Virtual Care in Canada

CANADIAN **PARTNERSHIP**
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Appendix D: Virtual Care Around the Globe

With the general consensus being that adoption of Virtual Care in Canada lags behind other nations, it is worth understanding some of the virtual care initiatives and activities in other countries.

Australia

Video-conferencing remains one of the main ways in which telehealth is being used by people in Australia to access healthcare services when they live in rural and remote areas.[1]

While Australia is grappling with how to modify its current regulatory policies towards a broader understanding of what a telehealth consult looks like, limited and reliable broadband access remains a barrier to adoption of virtual health technologies in remote areas of Australia.[2]

China

China has seen an advancement in the merger of medicine and information technology. Healthcare and technology company Ping An Good Doctor has approximately 1,000 doctors who provide 370,000 online remote consultations per day, in cooperation with hospitals. By accumulating data from 300 million cases, and with the support of an AI-based diagnostic system, the company has been able to provide enormous amounts of medical consultations beyond what could ever be delivered at a conventional hospital.[3]

Ping An Good Doctor is developing an extensive network of unstaffed, artificial intelligence-powered clinics. There are plans to build hundreds of thousands of these clinics in China in the next three years. Each clinic, which is about the size of a traditional telephone booth, enables users to consult a virtual "AI doctor" that collects health-related data through text and voice interactions. After the AI consultation, the information gathered is reviewed by a human doctor who then provides the relevant diagnosis and prescription online. Customers can then buy their medicine from the smart drug-vending machine inside the clinic.

Ping An Good Doctor is the largest online healthcare platform in mainland China, with 228 million registered users and 48.6 million monthly active users as of June

30th, 2018.[4]

Denmark

The Danish health service is among the most digitalized in the world. There is complete digitalization of the most commonly-used requests (referrals, discharge letters and laboratory test results). The Shared Medication Record (Fælles Medicinkort) offers healthcare professionals access to a complete, up-to-date prescription-medicine overview for a patient across the entire health system. In addition, patient's medical records are viewable by clinicians across regions through The National Health Record (Sundhedsjournalen). This level of digitalization allows patients to choose which method of healthcare delivery is best suited to them, be it through digital platforms, apps, health portals, or through face-to-face interaction. General Practitioners in Denmark currently provide e-consultations, but the solutions vary from one doctor to another.

In its 2018-2022 digitalization strategy, Denmark states that it aims to develop its own "doctor in your pocket" app to meet functional needs in communication and cooperation between GPs and patients in an easy-to-grasp, user-friendly manner. It will be integrated with the GP's medical system and draw on security solutions from national registries. Expected launch date is 2018. Further, each month, 5.5 million digital messages are sent within the health system, including referrals and discharge summaries.[5]

Germany

In an attempt to focus efforts and optimize development and innovation of telemedicine solutions, the German government established the German Telemedicine Portal. The portal acts as a public database to showcase different approaches of using telehealth to create healthcare solutions. According to the government website, there is not a widespread application of telemedicine in Germany. That said, there is an extensive tele-stroke program throughout German hospitals.[6]

There are about 200 telemedicine projects currently active in Germany, where telemedicine is defined as the combination of telecommunication and information technologies to provide remote healthcare and other health-related services.[7]

Japan

Japan removed regulatory barriers to virtual healthcare in August 2015. Some doctors use telemedicine apps to connect with their patients. There are also telemedicine platforms, like Medley's Clinics, which enable patients to: make appointments with doctors which are contracted by the firm, seek medical consultations via video chat, and settle fees with credit cards.[8]

In the country, a government panel meets every two years to decide and review the price of every procedure

performed and medication prescribed using telemedicine. In April of 2018, Japan changed regulations to allow health insurance coverage for telemedicine. At the same time, the Health, Labour and Welfare Ministry unveiled its vision for developing and utilizing a healthcare database to support telemedicine applications for remote diagnosis, remote treatment and telesurgery in its proposal "The Japan Vision: Health Care 2035".[9]

Sweden

Sweden is often seen as a digitally mature country. Evidence of this maturation is seen in their use of mobile apps, including those Apps supporting health. According to a Price Waterhouse Cooper survey, 44% of persons in Sweden say that they have at least one app on their smartphone or tablet that relates to health, lifestyle or medicine. This proportion is clearly higher than in the US, where 28% own such an app, or in the UK where 25% have a health-related app on their smartphone or tablet.[10]

In Sweden at least 7 "Society Rooms" (formally called "Virtual Health Rooms") have been established to provide healthcare to people living in the sparsely populated region of Västerbotten. In the rooms, people can take their own medical tests and benefit from remote consultations with healthcare professionals. The rooms are also used by other stakeholders and organizations so that the rooms can be of benefit to more people.[11]

The United Kingdom

A 2014 report was published by the National Information Board in the United Kingdom, which introduced the idea that the public was already using technology in their lives, so why not harness that potential in health care.[12] The report states that 59% of all citizens in the UK have a smartphone and 84% of adults use the internet; however, when asked, only 2% of the population report any digitally enabled transaction with the National Health Service (NHS).[13] The report focused on the need to ensure that the use of technology and data is done safely and effectively, with the patient in mind.

