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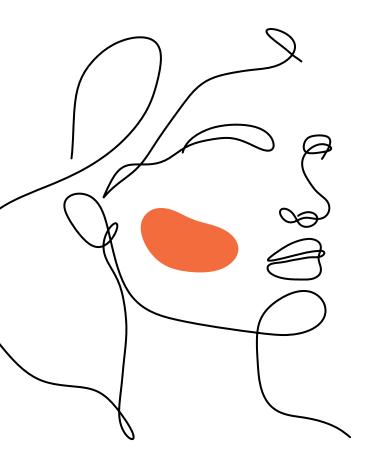
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Executive Summary

Founded in 2007, the Mental Health Commission of Canada (MHCC) is a non-profit organization that leads the development and dissemination of programs and resources to support the mental health of all people living in Canada. Through its unique mandate from the Government of Canada, the MHCC works with federal, provincial, and territorial governments, as well as other organizations, to develop and implement public policy that strengthens mental health initiatives in a wide range of priority areas.



In Changing Directions, Changing Lives: The Mental Health Strategy for Canada, published in 2012, the MHCC noted "the emerging world of e-health offers new opportunities for interaction and engagement between people who need services and providers" and looked ahead to the "tremendous possibilities for new technology in promoting mental health and preventing mental health problems."

Twelve years later, the use of technology is transforming the way people in Canada receive health care in new and exciting ways and is revolutionizing the delivery of mental health services. By using their smartphones, social media, and gaming, people accessing care are becoming empowered to make informed decisions about how they manage their physical and mental health, and service providers are able to deliver cost-effective and innovative care more promptly and efficiently across vast distances.

The increased adoption and use of e-mental health (e-MH) technologies and resources has been supported by the growing ubiquity of access to the internet and the development and increased availability of a variety of digital solutions, including mobile and web-based apps, digitally delivered interactions with clients via video calls and chats, chatbots, and devices that assess and monitor health.

The COVID-19 pandemic played a significant role in prompting increased use of telehealth approaches and digital solutions in delivering services. Not only did it create new mental health needs by intensifying stress and anxiety among many people living in Canada, it also disrupted the traditional delivery mechanisms of health care and mental health services. Service providers and people accessing care quickly took up the use of online platforms as an alternative.

Integrated properly and seamlessly into health-care delivery, e-MH services are proving to be just as effective as face-to-face services and the technology is improving every day.¹ Not only will this result in more people getting help faster, it will also improve the quality of care, reduce costs, and overcome challenges that are present in the current health-care system. All of this will result in improved mental health for people living in Canada.

Despite the significant strides made in the adoption and use of e-MH services in Canada, some major challenges remain, and that is what prompted the development of this strategy and this report. Given the sheer number of e-MH solutions and applications that are now available, both service providers and consumers find it extremely difficult to assess which of these options meet clinical

or usability standards; in other words, are they culturally sensitive, do they serve the needs they claim to, and are they effective? Are there risks associated with using them, and have these risks been clearly explained and assessed?

In addition, widespread concerns² have been raised by practitioners, academic researchers,³ and consumers about the security and safety of many of these options, relating to the privacy and potential data-sharing implications of unregulated applications. Should there be standards that govern the safety and security of consumer data when these e-MH solutions are used?

In response to the burgeoning use of e-MH resources in Canada and in light of the challenges faced in their adoption, the MHCC initiated a national consultation among leaders, practitioners, and user representatives with lived and living experience involved in e-MH at all levels. Specific activities in this consultation included a broad environmental scan, a review of international experience, a literature review, and a series of interviews with a group of international and Canadian experts. The purpose was to identify the priority issues and recommendations that a national strategy should address.

¹ Titov, N., et al, 2010; Robinson, E., et al, 2010; Andrews, G., et al, 2010; Christensen, H., et al, 2011. E-Mental Health in Canada: transforming the mental health system using technology, (2014). Ottawa, ON: Mental Health Commission of Canada. P 1, Paragraph 5. Retrieved from:

https://mentalhealthcommission.ca/resource/e-mental-health-in-canada-transforming-the-mental-health-system-using-technology-a-briefing-document/

² Steindl, E. (2023). Safeguarding privacy and efficacy in e-mental health: policy options in the EU and Australia. International Data Privacy Law, 13(3), 207-224. https://academic.oup.com/idpl/article/13/3/207/7208850?login=false

³ Lustgarten, S. D., Garrison, Y. L., Sinnard, M. T., & Flynn, A. W. (2020). Digital privacy in mental healthcare: current issues and recommendations for technology use. Current Opinions in Psychology, 36, 25–31. https://pubmed.ncbi.nlm.nih.gov/32361651/



The development of these priorities and recommendations was overseen by an advisory committee and the MHCC's e-Mental Health Collaborative, who played a key role in providing input on the content of this document. (See Appendix 1 for an overview of the consultative process). This combination of experts in e-MH in Canada and abroad called for the development of a "guiding star" document to highlight priorities for guidance in charting the future direction and development of e-MH in Canada. Many of the priority issues and recommendations are interrelated and interconnected.

Collaborators identified the following priority⁴ issues to be addressed in planning and implementing the future course of e-MH services in Canada:

- **Priority 1**: Improve perception, awareness, and engagement in e-MH.
- **Priority 2**: Develop resources for evaluating the effectiveness of e-MH solutions and programs.
- **Priority 3:** Address the quality of e-MH solutions and services, including privacy and data protection concerns.
- **Priority 4:** Reduce barriers and address system challenges to e-MH solution adoption.
- Priority 5: Embed IDEA (inclusion, diversity, equity, and accessibility) principles in all e-MH development, tools, and delivery.
- **Priority 6:** Support the mental health workforce to integrate e-MH into their practice.

⁴ Priority issues are in no specific order.

The experts consulted on this strategy identified the following recommendations⁵ to address the challenges and issues described in the priority areas:

- **Recommendation 1**: Advance the development and promotion of a readiness assessment tool for service providers.
- **Recommendation 2:** Develop and launch comprehensive e-MH training for the mental health workforce.
- **Recommendation 3:** Advance and promote a best-practice guideline for using e-MH tools.
- **Recommendation 4:** Increase safety with the use of artificial intelligence in mental health care.
- **Recommendation 5:** Develop a national mental health app library.
- Recommendation 6: Establish a champions network.
- Recommendation 7: Develop a navigation site and public awareness campaign for quality e-MH solutions.
- Recommendation 8: Leverage e-MH to support the continued utilization of interdisciplinary health-care teams, including mental health professionals.
- Recommendation 9: Consider the role of e-MH in Canada's high-speed bandwidth initiatives.
- **Recommendation 10:** Invest in the development of e-MH solutions for a spectrum of intensity of services.
- **Recommendation 11:** Allow for e-MH solutions in all funding models for provincial and territorial health systems.
- Recommendation 12: Advance interoperability of mental health data between providers and personal data ownership.

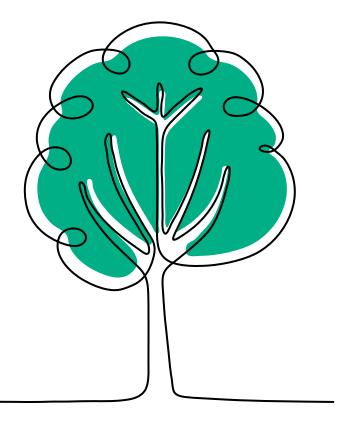
It is the MHCC's hope that the priority issues and recommendations presented in this strategy will provide a blueprint for the future development and adoption of e-MH in Canada. Governments and mental health organizations can use the strategy in shaping their next steps and strategic plans around e-MH. They can also use it to set their own priorities, as a guide for investing in infrastructure to support e-MH, and as a lever for seeking additional resources for e-MH.



5 Recommendations are in no specific order.

Background

The Mental Health Commission of Canada (MHCC) has a mandate to help transform the mental health care system. In 2012, the MHCC published *Changing Directions*, *Changing Lives*: The Mental Health Strategy for Canada. The strategy drew on the experience, knowledge, and wisdom of thousands of people across the country and provided an opportunity to bring efforts — large and small — together to co-create a mental health care system that can truly meet the needs of people of all ages living with mental health concerns and illnesses in Canada. It put forward a vision and broad goals for transforming the Canadian mental health care system through 26 priorities and 109 recommendations for action, grouped under six strategic directions.



Changing Directions, Changing Lives foresaw "tremendous possibilities for new technology in promoting mental health and preventing mental health problems." The strategy acknowledged that "technology makes collaboration easier and can be a remarkable tool for supporting self-management, especially for younger people, who use the internet in every aspect of their lives. The emerging world of e-health offers new opportunities for interaction and engagement between people who need services and providers."

To seize these possibilities, the strategy underlined the importance of using technology to foster collaboration, increase access to services, and engage people in managing their mental health concern or illness. It pointed to the importance of building better infrastructure, providing ongoing training and support, and creating greater flexibility in how services are funded.

⁶ Mental Health Commission of Canada. Changing directions, changing lives: the mental health strategy for Canada. https://mentalhealthcommission.ca/what-we-do/mental-health-strategy-for-canada/

⁷ Mental Health Commission of Canada. Changing directions, changing lives: the mental health strategy for Canada. p. 58. https://mentalhealthcommission.ca/what-we-do/mental-health-strategy-for-canada/

E-MENTAL HEALTH IN CONTEXT

One of the challenges when discussing e-mental health (e-MH) is agreeing on a definition. For the purposes of this strategy, the term e-MH refers to the delivery of mental health services and information through the internet and related technologies. It includes assessment for screening and monitoring, intervention, and social support through a variety of digital solutions, including mobile and web-based apps, digitally delivered interactions with clients via video calls and chats, chatbots, and devices for assessing and monitoring health.

While the MHCC acknowledges the importance of the development of digital interventions in the substance use health space, as well as the correlation between mental health and substance use health, this strategy will not substantively or explicitly address digital tools for substance use health. However, it is hoped that some of the recommendations in this strategy could also be applicable to and support the evolution of the digital space in substance use health care.

