# **Digital Mental** Healthcare in Canada

## **Progress and Considerations**

Ava Homiar & Adrienne Davidson

### An introduction to digital mental health tools and services

In Canada, during any given year, 1 in 5 people will experience some form of mental illness (Canadian Mental Health Association, 2021). Mental illness is a broad term for all diagnosable mental health disorders, which can vastly differ in terms of symptoms, severity, and duration (American Psychiatric Association, 2022). COVID-19 has greatly contributed to the prevalence of mental health disorders among Canadians due to the compounding impacts of social isolation, fears of infection, and stresses surrounding work, family, and community engagement (Government of Canada, 2021). According to a Spring 2021 survey, one in four Canadians aged 18 and older screened positive for symptoms of depression. anxiety, or posttraumatic stress disorder. Of those individuals, 94 percent reported being negatively impacted by the pandemic due to feelings of loneliness or isolation, physical health problems, and challenges in personal relationships (Government of Canada, 2021). At the same time, the spread of COVID-19 and measures to mitigate transmission meant that many healthcare providers were forced to move virtually, with more patients and professionals becoming familiar with digital mental health (DMH) services (Lattie et al., 2022). While trends prior to 2020 show a gradual uptake of DMH services, it is evident that the pandemic accelerated the use of these tools, which include online and/or mobile mental health platforms and telemental health services (Lattie et al., 2022). However, as a result of its growing popularity, patients and carers have reported difficulties in using these tools while healthcare providers have faced barriers in providing services - collectively limiting the widespread uptake of DMH services (Richardson et al., 2020).



In this first post, we will introduce DMH services and e-mental health tools that have been utilized since the beginning of the pandemic. Further, we consider public attitudes toward the shift to virtual mental healthcare and the quality of care patients receive.

#### **Key terminology**

**Mental health** includes a person's emotional, psychological, and social well-being. Our mental health affects how we think, feel and act (Centres for Disease Control and Prevention, 2021).

Mental health services are comprised of treatments and supports for individuals to receive help with their mental health. These services include case management, counselling, and support groups (Hamilton Niagara Haldimand Brant Healthline, 2022).

**Digital mental health (DMH)** technology refers to any application of digital health technology for mental health assessment, support, prevention, and treatment (Wies et al., 2021). This technological cluster includes mobile health (mHealth) applications, wearables, consumer neurotechnologies, virtual reality systems, online platforms, care coordination systems, and various assisted living ecosystems (Wies et al., 2021).

Digital mental health (DMH) tools and services consist of support delivered through online or digital platforms for symptom prevention and treatment of mental health conditions (Shen, Kassam, Chen, et al., 2022). These services offer an alternative to traditionally delivered mental health interventions, which include in-person interactions that may not be as accessible to various populations (Lattie et al., 2022; Pratap et al., 2022). DMH services include programmes that deliver psychological strategies and interventions through online and/or mobile platforms, as well as telehealth services, which are mental healthcare services delivered synchronously via a telephone or video conference-based connection (Lattie et al., 2022). Tele-mental health services include telecommunications, digital imaging, and healthcare monitoring devices (Mazziotti & Rutigliano, 2021).

#### The virtual care shift during COVID-19

Prior to the COVID-19 pandemic, the Canadian mental healthcare system was already unable to meet the increasing need for services as a result of limited financial resources, professional shortages, lack of access to care, and a growing population (Shen, Kassam, Chen, et al., 2022). The COVID-19 pandemic exacerbated this issue and grew the disparity between need and access to mental healthcare (Shen, Kassam, Chen, et al., 2022). A survey by the Canadian Mental Health Association (CMHA) indicated that one in four people (24 percent) sought help for mental health challenges in 2021, an increase from 9 percent in Spring 2020 (Canadian Mental Health Association, 2022).