By November of 2017, Babylon's GP at Hand, a product of the London-based company Babylon Health, was released. The free program, commissioned by the NHS, enables consumers to check their symptoms on a mobile app, then book a virtual visit with a physician at one of five participating clinics. Citizens must live or work within 40 minutes of one of those clinics to qualify for the clinic.

The service is very popular, with thousands of new registrants joining each month. Officials also note that 85 percent of the GP at Hand registrations seen since November 2017 are from people between 20 and 39 years old.[14]

Babylon's solution, and others in use around the UK, are not without detractors. While there are virtual care solutions in place for specific populations (e.g., renal patient telecare[15]), protests were staged

by GPs in London in 2018, accusing the GP at Hand service of "cherry-picking" the most profitable patients from the NHS, that is those without complex mental health or chronic issues. According to an article published for mHealthIntelligence, "the conflict highlights one of the enduring challenges to widespread acceptance of direct-to-consumer telehealth: Consumers are embracing the platform because it gives them access to on-demand care when and where they want it, but providers aren't embracing it because it often forces them to adapt workflows and change business strategies."[16]

The NHS Long Term Plan, published in January 2019, commits a 3.4% increase in budget to primary care, and part of the mandate for the delivery of that care is "making digital health services a mainstream part of the NHS"[17], so that patients across the country have consistent and equal access to online consults. It is worth watching how the UK manages the challenges of integrating virtual care, based on this commitment and their system's similarities with Canadian healthcare.

United States

Findings of Deloitte's 2018 US Health Care Consumers and Physician survey showed 90% of physicians saw benefits to virtual care, especially related to access to care, patient satisfaction and improved communication with care teams. However, only 14% of physicians

conducted virtual video visits, though use was higher among General Practitioners than specialists at 17% and 13% respectively. For patients, the survey found that 23% had a virtual visit with a doctor or nurse, and 57% of those who had not experienced a virtual visits were willing to try one.[18]

Health Systems in the United States are extremely active in the adoption and usage of virtual care solutions. The 2018 On-demand Virtual Care Benchmark Survey found that over 96% of health systems intended on further expanding their virtual care with real-time chat, video and asynchronous messaging capabilities.
[19]

Kaiser Permanente, the health system which manages the largest not-for-profit health plan in the United States, was already conducting 52% of its more than 100 million patient-physician encounters through smart phones, videoconferencing, kiosks and other technologies before the end of 2016.[20] In a letter to the New England Journal of Medicine, the health system published results of a study which analyzed 201,383 scheduled video visits between 2015 and 2017. Their results found that 93% of respondents said that their virtual visits met their needs. Three quarters of the visits were for medicine, pediatrics, dermatology, psychiatry or after hours calls. Of the primary care visits, 70% were with the patients' own general practitioners.[21]

Kaiser Permanente's CEO Bernard Tyson attributes the success of its virtual care

program to the aggressive spending on information technology. The health system spends about 25% of its $3.8 billion annual capital budget on information technology.[22]

Other large hospital networks are also showing significant virtual care usage. Cleveland Clinic, which completes 33 thousand outpatient visits a day, conducted 25,503 virtual visits in 2017. By 2018, that number grew to 42,976, an increase of 68.5%.[23]

Specific to cancer care, The Veterans Affairs (VA) Pittsburgh Healthcare System Virtual Cancer Care Networks was launched in January 2018. The clinical video telehealth (CVT) clinic allows veterans from central Pennsylvania to receive their anti-cancer therapy at the VA in Altoona, Pennsylvania, where the oncology pharmacy, nursing, telehealth and supportive oncology staff are onsite. Patients continue to follow up regularly during treatment via CVT visits with their oncologist, located 93 miles away at the VA in Pittsburgh. There was a total of 89 visits to the Virtual Cancer Care Network in Altoona for 27 patients from January 2018 to May 2018. Total commuting distance averted was 14,828 miles, total commute time saved for patients was 247 hours, and total mileage costs saved were $7,414 USD. Appointment compliance was 100%.[24]

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