GROWTH IN E-MH TECHNOLOGIES

The COVID-19 pandemic had significant impacts on the mental health of people living in Canada. A late 2020 study by the Canadian Mental Health Association found that "the second wave of the pandemic has intensified feelings of stress and anxiety, causing alarming levels of despair, suicidal thoughts and hopelessness in the Canadian population." As the pandemic continued, disrupting traditional support networks and increasing individuals' social isolation, there were disproportionate impacts on the mental health of specific population groups — especially those that have been traditionally disadvantaged and vulnerable.

Statistics Canada's 2023 Mental Health and Access to Care Survey⁹ found that in 2022 "there were more than 5 million people in Canada who were experiencing significant symptoms of mental illness." Further, the survey found that "not all needs for counselling and psychotherapy services are met. There are often long wait times for community mental health counselling, as well as additional barriers to the affordability and accessibility of these services."

⁸ University of British Columbia Faculty of Medicine. (2020, December 3). New national survey finds Canadians' mental health eroding as pandemic continues. https://www.med.ubc.ca/news/new-national-survey-finds-canadians-mental-health-eroding-as-pandemic-continues/

⁹ Stephenson, E. (2023, September 26). Mental disorders and access to mental health care. Statistics Canada. https://www150.statcan.gc.ca/n1/pub/75-006-x/2023001/article/00011-eng.htm

One of the outcomes of the pandemic period was the increased use of telehealth approaches — the delivery of medical care and information using telecommunications technologies. As physicians' offices and hospital emergency departments closed or curtailed visits because of pandemic restrictions, health-care professionals and people accessing care quickly embraced the delivery of medical care using online platforms. A 2021 Canada Health Infoway survey found that 90 per cent of respondents living in Canada were satisfied with the virtual care they received, and 91 per cent of those who had virtual visits believed it saved them time and money.¹⁰ In its Canadian Digital Health Survey 2021: What Canadians Think, 11 Canada Health Infoway found that 73 per cent of respondents said that e-MH technologies had helped them to deal with a moment of crisis or distress that would have resulted in physical harm or suicide. Sixty-three per cent said they would not have sought care if virtual options had not been available.

The increased use of e-MH solutions and resources has also been facilitated by the rapid expansion of the development and availability of mobile and web-based mental health applications in recent years. According to the American Psychological Association in 2021, more than 20,000 mental health apps are now available on the market. A recent *Market Analysis Report* by Grand View Research found that "the global mental health apps market size was estimated at USD 6.2 billion in 2023 and is expected to grow at a CAGR [compound annual growth rate] of 15.2% from 2024 to 2030."¹³

In light of these developments and forecasts, it appears that the use of e-MH approaches and digital tools will continue to grow in Canada. Many governments and voluntary mental health organizations have developed web-based links to digital mental health resources and tools, 14, 15, 16 and hundreds of mental health apps are now being widely used. Owing to the ubiquity of the internet in Canada, people living in this country have access to technologies from all over the world, including those developed and deployed in Canada.

¹⁰ Canada Health Infoway. Creating a more accessible and sustainable health system. https://www.infoway-inforoute.ca/en/digital-health-initiatives/virtual-care

¹¹ Canada Health Infoway. (2021, November). Canadian Digital Health Survey 2021: what Canadians think. https://www.infoway-inforoute.ca/en/component/edocman/4011-canadian-digital-health-survey-2021-what-canadians-think/view-document?Itemid=101

¹² Clay, R. A. (2021, January 1). Mental health apps are gaining traction. American Psychological Association. https://www.apa.org/monitor/2021/01/trends-mental-health-apps

¹³ Grand View Research. Market analysis report. Mental health apps market size and trends. https://www.grandviewresearch.com/industry-analysis/mental-health-apps-market-report

 $^{14 \}quad CAMH.\ Apps\ for\ mental\ health.\ \underline{https://www.camh.ca/en/health-info/mental-health-and-covid-19/information-for-professionals/apps-for-mental-health-and-covid-19/information-for-professionals/apps-for-mental-health-and-covid-19/information-for-professionals/apps-for-mental-health-and-covid-19/information-for-professionals/apps-for-mental-health-and-covid-19/information-for-professionals/apps-for-mental-health-and-covid-19/information-for-professionals/apps-for-mental-health-and-covid-19/information-for-professionals/apps-for-mental-health-and-covid-19/information-for-professionals/apps-for-mental-health-and-covid-19/information-for-professionals/apps-for-mental-health-and-covid-19/information-for-professionals/apps-for-mental-health-and-covid-19/information-for-professionals/apps-for-mental-health-and-covid-19/information-for-professionals/apps-for-mental-health-and-covid-19/information-for-professionals/apps-for-mental-health-and-covid-19/information-for-professionals/apps-for-mental-health-and-covid-19/information-for-profession$

¹⁵ eMentalHealth.ca. Looking for a mental health app or website? (Updated 2023, May 20). https://www.ementalhealth.ca/Canada/Looking-for-a-mental-health-app-or-website/index.php?m=article&ID=52627

¹⁶ Alberta Health Services. Addiction and mental health mobile apps directory. (2024, January). https://www.albertahealthservices.ca/assets/info/res/mhr/if-res-mhr-kt-mobile-app-directory.pdf

THE VALUE OF E-MH

The advantages of using e-MH approaches are significant. As Ashley Hancock¹⁷ put it in a recent report from Vantage Market Research, "The adoption of mental health applications has been facilitated by a shift in healthcare trends, moving away from traditional treatment models and towards person-centered and personalized care." Meanwhile, Canada is struggling with a backlog of unmet need in mental health services including long wait-lists and issues with accessibility.¹⁸ The majority of those living in Canada with mental health needs do not have access to adequate supports and services. 19 While there are shortages of human resources that need to be addressed, more can be done to make better use of existing strengths at the individual, community, and system levels.

This is why e-MH is so important to the future of delivering mental health services. Using digital tools to deliver mental health services leads to cost reductions and more effective use of scarce resources because it complements conventional service delivery. For example, the use of telehealth services reduces costs and increases access to services for rural and remote communities. In reducing some of the need for direct attention from practitioners, e-MH approaches

present opportunities to maximize the efficiency of services. Not everyone requires the same type or potential level of care. Some individuals may not need high-intensity services, and an in-person visit with a practitioner; some might be able to self-manage their mental health through online services, such as mental health apps, peer support, an online chat room, or other lower intensity services. The addition of e-MH tools to the system means greater access in general to mental health supports and to a range of service types, increasing the person centredness of the system.



¹⁸ Canadian Institute for Health Information. (2023, November). Wait times for community mental health counselling. https://www.cihi.ca/en/indicators/waittimes-for-community-mental-health-counselling

¹⁹ Mental Health Research Canada. (2002, October). Key facts on mental health. https://www.mhrc.ca/key-facts-on-mental-health



In these ways, the use of e-MH alternatives can help meet some individuals' needs and remove them from the waitlist. Therefore, the use of e-MH approaches contributes to more efficient use of scarce professional resources and improves access to more intensive services for those who need them. The delivery of e-MH harnesses the reach of the internet to facilitate the dissemination of accurate information about mental health conditions and facilitates consumer empowerment by democratizing health care delivery.

An additional important feature of e-MH is that it facilitates virtual consultations and enables people accessing care to consult with professionals remotely, which reduces the barriers of cost, distance, and stigma that prevent people from accessing support. The use of e-MH technologies can also reduce perceived stigma by creating a safe space for those who are not comfortable seeking in-person mental health care, such as youth and members of some cultures. Not everyone feels comfortable with in-person care, and some people are looking for anonymity and assurance that they won't be judged.

Finally, it is important to recognize the potential for use of e-MH solutions to improve access to mental health services by alleviating pressure on the health-care system. As wait times lengthen for in-person services, e-MH options are available at any time of the day or night: a person can access peer support through an app at times when in-person services are not open. In the Northwest Territories, the Stepped Care 2.0 initiative introduced a mix of in-person and online services between 2020 and 2022; the result was a 79% reduction²⁰ in wait times for mental wellness and substance use health counselling.

Another important consideration is that e-MH services such as apps are usually less expensive than in-person services — for both the provider and the user — allowing for more efficient use of limited financial resources and creating the potential to reach more individuals in need of mental health support.

²⁰ Mental Health Commission of Canada, Stepped Care Solutions, & Government of Northwest Territories. (2023). Partnering together for person-and-family centric care: the Northwest Territories Stepped Care 2.0 final report. https://mentalhealthcommission.ca/wp-content/uploads/2023/06/MHCC_22-006_Partnering_Together_for_Person-and-Family_Centred_Care_EN_ACC-March2024.pdf

THE IMPORTANCE OF SEAMLESS SERVICES

Health researchers have long known that physical health and mental health influence each other and are fundamentally linked. As the Canadian Mental Health Association (Ontario) notes, "There are multiple associations between mental health and chronic physical conditions that significantly impact people's quality of life, demands on health care and other publicly funded services, and generate consequences to society ... The associations between mental and physical health are:

- Poor mental health is a risk factor for chronic physical conditions.
- People with serious mental health conditions are at high risk of experiencing chronic physical conditions.
- People with chronic physical conditions are at risk of developing poor mental health."21

Whether the presenting issue is physical or mental, from the consumer's point of view it is critical that appropriate referrals be made to ensure that both kinds of needs are addressed, seamlessly and effectively. The reason is that both health-care systems — for physical and mental health — have a stake in each other's success in meeting the needs of people accessing care. As the use of telehealth approaches to service delivery advances for physical health care, it is important that e-MH tools and options be increasingly adopted and implemented for mental health care too.

²¹ Canadian Mental Health Association (Ontario). Connection between mental and physical health. https://ontario.cmha.ca/documents/connection-between-mental-and-physical-health/



EVOLVING POLITICAL AND POLICY ENVIRONMENT

Since the publication of Changing Directions, Changing Lives: The Mental Health Strategy for Canada in 2012, there has been a significant increase in the understanding of the mental health challenges experienced by people living in Canada. In 2017, the federal government introduced a \$5-billion 10-year targeted mental health transfer in line with shared federal, provincial, and territorial health priorities. Across the political spectrum, strong support for action on mental health continued to gain strength. In the 2021 federal election, a majority of the federal political parties promoted robust mental health policy platforms. Following that election, Prime Minister Justin Trudeau appointed Canada's first-ever minister of mental health and addictions and provided the new minister with a comprehensive mandate letter.

