Building Wellness in a Wired World

Recommendations for **Creating Equitable Digital Solutions** in the Youth Mental Health and Substance Use Sector

Land Acknowledgement

Frayme acknowledges that our office, located in Ottawa, is on the unceded, unsurrendered Territory of the Anishinabe Algonquin Nation whose presence here reaches back to time immemorial. We recognize the contributions First Nation, Métis, Inuit, and other Indigenous peoples have made, both in shaping and strengthening this community in particular, and our province and country as a whole.

We also recognize the ways in which concepts of the digital world have had unique impacts on Indigenous communities across Canada. The digital divide has impeded youth the opportunity to develop digital literacy skills critical to the realities of the online world. Colonialism and systemic racism have further prevented Indigenous communities from entering into this 'new' digital economy. Using a health equity lens, these recommendations look ahead towards solutions to these systematic disparities.

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Introduction

In November 2023, Frayme hosted their third Knowledge Series event, themed Wellness in a Wired World, which gathered over 150 stakeholders from across Canada to discuss the intricacies of the digital world and the impact it has on young people's well-being.

Over the course of two days, participants explored topics such as virtual care and e-mental health services, artificial intelligence (AI) in mental health care and research, the impact of the digital divide on Indigenous youth, the importance of media literacy, and ethical concerns in online environments. Breakout room conversations also provided space for collaborative discussion to share insights and brainstorm solutions on how we can best support young people in navigating a rapidly growing and evolving digital world.

The cumulative content from the event informed the recommendations found in this document. We hope these recommendations will be leveraged in future decision-making, policy and program development, knowledge mobilization and research across the youth mental health and substance use (YMHSU) sector.
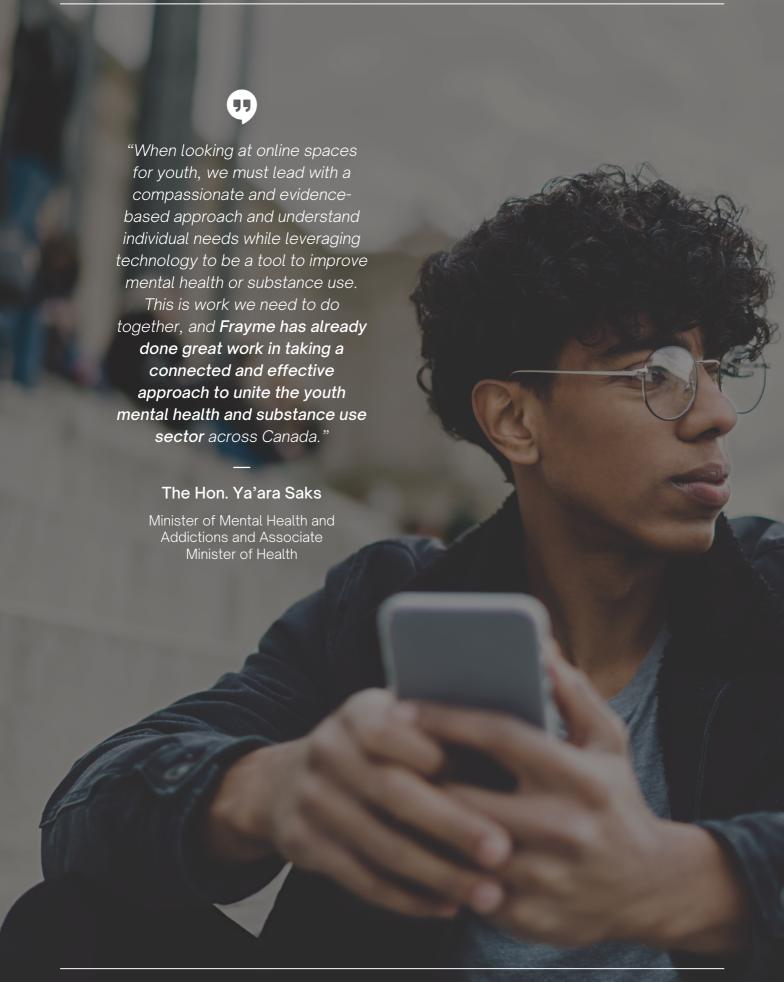
Learn More   Stream Day 1   Stream Day 2