engagementinhealthpolicy.ca

The COVID-19 pandemic accelerated the move of current healthcare practices service delivery, individual treatment, counseling and harm reduction - into digital spaces. In particular, there has been an increased uptake in telehealth solutions for many healthcare sectors, allowing practitioners to treat patients safely at home. According to Canada Health Infoway, rates of virtual care use rose from 10-20 percent in 2019 to 60 percent of all healthcare visits across provider categories in April 2020 (Canadian Medical Association, 2022; McMahon, 1997). In the face of strict health and safety protocols, the number of physicians providing virtual and telehealth services and having experience with remote healthcare provision also increased. As of September 2020, 83 percent of physicians reported having provided at least one virtual service which include phone consultations, videoconference appointments, website and apps, online prescription renewals, and online support groups (Canadian Centre on Substance Use and Addiction, 2022). Among healthcare providers that integrated digital services, primary care and psychiatric care physicians experienced the largest increase in virtual visits during the pandemic (Fu et al., 2022). COVID-19 served as a catalyst to accelerate the deployment of virtual services, enabling Canadians to access the care that they need (Public Health Agency of Canada, 2021).

#### **Funding DMH care**

There are early signals of the future of Canadian healthcare maintaining a demand for virtual care and other digital health services. It is estimated that digital health spending will more than double by 2030 for the healthcare industry as a whole (PricewaterhouseCoopers, 2022). Health Canada has already included digital healthcare delivery in their 2022/2023 departmental plan, with aims to partner with provinces and territories to support the expansion of digital tools and virtual healthcare services across the country. Health Canada has also announced plans to provide more than \$47 million in funding to Canada Health Infoway to advance digital health innovation, including virtual care initiatives (Health Canada, 2022b).

For mental healthcare specifically, we have already seen these changes taking place; the Government of Canada announced an investment of \$240.5 million at the start of the pandemic to develop and expand virtual care and mental health tools to support Canadians (Government of Canada, 2020). Currently, the Government of Canada is continuing to improve digital access to mental health resources with their launch of Wellness Together Canada (WTC), an online platform with over 2 million users that provides access to a virtual network of mental health and substance use supports (Health Canada, 2022a). In their 2022 budget, the Government of Ontario outlined plans to invest \$204 million to continue expanding and improving mental health services, committing \$15 million over three years to support enterprises to develop digital technologies to improve the diagnosis and treatment of diseases (Ministry of Finance, 2022). In addition to pan-Canadian initiatives for digital mental healthcare, the Centre for Addiction and Mental Health (CAMH) strategic plan for 2020-2023 describes digital mental health innovation plans to provide patients with in-person and virtual care, and a plan to move toward a virtual hospital, where "care follows the patient" and is accessible online (Centre for Addiction and Mental Health, 2020).



#### **Users of DMH tools/services**

Digital mental health usage is continuing to gain popularity. A 2021 Canada Infoway survey revealed that 51 percent of respondents said that they were interested in accessing electronically-enabled health services to support them with mental health issues. While patients are large consumers of DMH services, there are various diverse populations that also use these tools as a part of their health plan, or for personal use. Common groups that access and use DMH services include:

- Seekers: Individuals who have not been formally diagnosed with a mental health condition, but are seeking help through DMH tools (Shen, Kassam, Chen, et al., 2022);
- Patients: Individuals who have been diagnosed with mental illness and are being cared for by a general practitioner may be using DMH interventions and tools as a part of their care plan (Shen, Kassam, Chen, et al., 2022);
- Healthcare providers: Those who deliver care to the patients and participants may also use DMH tools for prevention/detection purposes, and to monitor patient health (Shen, Kassam, Chen, et al., 2022); and
- Care partners: Support persons who assist in the safety and well-being of a patient (Waypoint Centre, 2021). Care partners use these tools in the same way the practitioners do in order to provide their patient with support during their care plan (Shen, Kassam, Chen, et al., 2022).