In February 2023, the federal government announced increases in federal transfers²³ to the provincial and territorial governments that will provide \$46.2 billion in new funding for health care over the next 10 years. The federal transfer payment initiative includes "\$25 billion over 10 years to advance shared health priorities through tailored bilateral agreements that will support the needs of people in each province and territory in four areas of shared priority:

- 22 Government of Canada. (2024, January 23). Working together to improve health care in Canada: Home and Community Care, and Mental Health and Addictions Services bilateral agreements. https://www.canada.ca/en/health-canada/corporate/transparency/health-agreements/shared-health-priorities/home-community-care-mental-health-addictions-services-bilateral-agreements.html
- 23 Prime Minister's Office. (2023, February 7). Working together to improve health care for Canadians. https://www.pm.gc.ca/en/news/news-releases/2023/02/07/working-together-improve-health-care-canadians

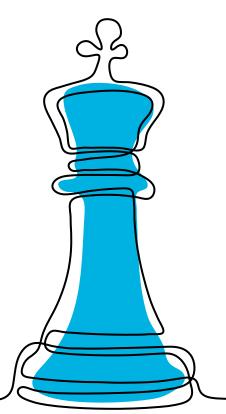
- family health services;
- health workers and backlogs;
- mental health and substance use; and
- a modernized health system [with standardized information and digital tools]."

The federal minister of health has since negotiated bilateral agreements with each province and territory to implement these initiatives. Most of the agreements contain a commitment to invest in improvements to mental health services and substance use health services.



About this Strategy

In response to the burgeoning use of e-MH solutions and resources in Canada, the MHCC initiated a national consultation among leaders, practitioners, and user representatives involved in e-MH services at all levels. Those consulted called for the development of a "guiding star" document to highlight priorities for use in charting the future direction and development of e-MH in Canada. This strategy represents the collective input from hundreds of experts on how to achieve change in e-MH to meet the needs of people across the country. The unique needs of Indigenous people living in Canada in respect to the truth and reconciliation work underway in Canada were considered in the development of the strategy.



While many of the recommendations in this strategy document are outside the mandate of the MHCC, it is hoped that all relevant pan-Canadian organizations involved in health care and mental health care will find this document useful as they consider the next steps they will take to support e-MH in Canada within their individual mandates.

This strategy can be used in several ways. Organizations can use it to shape their strategic plans around e-MH. It can also be used to assess the current state of development of e-MH services in individual provinces and territories, regions, and local communities. It can support priority setting for future development of e-MH programs and services and can be used as a lever for seeking additional resources and funding for e-MH.

A full description of the consultative process used to develop this strategy is included in Appendix 1. Appendix 2 contains descriptions of several e-MH resources developed by the MHCC in recent years.

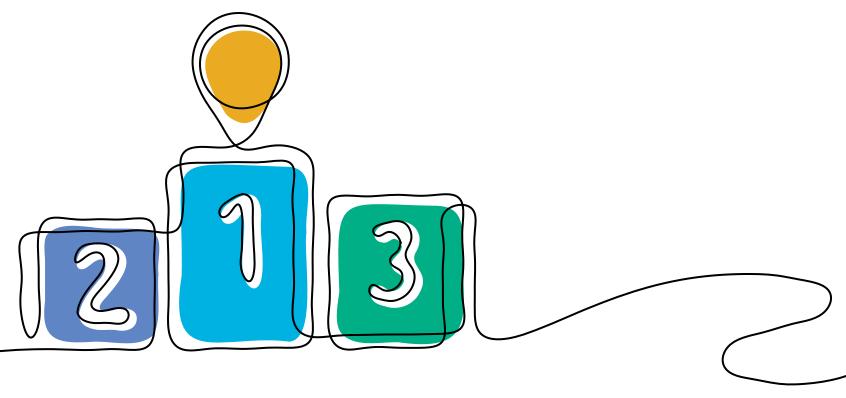


Priority Areas for the Future Development of E-MH

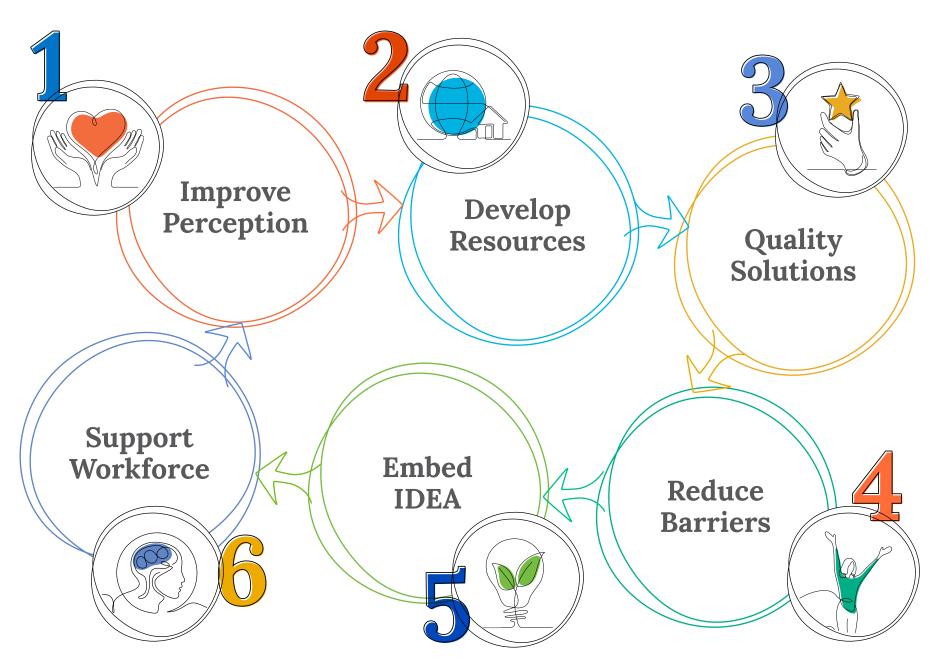
Priority Areas for the Future Development of E-MH

The priority areas and recommendations outlined in this document were informed and guided by the initial phase of research and by ongoing consultation with the MHCC's partners and the advisory committee for the development of the strategy.

The priority areas identify the challenges associated with the advancement and adoption of e-MH solutions in Canada while the recommendations — mapped to the priority areas — provide details on actionable items and solutions for the challenges.



Priority Areas



PRIORITY 1: IMPROVE PERCEPTION, AWARENESS, AND ENGAGEMENT IN E-MH

Several studies^{24, 25, 26} have shown that many mental health practitioners continue to resist recommending e-MH solutions, regardless of their quality and the evidence for them. The consultations indicated that while some of this reluctance can be attributed to normal resistance to change, some practitioners also reported that they lacked awareness of e-MH options or simply preferred traditional approaches to delivering mental health services.



Another significant barrier to adoption that was identified in the consultations is the sheer volume of e-MH options. If a resource has proven to be effective but practitioners and people accessing care are not aware of its existence or do not know how to evaluate its relevance or utility, it will be underutilized. There is a need for information and evaluative tools to help practitioners and consumers to assess the available options and choose which e-MH tools to use.

Part of the reticence in using e-MH solutions may stem from a lack of trust on the part of practitioners and the public in their safety and efficacy. Incorporating principles of equity-first data governance into the development and deployment of e-MH solutions demonstrates a commitment to creating solutions that are inclusive, effective, and trustworthy. As a 2022 Australian report²⁷ suggested, "Gaining trust in digital health technologies is crucial for widespread adoption and effective utilisation of the technologies, as trust ensures that people accessing care and healthcare providers confidently engage with the innovative tools." The consultations resulted in calls for standards for regulatory compliance measures and greater transparency to build clinician acceptance and service-user assurance that e-MH solutions are safe and of high quality.

²⁴ Feijt, M. A., de Kort, Y. A., Bongers, I. M., Ijsselsteijn, W. A. (2018). Perceived drivers and barriers to the adoption of eMental health by psychologists: the construction of the levels of adoption of eMental health model. *Journal of Medical Internet Research*, 20(4), e153.

²⁵ Nogueira-Leite, D., Diniz, J. M., Cruz-Correia, R. (2023). Mental health professionals' attitudes toward digital mental health apps and implications for adoption in Portugal: mixed methods study. JMIR Human Factors, 10, e45949.

²⁶ DuBois, R. (2019, September 6). What do therapists really think about digital health tools? Psychology Today. https://www.psychologytoday.com/intl/blog/the-digital-doctor/201909/what-do-therapists-really-think-about-digital-health-tools

²⁷ Winston Churchill Trust. (2022). To drive safety and quality improvements in digital mental health service provision in Australia. https://www.churchilltrust.com.au/project/to-drive-safety-and-quality-improvements-in-digital-mental-health-service-provision-in-australia/

Given the known gap between research and evidence and the time it takes for innovations to become common practice, this strategy does not underestimate the challenge in changing perceptions among practitioners who may be skeptical that these solutions can be as effective as in-person services in the right circumstances. However, as e-MH solutions continue to improve in quality and efficacy, there must be a stronger focus on how to communicate about evidence-based solutions with practitioners and to prove that they are both safe and efficacious.

Observations

- Practitioners are often unaware of e-MH options, and many find the abundance of options confusing. The perceived or real ease of use of the solutions can also present barriers to their adoption and usage.
- Examining how innovations in service delivery come about could help explain why negative perceptions of e-MH approaches exist. Particular attention should be paid to considering how later adopters can be encouraged to embrace new technologies.
- E-MH tools may be developed by a particular clinical group (such as psychologists); practitioners with different expertise may not be inclined to utilize those tools because they are not specific to their needs.
- Different approaches may be needed to encourage different types of collaborators to adopt e-MH solutions. Practitioners and potential e-MH users are not uniform audiences.
- Practitioners often require information on how hybrid options can be integrated into their practice.
- Identifying and highlighting champions of e-MH as role models could broaden understanding and encourage uptake of e-MH innovations.



PRIORITY 2: DEVELOP RESOURCES FOR EVALUATING THE EFFECTIVENESS OF E-MH SOLUTIONS AND PROGRAMS.

