-based or home-based.

The Healthcare Manpower Plan 2020 focuses on improving family medicine clinics, community facilities and senior care centres to enable seniors to age-in-place, and on making home care more accessible and affordable.

Creating a tech-driven healthcare delivery model has come into focus.

The SMU-TCS iCity Lab is test-running the SHINEseniors project, equipping homes with sensors to provide a safe and comfortable environment through the use of IoT cloud platforms.

NEW MINDSETS

Even as many industries are downsizing, the healthcare industry seems constantly in need of more manpower.

With policies and support for mid-career shifters, such as the enhanced healthcare professional conversion programme and the Return to Nursing programme, the aim is to recruit 30,000 more healthcare professionals by 2020.

While manpower attrition continues to be an issue, retraining of mid-career shifters through scholarships and sponsorships to increase doctor training, together with research and development of new technology, seems to be the way forward.

In order to adapt to societal needs, modern healthcare professionals need to be well-educated in the management of technological capabilities and deliver patient-centric solutions.

The writer is Deloitte South-east Asia's healthcare sector leader. The views expressed are his own. This is an abridged version of the commentary which was published in The Business Times last Friday.