#### Public attitudes towards DMH services

Current research has shown that the use of DMH services has resulted in varying levels of satisfaction. A 2021 survey of persons (seekers, patients, care partners) affected by mental health disorders found that around 70 percent of participants routinely used DMH services, but only around 29 percent of participants were satisfied with the available supports (Shen, Kassam, Chen, et al., 2022). However, satisfaction appears to be driven in large part by access. In the study, proportionately more patients and care partners expressed satisfaction than did "seekers", indicating that there may be differences in target populations for these DMH services which need to be addressed. As noted in a 2022 survey, despite a general level of satisfaction and comfort meeting a healthcare provider virtually, two-thirds of respondents felt more comfortable meeting their healthcare provider in-person and agreed that they preferred in-person office or clinic settings for appointments (Canadian Centre on Substance Use and Addiction, 2022). While DMH use is on the rise and has been integrated into a majority of care plans for clients, overall satisfaction and attitudes seem to vary by population groups indicating that the current selection of tools used may benefit some groups more than others.

Individuals who currently use DMH services also have various priorities which influence how they integrate these tools into their daily lives or broader care plan. A 2021 CAMH survey concluded that the top characteristics positively impacting respondents to test out new digital supports included affordability,



trustworthiness, healthcare provider recommendation, content-relevance, and whether it was evidence-based (Shen, Kassam, Chen, et al., 2022). A similar survey revealed that respondents prioritized initiatives that helped individuals choose the DMH tools best suited for them, that support navigation through the healthcare system, that provide digital access and control to providers, and facilitate the integration of DMH tools into their care plan (Shen, Kassam, Boparai, et al., 2022).

While most DMH tools are considered through the patient's lens, other stakeholders shape the use and quality of DMH care. For example, practitioners have also had mixed feelings about virtual care provision for their patients. While healthcare providers believe that there are benefits to both in-person and DMH care, neither can, or should, be used on their own (Canadian Centre on Substance Use and Addiction, 2022). As a result of differing client preferences and abilities, most practitioners would like to offer both virtual and in-person mental health care post-pandemic (Canadian Centre on Substance Use and Addiction, 2022).

#### **Next steps**

There are still several questions of how virtual mental health care and DMH tools will be provided in the coming years, and how the growth of these services may transform current healthcare policies, as well as pan-Canadian practices. While patients and practitioners are optimistic about the further use of e-mental health resources, the varying target population for these services poses a challenge to the curation of tools that are accessible to a wider population.

In the next blog post, we will explore various barriers to accessing DMH tools that may prevent individuals and certain populations from receiving these supports in a virtual sphere.

\*\*\*

Ava Homiar is a BSc student in the Honours Life Science Co-Op program at McMaster University and a 2022 research fellow with the Public Engagement in Health Policy Project. Her research interests include developing people-centred AI and digital technology-enabled solutions for the monitoring and treatment of symptoms in individuals living with mental illness. She is also interested in assessing patients' ability and motivation to engage in digital healthcare/research. Ava works at the Centre for Addiction and Mental Health in Toronto where she is involved in assessing the clinical utility of artificial intelligence and technology in the digital mental health field.

**Adrienne Davidson** is an Assistant Professor of Political Science, specializing in comparative public policy and Canadian politics. Her work focuses on the political dynamics of federal systems, investigating the conditions that favour periods of significant policy change. Her research also explores the relationship between political institutions and group identity, including the ways in which institutions shape, reinforce, or undermine minority nations (including Indigenous nations) in

federal systems. Her work has spanned questions of regionalism, Indigenous politics, environmental policy and child care policy.

\*\*\*

This essay was prepared by members of the Public Engagement in Health Policy team, which is supported by the Future of Canada Project at McMaster University. Please visit www.engagementinhealthpolicy.ca for further research outputs and resources, including future work focused on Black community-led engagement in health policy.

