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ASIA EDITION

Singapore behind China, Saudi Arabia in use of AI to improve diagnostic accuracy

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Royal Philips, a global leader in health technology has recently released a new report which finds that Singapore's healthcare professionals are not yet leveraging Artificial Intelligence (AI) to its full potential for treatment and diagnosis.

Philips' annual Future Health Index (FHI) 2019 report titled 'Transforming healthcare experiences: Exploring the impact of digital health technology on healthcare professionals and patients' reveals that healthcare professionals in Singapore are using AI technology more for improving the accuracy and efficiency of administrative tasks such as staffing and patient scheduling (37%) than for diagnosis (28%), flagging patient anomalies (26%) and facilitating remote patient monitoring (25%).

According to the FHI 2019 report, it is emerging countries that are leading the way for AI use in diagnosis globally with nearly half (45%) of China's healthcare professionals, and more than a third in Saudi Arabia (34%), using AI technology to improve the accuracy of their diagnoses. For China, this follows significant investment in the field of AI, accounting for 60% of the total global investment between 2013 and Q1 2018.

Elsewhere in the region, India is not far behind Singapore in its healthcare professionals' use of AI for improving the accuracy of diagnosis (26%), but Australian healthcare professionals record the lowest use amongst the 15 countries in the study at just 8%.

The report also hints that apprehension amongst Singapore's healthcare professionals may be one of the barriers to wider adoption, with one in five (20%) admitting that they fear their long-term job security is threatened by new advancements in healthcare technology, such as AI and telehealth.

"By primarily using Artificial Intelligence for administrative tasks, like scheduling appointments, Singapore's healthcare professionals risk missing out on the enormous benefits it can bring to patient outcomes," said Caroline Clarke, CEO, Philips ASEAN Pacific. "Technology will never replace the 'human touch', but AI can save time and improve diagnosis accuracy thereby having a huge potential for saving peoples' lives."

The report reflects independent research, commissioned by Philips, of what is required to accelerate the shift from volume-based to value-based care in the global drive for sustainable healthcare systems.

Now in its fourth year, the report's researchers identified three additional key themes in Singapore:

1. Engaged and digitally enhanced healthcare professionals

Artificial Intelligence aside, the report highlights that Singapore consistently outperforms its Asia Pacific neighbour Australia and holds its own amongst additional Asian countries that were part of the study in terms of digital technology usage, with 89% of Singapore's healthcare professionals using digital health records in their hospital/practice, compared to 81% in Australia and China, and 76% in India.

More than four in five Singaporean healthcare professionals (86%) also share patient information electronically with other healthcare professionals that are inside their health facility, compared to 84% in Australia, 81% in China and 80% in India.

This adoption is thanks, in part, to Singapore's healthcare professionals recognizing the benefits that digital technology can have on patient outcomes and experience. Eighty percent

of Singaporean healthcare professionals that use digital health records report a positive impact on quality of care provided, whilst 69% report a positive impact on patient outcomes.

2. Empowered patients – access to data, more control

The study also indicates that giving patients access to their own health data has several benefits, with two in three Singaporean healthcare professionals (67%) affirming that patients having access to their own health data has positively impacted their experience in the last five years.

Despite this, only 28% of Singaporeans have access to their digital health record, whilst one in five (20%) do not know whether they do, or not. The study also highlights that reciprocal data sharing is not being done as much as it could be in Singapore either. More than half of Singaporean healthcare professionals often, or always, advise their patients to track key indicators of health such as their blood pressure (61%), physical activity (57%) and weight (53%). However, 43% of Singaporeans have never shared health data that they have collected from digital technology or mobile apps with healthcare professionals. Of people who have access to their DHR, 50% would be more likely to use it if they were clear about how it could make managing their health easier.

As a result, Singaporeans fall below the 15-country average (47%) in contacting healthcare professionals and taking action based on the health-related data they have collected (34%).

"It is encouraging to see that Singapore's healthcare professionals are recognizing the positive impact of digital health technology and reciprocal data sharing, but patients will need to be on board too for Singapore to really see the benefits," said Caroline Clarke. "More needs to be done to educate and encourage Singaporeans to proactively collect and share their health data on an ongoing basis. This will be key for Singapore to shift to disease prevention over cure in the long-term."

3. Learning from forerunners

The third theme of the FHI 2019 report finds that some emerging countries have leapfrogged Singapore in their adoption of certain types of digital health technology.

In addition to leading the way in AI, China and Saudi Arabia have higher rates of telehealth adoption by healthcare professionals at 89% and 75% respectively, compared to 68% in Singapore, 61% in Australia and 66% in India.

The report indicates that this could be due to higher patient demand in these countries, with 44% of individuals in China, and 38% of inidviduals in Saudi Arabia stating that, if given the choice, they would prefer a consultation with their doctor remotely via a digital channel for non-urgent care, compared to just 27% of Singaporeans.

A similar trend is seen in relation to reciprocal data sharing, with 81% of individuals in China and 74% in Saudi Arabia reporting that the information that they receive from their digital health technology and mobile apps frequently leads them to

contact healthcare professionals, compared to just 34% of Singaporeans who say the same.

“Singapore has enjoyed a reputation as a global leader in healthcare and needs to continue to prioritize the adoption of new technologies,” added Caroline Clarke. “Increasing not only the adoption, but also the usage, of digital health technology among Singaporean individuals could empower patients to adopt a more proactive attitude towards health management, ultimately improving healthcare outcomes.”