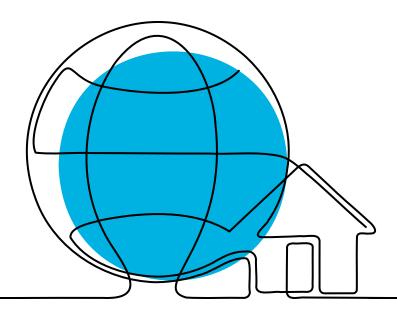
Evaluation should be a critical component of any e-MH strategy. The first question to be answered is which options are most appropriate for which mental health concerns and conditions (i.e., in what circumstances and for whom should they be used?). Additional questions are whether they are safe and efficacious, whether they are accessible and inclusive, and whether they provide value for money.

Currently, Canada is without a means to ensure access to safe e-MH solutions, which hinders health-care providers from promoting e-MH solutions that are effective and incorporate culturally appropriate design for people accessing care.

Several countries have moved, or are moving, to create and put in place evaluation systems for e-MH solutions. A made-in-Canada framework would provide an evidence-based approach for e-MH service delivery that people in Canada could rely on from coast to coast to coast.

Observations

- Evaluation of e-MH is important because it will measure the effectiveness of services and solutions and validate return on investment.
- In the absence of an effective evaluation framework, Canada is not collectively assessing implementation and outcomes of e-MH solutions and programs.
- Developing evaluation methods is challenging, given the complexity of different needs and interventions.
- Evaluation criteria need to focus on clinical safety and include demographic criteria and the information that is available on how to access the user interface and navigation.



PRIORITY 3: ADDRESS THE QUALITY OF E-MH SOLUTIONS AND SERVICES, INCLUDING PRIVACY AND DATA PROTECTION CONCERNS.

The primary advantage of using technology is its potential to improve the quality, efficiency, and equity of mental health services in Canada. Consultation feedback revealed the centrality of building trust in e-MH solutions to encourage uptake. Assurances around the quality, safety, privacy, and security of e-MH options are of the utmost importance in developing credibility with both practitioners and users. Mental health providers need to be assured, and need to be able to assure users, that these tools adhere to the same standards of quality and safety as face-to-face services.



The consultation also yielded significant concerns about data privacy and security of personal information when e-MH solutions are used in mental health care. There are several elements to these concerns. Many applications are created by private-sector developers and marketed by commercial entities. Some of these companies are known to routinely collect and store personal consumer information, such as telephone numbers, email addresses and contacts, call and internet usage histories, social networking sites, and photographs. Mobile phone numbers can be used to link to the personal data that is held by multiple companies. The personal information collected by app companies can then be shared or sold to third parties by these developers or be put at risk through malign hacking activities. These issues confirm the value of taking a risk management approach to ensuring that safety and security concerns are recognized and addressed.

Equity in e-MH solutions can be significantly enhanced by adopting frameworks like the OCAP® principles (ownership, control, access, and possession), particularly for First Nations communities. Adherence to these principles ensures that data governance respects the rights and sovereignty of these communities, thereby fostering greater trust and engagement. Incorporating the OCAP® principles into e-MH solutions helps address equity concerns by ensuring that data collection and usage practices are inclusive and respectful of all populations, especially underrepresented groups.

Personal data security could be enhanced through the adoption of standards such as requiring that consent be sought before information is collected or shared, only collecting data that is essential to the functioning of the app, defining a reasonable time period for data retention, and requiring the deletion of expired data.

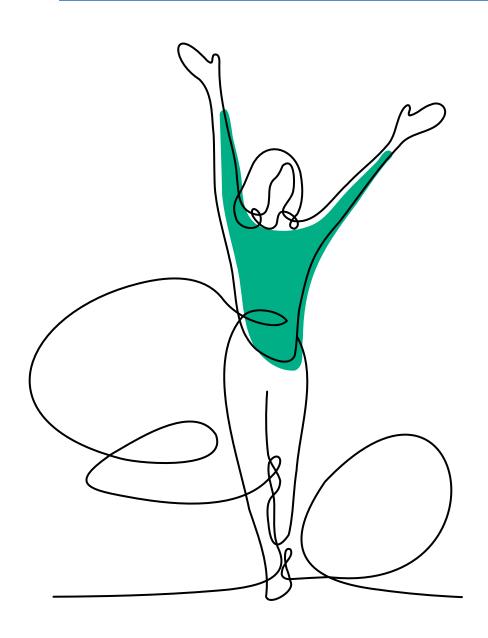
Observations

- The development and implementation of standards for e-MH solutions that protect personal privacy and improve the security of personal information could improve trust and uptake.
- Greater protection and safeguards of personal data could improve confidence around data sharing, particularly owing to the sensitive nature of personal health information.
- Interoperability between data laws will continue to be challenging to navigate.



²⁸ First Nations Information Governance Centre. (2024). The First Nations Principles of OCAP®. https://fnigc.ca/ocap-training/

PRIORITY 4: REDUCE BARRIERS AND ADDRESS SYSTEM CHALLENGES TO E-MH SOLUTION ADOPTION.



The consultations exposed existing systems and infrastructure challenges and identified barriers that are limiting the adoption of e-MH services across Canada. These include issues such as the lack of high-speed internet²⁹ in some parts of the country and funding structures that have not yet been adapted to facilitate use and incorporation of e-MH solutions and applications. There is significant overlap with issues associated with equity and inclusion in some areas, such as English to French translation and the need to ensure that people in Canada are receiving culturally appropriate services in the language of their choice.

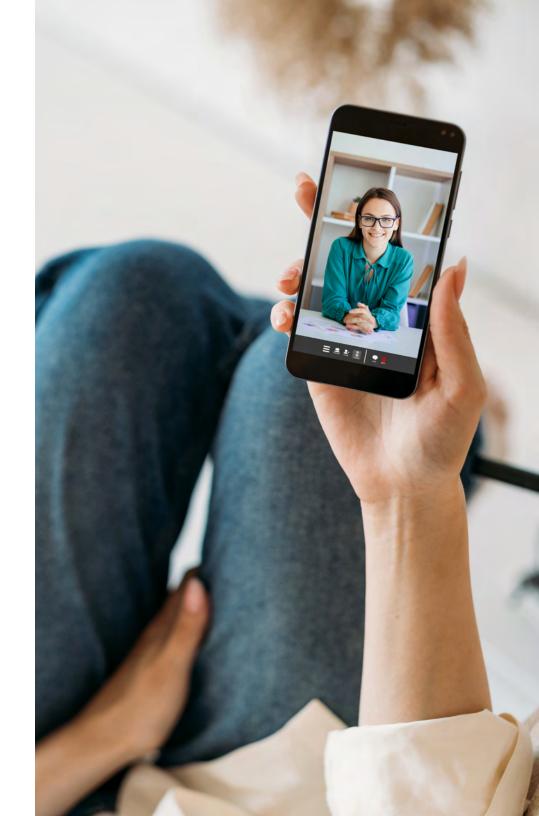
The literature review and discussions with collaborators identified that a number of existing systems are working against the implementation of e-MH. These include data-focused systems — billing codes, algorithms, and the ability to transfer and share data — that limit interoperability between physical and mental health care systems.

Collaborators agreed that while not all systems can be changed, identifying the challenges and testing possible solutions is a good first step to begin addressing these barriers to adoption.

²⁹ Government of Canada. High-speed internet access dashboard. https://www.ic.gc.ca/app/scr/stsidcr/web/high-speed-internet-canada/en/universal-access/broadband-dashboard.html

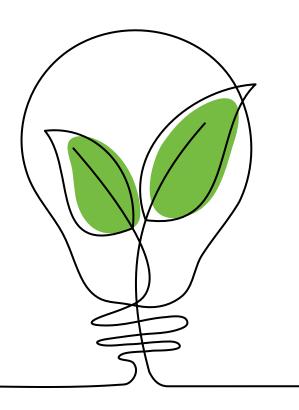
Observations

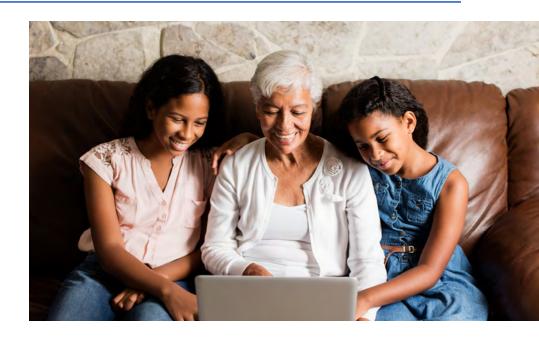
- The current system could do more to incentivize the use of e-MH solutions and approaches and to build and support collaboration among different types of practitioners.
- Practitioners highlighted the need to better understand how existing funding systems may disincentivize uptake of e-MH solutions.
- Those delivering and implementing e-MH solutions should consider how the social determinants of health affect health outcomes and access to e-MH care.
- The mental health care system would benefit from better coordination of the transfer of care and service-user data between the child and adult mental health care systems, with due consideration of privacy and confidentiality.
 Currently, when such transfers are not handled smoothly, continuity of care can be disrupted, which can be detrimental to the mental health of the individual being transferred.
- In some parts of the country, there are infrastructure challenges in implementing e-MH solutions, notably gaps in the availability of internet bandwidth and technology to certain communities to support implementation.
- There are gaps in the existing system's capability to ensure translation of e-MH materials into various languages, including English to French.
- The interoperability of medical data the transferring of data between practitioners — could be improved to support implementation of e-MH solutions.



PRIORITY 5: EMBED IDEA (INCLUSION, DIVERSITY, EQUITY, AND ACCESSIBILITY) PRINCIPLES IN ALL E-MH DEVELOPMENT, TOOLS, AND DELIVERY.

Participants in the consultation helped to identify the most common areas where IDEA (inclusion, diversity, equity and accessibility) issues are impacting the uptake of e-MH services and how efforts to address those issues need to be prioritized. As highlighted in several of the studies in the literature review and the comments of many consultation participants, especially those in service delivery, there are gaps in the ways that e-MH addresses equity and inclusion concerns.





Observations

- Some elements of program development and delivery of e-MH services need attention to eliminate bias and to ensure the inclusion of culturally relatable content.
- Efforts to support IDEA must ensure that those with lived experience and equity-seeking groups are engaged early and often and have a meaningful role in shaping both policy and solutions.
- More should be done to ensure that e-MH content is tailored to the needs of different demographic groups.
- Evaluation of e-MH tools and solutions should respect and accommodate the diversity of users.