#### References

- American Psychiatric Association. (2022, November). What is mental illness? Psychiatry.org - What is mental illness? Retrieved January 12, 2023, from https://psychiatry.org/patients-families/what-is-mental-illness
- Canadian Centre on Substance Use and Addiction. (2022, March). Client and practitioner experiences and perceptions of virtual services and supports for substance use or concurrent disorders during the COVID-19 pandemic [report]. Canadian Centre on Substance Use and Addiction. Retrieved September 4, 2022, from https://www.ccsa.ca/client-and-practitionerexperiences-and-perceptions-virtual-services-and-supports-substance-useor
- Canadian Medical Association. (2022, February 6). Virtual Care in Canada: progress and potential. Report of the Virtual Care Task Force. Virtual care in Canada: Progress and potential, report of the Virtual Care Task Force - CMA Policybase - Canadian Medical Association. Retrieved September 4, 2022, from https://policybase.cma.ca/link/policy14470
- Canadian Mental Health Association. (2021, July 19). Fast Facts about Mental Health and Mental Illness. CMHA National. https://cmha.ca/brochure/fastfacts-about-mental-illness/
- Canadian Mental Health Association. (2022, February 7). 1 in 4 Ontarians access mental health help – the highest rate during the pandemic. CMHA Ontario. Retrieved October 12, 2022, from <a href="https://ontario.cmha.ca/news/1-in-4-">https://ontario.cmha.ca/news/1-in-4-</a> ontarians-access-mental-health-help-the-highest-rate-during-the-pandemic/
- Centre for Addiction and Mental Health. (2020, June). One CAMH: Strategic plan 2020-2023. CAMH. Retrieved September 6, 2022, from https://www.camh.ca/en/driving-change/about-camh/one-camh-strategicplan-2020-2023
- Centers for Disease Control and Prevention. (2021, June 28). About mental health. Centers for Disease Control and Prevention. Retrieved October 13, 2022, from https://www.cdc.gov/mentalhealth/learn/index.htm



- Fu, R., Sutradhar, R., Li, Q., & Eskander, A. (2022). Virtual and in-person visits by Ontario physicians in the COVID-19 era. Journal of Telemedicine and Telecare, 1357633X221086447
- Government of Canada. (2020, May 3). Prime Minister announces virtual care and mental health tools for Canadians. Prime Minister of Canada. Retrieved September 6, 2022, from <a href="https://pm.gc.ca/en">https://pm.gc.ca/en</a>
- Government of Canada. (2021, September 27). Survey on COVID-19 and Mental Health, February to may 2021. <a href="https://www150.statcan.gc.ca/n1/daily-quotidien/210927/dq210927a-eng.htm">https://www150.statcan.gc.ca/n1/daily-quotidien/210927/dq210927a-eng.htm</a>
- Government of Canada. (2022, March 30). Enhancing equitable access to virtual care in Canada: Principle-based recommendations for equity. Canada.ca. Retrieved September 6, 2022, from <a href="https://www.canada.ca/en/health-canada/corporate/transparency/health-agreements/bilateral-agreement-pan-canadian-virtual-care-priorities-covid-19/enhancing-access-principle-based-recommendations-equity.html">https://www.canada.ca/en/health-canada/corporate/transparency/health-agreements/bilateral-agreement-pan-canadian-virtual-care-priorities-covid-19/enhancing-access-principle-based-recommendations-equity.html</a>
- Hamilton Niagara Haldimand Brant Healthline. (2022). Community Mental Health Programs Hamilton Niagara Haldimand Brant. Retrieved October 9, 2022, from <a href="https://www.hnhbhealthline.ca/listServicesDetailed.aspx?id=10237">https://www.hnhbhealthline.ca/listServicesDetailed.aspx?id=10237</a>
- Health Canada. (2022a, January 14). Government of Canada improves digital access to mental health and substance use resources during the COVID-19 pandemic. Government of Canada. <a href="https://www.canada.ca/en/health-canada/news/2022/01/government-of-canada-improves-digital-access-to-mental-health-and-substance-use-resources-during-the-covid-19-pandemic.html">https://www.canada.ca/en/health-canada/news/2022/01/government-of-canada-improves-digital-access-to-mental-health-and-substance-use-resources-during-the-covid-19-pandemic.html</a>
- Health Canada. (2022b, March 3). 2022–23 Departmental Plan: Health Canada. <a href="https://www.canada.ca/en/health-canada/corporate/transparency/corporate-management-reporting/report-plans-priorities/2022-2023-report-plans-priorities.html">https://www.canada.ca/en/health-canada.ca/en/health-canada.ca/en/health-canada.ca/en/health-canada.ca/en/health-canada/corporate/transparency/corporate-management-reporting/report-plans-priorities/2022-2023-report-plans-priorities.html</a>
- Lattie, E. G., Stiles-Shields, C., & Graham, A. K. (2022). An overview of and recommendations for more accessible digital mental health services. Nature Reviews Psychology, 1(2), 87–100
- Mazziotti, R., & Rutigliano, G. (2021). Tele-Mental Health for Reaching Out to Patients in a Time of Pandemic: Provider Survey and Meta-analysis of Patient Satisfaction. JMIR Mental Health, 8(7), e26187
- McMahon, B. (1997). Virtual care. Nursing Standard: Official Newspaper of the Royal College of Nursing, 11(52), 20–20