PRIORITY 6: SUPPORT THE MENTAL HEALTH WORKFORCE TO INTEGRATE E-MH INTO THEIR PRACTICE.

The mental health workforce is the backbone of the mental health care system, and engaging this group is an essential component of this strategy. The priority actions identified by the consultation collaborators were focused on building understanding and trust, training, establishing champions, and deepening understanding of the opportunities presented by e-MH solutions and tools.

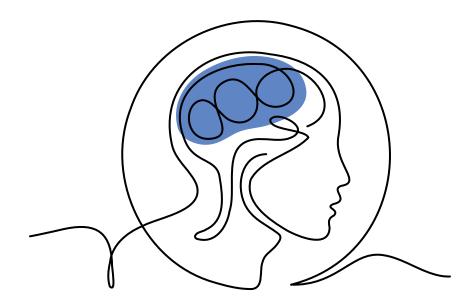
The mental health workforce was not only deeply impacted by the COVID-19 pandemic but has remained challenged since then,³⁰ as evidenced by recent studies on burnout and other psychological challenges faced by mental health providers. This e-MH strategy must take care to support this workforce through the transition to e-MH service delivery without adding to existing burnout.

As indicated in the earlier discussion of the value of e-MH approaches, the use of such options has the potential to free up hard-pressed traditional in-person services and relieve the pressure on mental health practitioners and people accessing care who are facing difficult-to-manage wait times. In addition, these approaches can enable more efficient use of scarce resources because they are usually less costly than in-person services.

30 Mental Health Research Canada. Anxiety and depression in the workplace. https://static1.squarespace.com/static/5f31a311d93d0f2e28aaf04a/t/626a9ee63 4b74940f238e7lb/1651154663758/Anxiety+and+Depression+in+the+Workplace.pdf

Observations

- Comprehensive training and ongoing support for e-MH implementation for the entire mental health care workforce is recommended.
- This training should include basic digital literacy skills, because some members of the workforce have very low digital literacy, which limits their ability to engage in this area.
- A challenge to be addressed is the fragmentation of the mental health care system, with multiple points of service entry and significant variation between the training needs of different types of practitioners.
- Special consideration should be given to the capacity of smaller organizations to develop defined training support capabilities.



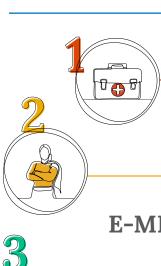
Detailed Recommendations for Action

Detailed Recommendations for Action

On the basis of the priority areas presented above, participants in the consultations developed several recommendations to support the expanded adoption and use of e-MH approaches, solutions, and options for delivering mental health care services. Each recommendation responds to specific priorities discussed above.



Recommendations



Readiness Assessment Tool









Best-Practice Guideline



What we can do today

Interdisciplinary **Health-Care Teams**



High-Speed Bandwidth

Invest in e-MH







Funding Models





Champions Network

Mental Health Data

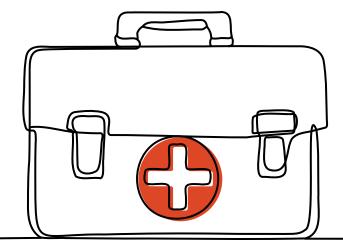


1. ADVANCE THE DEVELOPMENT AND PROMOTION OF A READINESS ASSESSMENT TOOL FOR SERVICE PROVIDERS.

Service providers often face challenges in implementing e-MH tools and services. In several of the priority areas explored earlier, it was noted that practitioners face challenges in negotiating their way through the volume of e-MH options and possibilities. E-MH tools can meet different kinds of service-user needs, but many practitioners may require program implementation knowledge and training to choose the right approach to achieve the desired outcomes. Some practitioners may also need technical literacy training.

There is a need for environmental scans that assess e-MH tools that meet the needs of practitioners and individuals seeking to access services. Overall, while many e-MH solutions are available in Canada, there is an abundance of navigation tools in some areas and too few in other areas. Funders of new e-MH solutions will need to pivot to consider areas where other tools are needed. Investments can also flow to expanding the language and accessibility options of existing e-MH solutions as opposed to building entirely new niche products. This requires greater collaboration in this sector.

Early efforts are underway to develop implementation readiness tools to increase practitioners' understanding of e-MH solutions and how to prepare to use them. As these readiness tools are developed, they should be free, widely promoted, easily accessible, and regularly updated. These tools must consider inclusivity, alignment with client needs, technological capacity and gaps, and how to educate and inform practitioners on how digital services might differ from existing non-digital services.



An assessment tool would help service providers and practitioners understand their readiness to engage with a variety of specific e-MH options. A starting point for meeting this need is already available; in 2018, the MHCC published athe Toolkit for e-Mental Health Implementation.³¹

Such a tool would assist practitioners in understanding the range of e-MH tools and applications available and identifying opportunities to integrate these solutions into their practices. It would also assist practitioners in evaluating the quality and appropriateness of different e-MH tools in meeting consumers' needs and describe the training and technology supports that may be needed.

Finally, the assessment tool should address safety, privacy, and data security, outline key characteristics of e-MH solutions such as ensuring inclusivity, identify the technology supports needed to implement itthem, and indicate what training and supports are available.

This recommendation responds to Priorities 1, 2, 3, 5, and 6.

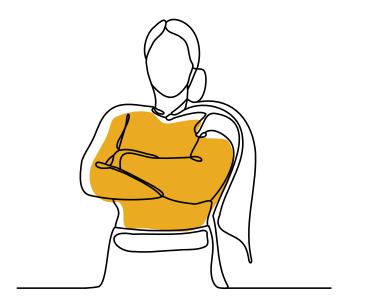
³¹ Mental Health Commission of Canada. (2018, August). Toolkit for e-mental health implementation. https://mentalhealthcommission.ca/wp-content/uploads/2021/05/E_Mental_Health_Implementation_Toolkit_2018_eng.pdf



2. DEVELOP AND LAUNCH COMPREHENSIVE E-MH TRAINING FOR THE MENTAL HEALTH WORKFORCE.

Training will be essential to ensuring that practitioners can properly implement e-MH solutions. This strategy recommends that a suite of resources be developed and launched to support the mental health care workforce. These should be free-to-low-cost training modules covering a host of subjects pertaining to the implementation and delivery of services using e-MH resources.

Since the existing knowledge base of practitioners with respect to e-MH services is variable, training should be available for a variety of entry points — from the novice to the intermediate user — and cover content ranging from the initial assessment of tools and resources and the implementation and administration of e-MH services to service delivery.



Given the array of entry points for such training, the user interface must use clear and accessible language on the intended outcomes of training and help the user understand the specific skills they will gain. A robust user interface would have an advanced search engine to ensure user friendliness. Quizzes and other varieties of question-type interfaces could also help users identify what help would benefit them most. Modern engagement techniques in training such as gamification (similar to the techniques used in successful training programs like Duolingo) should be explored.

Since the many different types of mental health service providers are often siloed, courses could be geared toward specific kinds of practitioners (or at least clusters of similar practitioner groups) as scaling of training is achieved. Engaging with the regulatory bodies that govern these groups could support the inclusion of training modules into a centralized database and provide the potential for other new forms of training to be eligible for training credits.

Given the extensive array of different types of training that are required, the ideal solution would be one of two options: either an existing reputable, large-scale training provider could be engaged to support this initiative, or a consortium of training providers working through a coordinating organization could be used.

This recommendation responds to Priorities 1, 5, and 6.

3. ADVANCE AND PROMOTE A BEST-PRACTICE GUIDELINE FOR USING E-MH TOOLS.

An incredibly large collection of e-MH tools and solutions are widely available in Canada. While many of these tools support the practitioner in delivering services, those targeted to people accessing care have been almost universally developed without sufficient evidence. In addition, many of the tools and solutions for consumers duplicate existing support services and do not adhere to best practices in privacy, security, and accessibility standards.

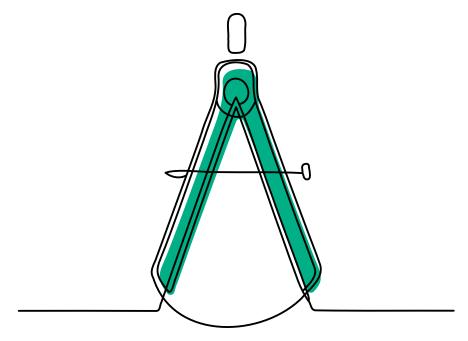
It is recommended that a best-practice guideline for e-MH solutions be developed and promoted widely. A promotion campaign for a best-practice guideline will need to be multifaceted and will require a significant investment of resources. Knowledge mobilization for a guideline would best be handled by organizations with extensive, trusted networks, strong brands, and experience in this space and that are already working in the field.

A best-practice guideline would need to be updated regularly, as technology, legislation, and research evidence are constantly changing, particularly in relation to data security and privacy standards. Timely production, distribution, and updates are critical as the digital space evolves quickly and lag times will hinder forward movement. It will be important for the delivery and promotion of resources to keep pace with the speed at which this field is evolving.

The best-practice guideline should cover the importance of understanding and adhering to data and privacy standards, usability assessment criteria, and data collection standards, and people with lived and living experience and diverse viewpoints must be engaged in its development.

Finally, a best-practice guideline would support future steps to create assessment tools for e-MH tools and services. It would be helpful if the evaluation system were built in alignment with the key elements of the guideline. This recommendation also works in tandem with the proposal for a Canadian mental health app library (Recommendation 5).

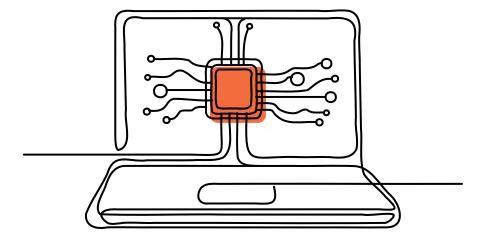
This recommendation responds to Priorities 1, 3, 5, and 6.



4. INCREASE SAFETY WITH THE USE OF ARTIFICIAL INTELLIGENCE IN MENTAL HEALTH CARE.

Artificial intelligence (AI) is increasingly being used in a variety of supportive ways in mental health care, to assist in triage, in navigation of available services, in chat and text messaging, and in helping to decrease wait times to make services more efficient. However, there have been Canadian and international examples where the use of AI in mental health care has lacked the necessary rigor and quality.

The Artificial Intelligence and Data Act (AIDA), Bill C-27, was introduced in Parliament in June 2022. This act would include mandatory legislation at the federal level for AI use in Canada. The e-MH community is following closely this pending legislation, which would impact the safe use of AI in an overarching way in Canada if passed.



If this federal legislation is passed, it is estimated it will take years to implement it, and there was a strong consensus in the consultations that there is an urgent need for more oversight in the meantime to ensure safety, ethical standards, and quality safeguards for the application of AI specific to the delivery of mental health care services.

While there are some existing domestic and provincial guidelines and standards on the ethical use of AI in Canada, the e-MH community is calling for more specific guidelines related to AI use in mental health care. Some specific concerns identified by the e-MH community include bias in programming, the lack of involvement of clinicians and people with lived and living experience in the development and testing of AI solutions, the safety of data and privacy, and transparency with the users. There is also a need for a human-centred approach to technology and algorithms into which principles of compassion and personcentred care are embedded.

It is crucial that guidelines be put in place for AI technology in mental health care, to prevent harm, bias, and wrongful use of information.

This recommendation responds to Priorities 3 and 5.

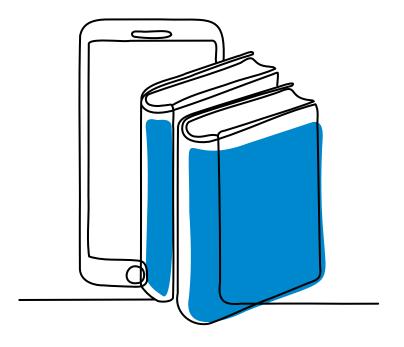
5. DEVELOP A NATIONAL MENTAL HEALTH APP LIBRARY.

Throughout the consultations, the development of a mental health app library or database was one of the most discussed topics among both international experts and domestic collaborators. Meeting the need for a Canadian library of safe, quality, and effective mental health apps is one of the most critical components in this strategy. An app library would directly address some of the largest issues facing e-MH in Canada — ensuring access to quality mental health services, providing system navigation, and ensuring solutions are effective.

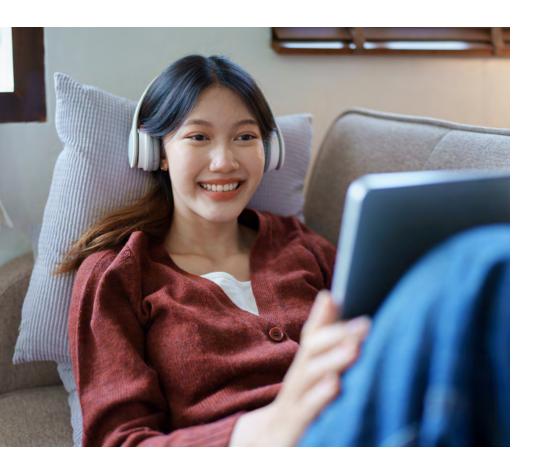
There are tens of thousands of e-MH solutions; some have been developed for practitioners and others are marketed directly to the consumer. Currently, it is overwhelmingly complex for both practitioners and people accessing care to ascertain which solution is best or the most appropriate for them. A library that is very easy to navigate, effectively searchable, and simple to understand both for the mental heath care worker and the consumer would be highly valuable.

A national e-MH library would make a significant contribution to supporting system navigation in mental health. Wide availability of a robust navigation system for e-MH apps would help people living in Canada to easily access safe and effective solutions. Moreover, the confidence of practitioners in recommending e-MH solutions to people accessing care would be significantly increased.

Such a digital library must first be developed, and then it must be kept up to date. If it is regularly updated and easy to use, it will quickly become a "go-to" source of information for both practitioners and the public. An assessment system for the efficacy of apps is also critically important. The library must become a strong tool to assist consumers in considering whether a particular solution will be effective for them. Ongoing effort will be required to incorporate new tools into the library as well as update existing tools, and a long-term funding commitment will be required.



During the consultation, participants discussed whether it would be more useful to have one central library or to have several targeted or specialized libraries such as those already in development. Niche libraries, focused on youth depression, for example, are already in development but they might be limited in scale and scope. Such libraries could co-exist and complement each other if they were linked.



A national central app library could enable users to navigate the system of apps nationally and could serve as an entry point and information source for targeted libraries that may have better lines of communication and outreach to specific groups and issues. The experience with targeted libraries could also provide insights to developers of the central library on how best to structure the national library and what information to include in it to maximize its usefulness to users. If a central library were developed, the other libraries should be encouraged to look to it for best practices.

It is recommended that a national central app library should be built on existing app evaluation frameworks and backed by substantive efforts in marketing. Tracking both awareness and usage would keep a line of sight on market penetration and identify gaps.

Every aspect of any app library should conform to best practices in effectively engaging with users. Experts in user interfaces and strategic marketing and communications would need to be involved, to ensure that potential users know about the library and find it accessible, easy to navigate, and engaging. A robust and multi-faceted strategy for promotion is critical. At present, many consumers of e-MH tools and technologies trust only their own judgment about what will work for them — this paradigm needs to be shifted. Changing consumer behaviours is a very challenging endeavour. Evaluation of this ongoing effort would be very important to the success of the library.

This recommendation responds to Priorities 1, 2, 3, 4, 5, and 6

6. ESTABLISH A CHAMPIONS NETWORK.

One of the most potentially effective mechanisms for effecting and supporting change and ensuring the success of a new initiative, tool, or process is to engage and highlight champions in its implementation. Creating and promoting an e-MH champions network to encourage new adopters could provide multiple benefits in advancing the use of e-MH solutions in Canada. e-MH champions could offer micro-credentials; this would encourage organizations looking to integrate e-MH solutions into practice to seek out these individuals. In addition, the network could offer expertise in a broader sense as a place where organizations and individuals could find trusted communities of practice, influencers, and key advisors.

It is recommended that the champions network be integrated into the approach to training suggested in recommendation 2.

This recommendation address Priorities 2, 3, 4, and 6.

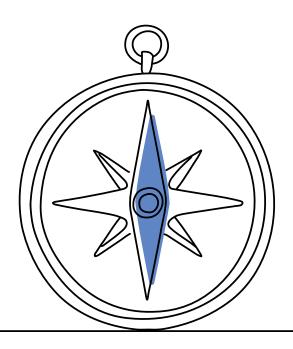




7. DEVELOP A NAVIGATION SITE AND PUBLIC AWARENESS CAMPAIGN FOR QUALITY E-MH SOLUTIONS.

Practitioners and consumers need easily accessible information on e-MH solutions and options and on the mental health conditions and challenges for which these solutions and options are appropriate. In addition, a public awareness program is needed to help people learn where to find these services.

An example of a country that has implemented initiatives at the national level is Australia. The government's website "Head to Health" provides practitioners and the general public with the navigation tools they need to find in-person and e-MH services that work for them.



Federal resources in Canada that are already in place could be expanded to include a national platform that includes navigation and information on quality e-MH solutions that residents can use immediately, including safe, quality, and effective mental health apps that have been assessed using an evidence-informed framework. Other national mental health resources could also be leveraged on the same site, making it all inclusive for the public and practitioners.

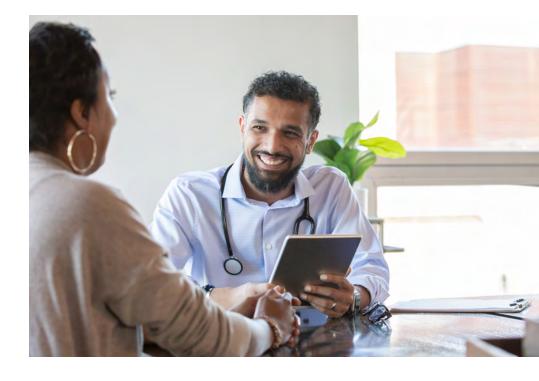
A public awareness campaign, which could be delivered alongside a mental health literacy effort, would help the public to become more informed and to become better advocates for their own health, which would in turn increase uptake and usage of e-MH resources. With greater knowledge of solutions with demonstrated efficacy, people will be better equipped to navigate the relative complexity of our diversified mental health care system, which includes public, private, and community providers with limited resources and lengthy wait times.

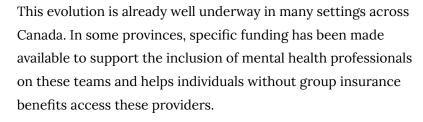
Campaigns targeted to mental health professionals could be run alongside more general public campaigns for e-MH. Engaging and consulting with professional associations and colleges could help tailor messages and create new channels for encouraging the uptake of e-MH solutions.

This recommendation responds to Priorities 1 and 4.

8. LEVERAGE E-MH TO SUPPORT THE CONTINUED UTILIZATION OF INTERDISCIPLINARY HEALTH-CARE TEAMS, INCLUDING MENTAL HEALTH PROFESSIONALS.

Many provinces and territories are moving toward organizing their health-care human resources into interdisciplinary health-care teams consisting of health-care professionals from diverse fields who work together to treat people with different needs. There has not yet been widespread inclusion of mental health service providers in these teams. The value of the interdisciplinary model can be significantly improved through the addition of mental health professionals to these teams, because they can help other team members to gain more awareness and understanding of mental health issues. A mental health professional, such as a psychologist or a trained counsellor, can help move mental health knowledge into these teams and help team members to develop trust in e-MH solutions. The objective must be to make the relationship between physical health services and mental health services as seamless as possible.





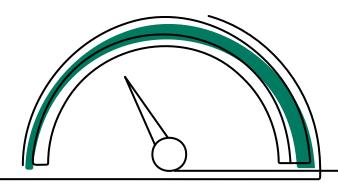
This recommendation responds to Priority 4.



9. CONSIDER THE ROLE OF E-MH IN CANADA'S HIGH-SPEED BANDWIDTH INITIATIVES.

Some very remote communities in Canada lack access to both mental health professionals and accessible bandwidth for virtual engagement. In many of these communities, when high bandwidth finally arrives it should be allocated for specific purposes such as schools and health-care services. This recommendation underscores the point that the importance of access to e-MH tools and services must be considered when allocating critical bandwidth in these communities.

This recommendation responds to Priority 4.