- Ministry of Finance. (2022, April 28). Chapter 1, section E: A plan to stay open. 2022 Ontario Budget | Chapter 1E. Retrieved October 13, 2022, from <a href="https://budget.ontario.ca/2022/chapter-1e.html">https://budget.ontario.ca/2022/chapter-1e.html</a>
- Pratap, A., Homiar, A., Waninger, L., Herd, C., Suver, C., Volponi, J., Anguera, J. A., & Areán, P. (2022). Real-world behavioral dataset from two fully remote smartphone-based randomized clinical trials for depression. Scientific Data, 9(1), 522
- PricewaterhouseCoopers. (2022). The digital disruptors changing health care in Canada. PwC. Retrieved September 6, 2022, from <a href="https://www.pwc.com/ca/en/industries/technology/digital-disruptors-changing-health-care-in-canada.html">https://www.pwc.com/ca/en/industries/technology/digital-disruptors-changing-health-care-in-canada.html</a>
- Richardson, C. G., Slemon, A., Gadermann, A., McAuliffe, C., Thomson, K., Daly, Z., Salway, T., Currie, L. M., David, A., & Jenkins, E. (2020). Use of Asynchronous Virtual Mental Health Resources for COVID-19 Pandemic-Related Stress Among the General Population in Canada: Cross-Sectional Survey Study. Journal of Medical Internet Research, 22(12), e24868
- Shen, N., Kassam, I., Boparai, N., Ma, C., Chen, S., Jankowicz, D., & Strudwick, G. (2022). Planning for the Future of Digital Mental Health in Canada: Priorities of Canadians Affected by Mental Health Conditions. Studies in Health Technology and Informatics, 290, 1114–1115
- Shen, N., Kassam, I., Chen, S., Ma, C., Wang, W., Boparai, N., Jankowicz, D., & Strudwick, G. (2022). Canadian perspectives of digital mental health supports: Findings from a national survey conducted during the COVID-19 pandemic. Digital Health, 8, 20552076221102253
- Waypoint Centre. (2021). Care partners. Waypoint Centre for Mental Healthcare. Retrieved October 9, 2022, from <a href="https://www.waypointcentre.ca/patients\_families/care\_partners">https://www.waypointcentre.ca/patients\_families/care\_partners</a>
- Wies, B., Landers, C., & Ienca, M. (2021). Digital Mental Health for Young People: A Scoping Review of Ethical Promises and Challenges. Frontiers in Digital Health, 3, 697072.