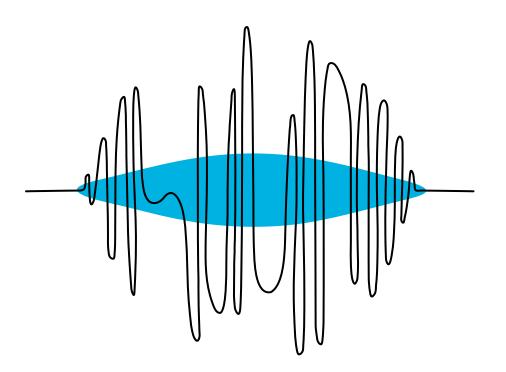




10. INVEST IN THE DEVELOPMENT OF E-MH SOLUTIONS FOR A SPECTRUM OF INTENSITY OF SERVICES.

There are a broad range of e-MH solutions available in Canada. Some solutions address mental health issues that require lower intensity services, such as wellness apps, while others offer solutions for higher intensity mental health services, such as support with suicidal ideation.

Currently there are more e-MH solutions available in Canada that address lower intensity services, but solutions are increasingly being made available that meet the need for support of more complex and persistent mental health issues.



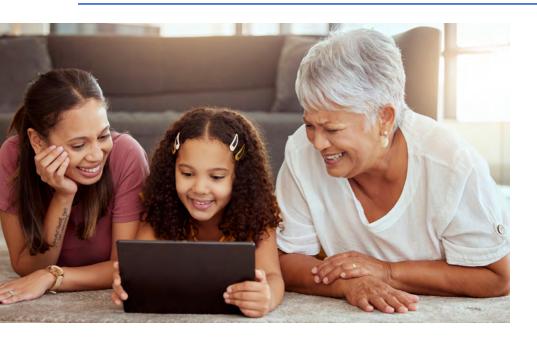


To address the growing needs for e-MH solutions for mid- to high-intensity mental health services, it is recommended to consider investments into mid- to high-intensity e-MH services, along with lower intensity services.

It is important that e-MH solutions be offered for a broad range of intensity of services so that those living in Canada have choices in accessing the intensity of mental health services they need at a given time in their lives.

This recommendation responds to Priority 2, 3, and 4.

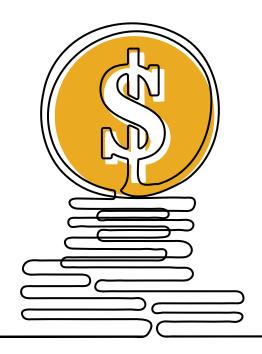
11. ALLOW FOR E-MH SOLUTIONS IN ALL FUNDING MODELS FOR PROVINCIAL AND TERRITORIAL HEALTH SYSTEMS.



An issue surfaced by the consultation was the asymmetrical way in which some publicly funded health systems support the use of e-MH tools through their funding models. For example, in some provinces and territories, doctors have to bill differently for consultations with service users via a video call versus an in-person appointment. Further, if a service user requires ongoing treatment that could be supported by an e-MH tool between appointments, funding may not extend to the medical professional who is using that tool.

Adapting funding models to accommodate e-MH care will not be easy or quick, but policy makers in this space should acknowledge that e-MH tools that increase efficiencies represent a cost-saving opportunity. It is recommended that all provinces and territories consider how they might adjust their funding models to facilitate the efficient and consistent use of e-MH tools.

This recommendation responds to Priority 4.



12. ADVANCE INTEROPERABILITY OF MENTAL HEALTH DATA BETWEEN PROVIDERS AND PERSONAL DATA OWNERSHIP.

The issue of data interoperability continues to be discussed throughout the broader Canadian medical community. In physical health care, there has been great improvement in this issue as electronic medical records (EMRs) and other systems have securely allowed doctors (and others funded through provincial health-care systems) to keep common files on people accessing care.

A comprehensive service-user file is better for people accessing care and ultimately supports more efficient health-care provision as service users move between health-care providers.



In mental health care, such record systems are earlier in their development and implementation, if they exist at all. While doctors, a primary source of mental health care, can share some information on EMRs, the broader mental health care community rarely has access to these records. If a person accessing care goes to a private psychologist and then moves to a different private psychologist or visits a hospital for a mental health issue, their file does not move easily with them. This issue is complex enough in the publicly funded health-care system, but when the private and community nature of much of the mental health care field is factored in, it is even more challenging.

In the collaborator consultations, it was noted that efforts are already underway to advance overall health data interoperability within a longer-term plan for the Canadian health-care system. This recommendation is to encourage a specific focus on the unique challenges of data interoperability for Canada's mental health care systems as these plans are developed.

This recommendation responds to Priorities 3 and 4.

Implementation

This strategy advances several priorities and recommendations for action. This section is intended to share insight into **how** this strategy can be used to change e-MH in Canada. It is the MHCC's hope that it will be a living document that prompts and facilitates incremental improvement over time.

Organizations can use the strategy for shaping and prioritizing their next steps and strategic plans around e-MH. They can also use it as a lever for seeking additional resources for e-MH and to seek funding for projects that focus on the recommendations in the strategy.

Some recommendations will work best if developed in tandem. For example, an e-MH library would be most effective if a framework for properly evaluating apps were developed (and integrated) at the same time. Other recommendations, such as supporting the mental health workforce and establishing champion networks, can be implemented independently.

This strategy also presents an opportunity to establish a set of common priorities among multiple jurisdictions. In recent years, a host of new collaborations have been established specifically in the area of e-MH. Many of these collaborations are showing early promise toward achieving many of the goals outlined in this strategy.

Evaluation

Ongoing qualitative and quantitative evaluation of the strategy will be undertaken by the MHCC. Information will be sought about the stages of implementation of the recommendations across the system and across organizations, using feedback gathered from collaborators at the federal, provincial/territorial, and community levels.

The results of these evaluations will provide insights into the level of success in implementing the strategy, and where progress has been made or where work is still needed. It will also shed light on the relative ease of implementing the various recommendations.

Surveys, polls, and qualitative interviews will evaluate if funding for e-MH services has increased following the publication of the strategy.

Organizations and individuals at the federal, provincial/territorial, and community levels can use similar methods to evaluate their success in implementing the strategy.

Conclusion

At the time much of the current Canadian health-care system was developed and put in place, the importance of mental health was much less recognized than it is today. This resulted in mental health being substantially absent from much of the Canada Health Act and helps to explain why approximately only seven per cent of public health-care spending is directed explicitly to mental health care, but progress is being made.

When the MHCC published Changing Directions, Changing Lives: The Mental Health Strategy for Canada in 2012, its purpose was to improve mental health and well-being for everyone and to spur the creation of a mental health care system that could truly meet the needs of people of all ages living with mental health concerns and illnesses, and their families.

In the past 12 years, understanding of the importance of mental health has grown, with increased recognition of the need to consider mental health in Canada's care models in the same way we approach physical health. Federal, provincial, and territorial governments have agreed that mental health is a priority, and the bilateral funding agreements that provide for transfers to the provinces and territories specifically include commitments to invest in mental health services. Reflecting this increased recognition, the federal cabinet now includes a minister of mental health and addictions.

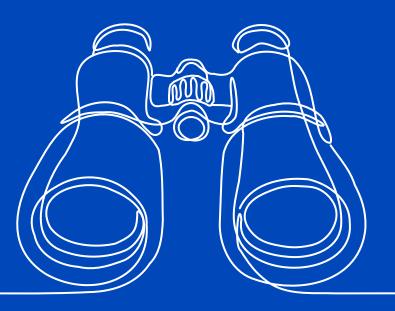
Given the significant need for increased mental health care and the ability to rapidly expand the availability of mental health services to meet these needs, the opportunities for the advancement of e-MH health in Canada are enormous, as are the potential benefits for people living in Canada. Existing and evolving technologies have tremendous potential to transform the mental health care system and positively change how resources and care are developed, delivered, and received. However, realizing this potential will require investments of both time and resources from collaborators at all levels.

This strategy document builds on several innovative and excellent initiatives already underway across Canada. Its recommendations are informed by the best available evidence and knowledge contributed by dozens of collaborators and experts. While challenges exist, they are presented here not as barriers or hindrances but instead as opportunities to work collectively to overcome them.

A collaborative and committed approach to furthering e-MH in Canada is required. This strategy and its recommendations are intended to inform this approach and encourage the advancement and uptake of e-MH resources and tools sooner rather than later. There is no better time than the present for such investments, as Canada is currently well positioned to further the development and implementation of e-MH services and resources, to benefit the mental health and well-being of people living in Canada.



Appendices



Appendix 1: Overviewof the Consultative Process

Overall management of this project was provided by the e-MH Collaborative, an ongoing effort of the MHCC that predates the development of the e-MH strategy. The collaborative brings together experts from across Canada with lived and living experience and expertise in cutting-edge e-MH programs and services.

As the consultations proceeded, the members of the collaborative reviewed the recommendations of an advisory group of individuals consisting of leaders and practitioners in the e-MH field, who in turn reviewed the findings of working groups made up of individuals with expertise on the details of e-MH approaches, programs, and services.

This strategy is the result of a three-phased approach. Phase 1 included a comprehensive literature review and collaborator interviews with practitioners, health leaders, researchers, and people with lived and living experience.

In Phase 2, the priorities and recommendations were developed by the advisory committee and working group members, and shared with the e-MH Collaborative members to confirm all the priority issues and actions that a strategy should address. Finally, in Phase 3, these groups and other experts were engaged to validate the final content.

The ideas presented in this strategy reflect the expertise and time-in-field of the various collaborators involved in the consultative process. It is important to note that in developing the recommendations from these consultations, the group sought to arrive at a consensus of views.



Results of Environmental Scan and Literature Review

To provide a comprehensive assessment of international and domestic experiences in designing and implementing e-MH programs and approaches, the MHCC began by conducting a broad environmental scan, a literature review, and a series of interviews with a group of international and Canadian experts.

The environmental scan reviewed e-MH strategies around the world, most notably in Australia, New Zealand, the United States, Romania, Estonia, the United Kingdom, the Netherlands, Ireland, Germany, France, and Belgium.

A literature review of the Canadian experiences included published papers, current major projects, announcements, or new policies enacted by Canadian provinces and territories on e-MH. The review was conducted following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines and posed the following questions:

- What are the facilitators for developing and implementing an e-MH strategy?
- What are the barriers to developing and implementing an e-MH strategy?
- What progress has been made in implementing an e-MH strategy?

Finally, 31 interviews were conducted with international and Canadian experts, with questions on leading examples of e-MH, perceived barriers, and successes. The interviews helped identify the current trends and issues that will need to be addressed in future work.



Appendix 2: MHCC E-MH Resources

Since 2012, the MHCC has focused its efforts on research, development, and collaboration with respect to resources to improve e-MH standards and the implementation and uptake of e-MH in Canada. In the wake of the COVID-19 pandemic, the use, development, and deployment of e-MH tools have increased, including the use of apps and artificial intelligence (AI) in programming to provide tailored care. The MHCC has created a number of resources³² to address the current and future applications of e-MH to reach more people living in Canada in need of help.

The MHCC Assessment Framework for Mental Health Apps

Given the proliferation of mental health apps in Canada combined with the absence of quality standards for these apps, it was imperative for the safety of the Canadian public that standards be developed. The MHCC finalized the Assessment Framework for Mental Health Apps,³³ following a public review and two years of work with support from the Organisation for the Review of Care and Health Apps (ORCHA) in the United Kingdom. Working with 200 Canadian and international collaborators from diverse backgrounds, including policy makers, government officials, app developers and designers, academic researchers, and mental health service providers, the MHCC developed the Cultural Safety, Social Responsibility and Equity Standards for the assessment

framework. It includes content on key topics such as Indigenous data security and privacy, gender equity, representation from the Black, Indigenous, and people of colour (BIPOC) community in app content and visuals, usability, accessibility, and the involvement of people with lived experience in app development.

In June 2023, the MHCC launched this framework publicly. The MHCC has also turned the framework into an online digital app review engine so apps can be reviewed easily and quickly against the framework.

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³² Mental Health Commission of Canada. e-Mental health. https://mentalhealthcommission.ca/what-we-do/e-mental-health/

³³ Mental Health Commission of Canada. Assessment framework for mental health apps. https://mentalhealthcommission.ca/app-assessment/

Mental health app libraries

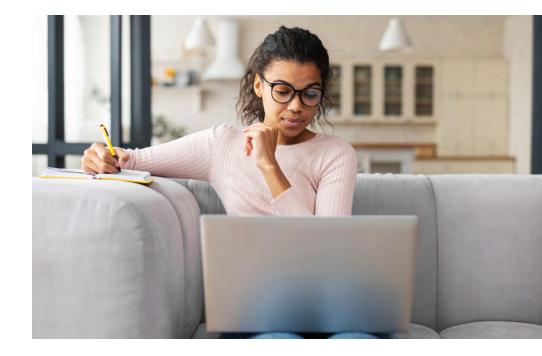
The MHCC is currently collaborating with provinces, territories, and individual organizations interested in investing in customizable mental health app libraries for their regions. These collaborators can assess mental health apps with the framework and highlight

them for their residents and clients in the form of an app library. While the framework was developed for mental health apps in Canada, once validated, its content may also be applicable to other health apps or jurisdictions.

E-MH implementation learning modules

E-MH learning modules³⁴ were developed from the MHCC Toolkit for e-Mental Health Implementation to disseminate the learnings from e-MH programs and support their implementation more widely. The e-modules were developed in collaboration with the Centre for Addiction and Mental Health. They reflect information gathered from the knowledge and experiences of practitioners and research groups, an environmental scan and review of existing literature, interviews conducted with key informants across Canada and internationally, peer-reviewed research, templates, and case studies. The online learning modules are free, self directed, and designed to give mental health providers, managers, leaders, and students the knowledge and skills they need to integrate e-MH into daily practice and support effective, person-centred e-MH service delivery.

The modules were launched in September 2021, and more than 1,000 people are now accessing the curriculum in English or French. More than 100 people have completed the entire course, which is accredited by the Canadian College of Health Leaders.



³⁴ Mental Health Commission of Canada. E-Mental Health Implementation E-Modules. https://mentalhealthcommission.ca/e-mental-health-implementation-e-modules/

Appendix 3: List of Organizations and Individuals Consulted in the Preparation of this Strategy

The MHCC thanks Mental Health Research Canada and Earnscliffe Strategies for their research and writing support for the E-Mental Health Strategy for Canada.

Additionally, the hard work and dedication of the following organizations and individuals, all of whom donated their time and expertise at no cost, was invaluable to the development of this strategy. The MHCC thanks them for their contribution.

Organizations

AbilitiCBT / Lifeworks	Canada Health Infoway	Canadian Mental Health Association,
Aifred Health	Canada Life	Manitoba and Winnipeg
Alberta Health Services	Canadian Centre on Substance Use and Addiction (CCSA)	Canadian Psychological Association
Antidote Health McGill University		Centre for Addiction and Mental Health (CAMH)
APEC Digital Hub for Mental Health	Canadian Foundation for Healthcare Improvement Canadian Institute of Natural and Integrative Medicine	
BC Mental Health and Substance		Children's Hospital of Eastern Ontario (CHEO) Research Institute
Use Services (BCMHSUS)		Daymark Foundation
Beth Israel Deaconess Medical Center	- Canadian Institutes of Health	Douglas Mental Health University Institute
Blue Cross	Research, Institute of Health Services and Policy Research	
Breathing Room		Douglas Research Centre
Bridge the Gapp	Canadian Institutes of Health Research, Institute of Neurosciences Mental Health and Addiction Canadian Mental Health Association (CMHA)	Eating Disorders Nova Scotia
		Edgewood Health Network (EHN Canada)
CADTH		eMental Health International
Calm		Collaborative (eMHIC)

Epic EMR	MacEwan University	
Foundry BC	Manulife	
Friends of Ruby	Mental Health and Addictions Centre of Excellence	
Government of Newfoundland and Labrador Government of the Northwest Territories	MindBeacon / CloudMD	
Greenspace	MindWell	
Harvard Brain Science Initiative	Mood Disorders Society of Canada (MDSC)	
Harvard Medical School	National Overdose Response Service	
Headspace	NHS England, London Digital Transformation Directorate	
Health Canada	Nordic Interoperability Project (N!P)	
Health PEI	Organisation for the Review of	
Homewood Research Institute	Health and Care Apps (ORCHA)	
Indigenous Services Canada	Pathways to Care project /	
Inkblot Therapy by GreenShield Health	Black Health Alliance	
International Initiative for Mental	PolarUs App / CrestBD	
Health Leadership (IIMHL)	PTSD Coach Canada	
IWK Health	Rainbow District School Board	
Kelty's Key	Royal Ottawa Mental Health Centre	
Kids Help Phone	Stepped Care Solutions	
Krembil Centre for Neuroinformatics (CAMH)	St. Michael's Hospital, Centre for Depression and Suicide Studies	
Krembil Research Institute	Strongest Families Institute	
Lifeguard Digital Health / The Lifeguard App	Sun Life Pride Network Canada	

TAO
TELUS HealthText4Hope
ThriveSpace Health and Wellness
Thunderbird Partnership Foundation
Togetherall
Tranquility App
Université du Québec en Outaouais
University Health Network
University of Alberta
University of British Columbia, Institute of Mental Health
University of Calgary, Faculty of Medicine
University of Regina, Department of Psychology
7 Cups



Advisory committee members

Alisa Simon, Kids Help Phone

Al Raimundo, MHCC Hallway Group

Anita David, MHCC Hallway Group

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Manish Toofany

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Morenike Akinyemi, Canada Health Infoway

Nikki Legge, Government of Newfoundland and Labrador

Shaleen Jones, Eating Disorders Nova Scotia

Shalini Lal, University of Montreal

Sonia Kumar, Body Brave

E-MH Collaborative

Nomin Bayasgalan, policy analyst, virtual mental health policy, Health Canada

Glenn Brimacombe, director of policy and public affairs, Canadian Psychological Association

Meghan Churchill, provincial e-mental health manager, Eastern Health Newfoundland and Labrador

Marion Cooper, executive director, Canadian Mental Health Association, Manitoba and Winnipeg

Peter Cornish, associate professor, Memorial University of Newfoundland and Stepped Care Solutions Jennifer Dahak, senior executive advisor, Integrated University Health and Social Services Centre of the Eastern Island of Montreal

Fauzia Gardezi, senior policy analyst, virtual mental health policy, Health Canada

Heather Hadjistravropoulos, professor/ executive director, University of Regina, Department of Psychology

Shaleen Jones, executive director, Eating Disorders Nova Scotia

Kimberley Korf-Urzan, project manager, BC Mental Health & Substance Use Services

Patricia Lingley-Pottie, president & CEO, Strongest Families Institute

Austin Mardon, assistant adjunct professor; University of Alberta, Department of Psychiatry and John Dossetor Health Ethics Centre

Jeff Niles, national ehealth manager, Indigenous Services Canada

Laura Sikstrom, project scientist, Centre for Addiction and Mental Health (CAMH)

Heather Thomas, CEO, Canadian Institute of Natural and Integrative Medicine

Nancy Young, senior scientist, Children's Hospital of Eastern Ontario (CHEO) Research Institute

Interviewees during Phase 1 (research)

Nicholas Watters, Mental Health Commission of Canada

Marianne Nguyen, Sun Life

Melanie Dobler, Sun Life

Fraser Ratchford, Stepped Care Solutions

Quynh Pham, Stepped Care Solutions

Vani Jain, Daymark Foundation

Melissa Booker, Black Health Alliance

Dr. Kristopher Wells, MacEwan University

Alex St John, Friends of Ruby

Cara Vaccarino, Edgewood Health Network Canada (EHN)

Rochelle Hildebrand, Edgewood Health Network Canada (EHN)

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Krista Balenko, Canada Health Infoway

Lydia Sequeira, Canada Health Infoway

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Robin Laird, Health PEI

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Christine Morgan, National Mental Health Commission (Australia)

Anders Tunold-Hanssen, Nordic Interoperability Project (N!P)

Tim Andrews, ORCHA

Members of the IEEE Standards Subcommittee on Ethics and e-Mental Health:

Dr. Elisabeth Steindl, Department of Innovation and Digitalisation in Law, University of Vienna Becky Inkster, Cambridge University

Chris Boyd-Skinner, Winston Churchill Trust Fellow



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