Acknowledgements

We would like to extend our appreciation to everyone who attended the 2023 Knowledge Series, as well as the speakers of the event: The Honourable Ya'ara Saks, Nicole Luke, Stacie Smith, Sonia Kumar, Kaydi Hayden, Jessica Noakes, Matthew Reeson, Elizabeth Cawley, Alisa Simon, Yuri Quintana, Zach Kaminsky, Ary Maharaj, Shirley R. Steinberg, Raffela Mancuso, Krista Benes, Shannon Thom, Nathalie Blanchet, and Jarret Lehman.

Defining Digital Solutions

For these policy recommendations, digital solutions are defined as mental health care processes, including psychiatric, behavioural or health care, that are delivered remotely using technology at a distance for the purpose of managing one's health (Evans et al., 2023; Hilty et al., 2020; MHCC, n.d.); these services may or may not include the integration of artificial intelligence or machine learning processes.

*"When looking at online spaces for youth, we must lead with a compassionate and evidence-based approach and understand individual needs while leveraging technology to be a tool to improve mental health or substance use. This is work we need to do together, and **Frayme has already done great work in taking a connected and effective approach to unite the youth mental health and substance use sector** across Canada."*

—

The Hon. Ya'ara Saks

Minister of Mental Health and Addictions and Associate Minister of Health

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RECOMMENDATION #1

Establish a national framework for the implementation of next-gen digital solutions in YMHSU services

01

A national digital health policy framework must be established to help guide Canada's learning health system in the design, implementation, evaluation, sustainability and health system impact of digital solutions (Centre for Digital Health Evaluation, n.d.).

Actionable Strategy: Leveraging international best practices can enable a strong pan-Canadian e-healthcare system and vision (Task Team on Equitable Access to Virtual Care, 2021). Thus, building this policy framework in accordance to the World Health Organization's Global Strategy on Digital Health (2021) is recommended to ensure the appropriate collection of patient data via supporting legal and ethical frameworks (p.22).

02

Use of AI demands a commitment to transparency, safety, and ethics in the development, implementation, maintenance, and evaluation of AI processes. **Safety must take precedence over functionality and data collection to ensure the responsible integration of AI in our learning health system.**

Actionable Strategy: Utilizing smaller, controlled datasets can help mitigate the generation of harmful speech or misinformation in AI development (Zamani et al., 2023). Having organizations and the communities they serve work together to co-create small AI training datasets that can subsequently be employed to fine-tune existing large language models offers our sector a cost-effective strategy to achieve this outcome. This collaboration benefits the sector by extending and sharing resources for expansive dataset creation and increases the capacity for implementing machine learning.
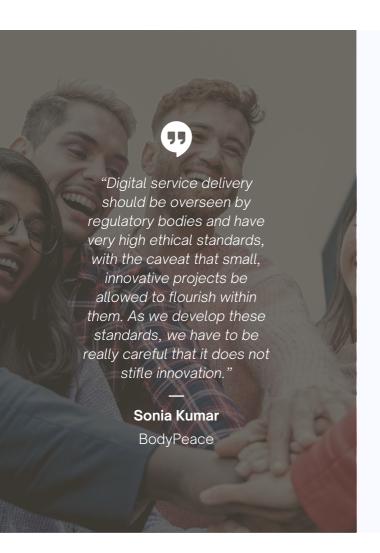
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"I want us in youth mental health spaces to consider as our first priority: what is the minimum amount of information I can collect to provide the service? **How can we collect the minimum viable information at that moment to be as effective as we can, trusting that over time we can collect more data** *we may need from individuals who want to use our service?"*

— **Ary Maharaj**, National Eating Disorder Information Centre

03

Canada must implement comprehensive standards to ensure the inclusion of mechanisms for explaining algorithmic decision-making within technological systems in order to minimize risk and prevent common design, implementation, evaluation and maintenance pitfalls.

Clinical decision support systems have come a long way since their beginnings in the 1980s— improving patient safety when administering medications, clinician adherence to new practice guidelines, and how both patient management plans and files are monitored and documented. However, it's important to note that factors like poor data quality, deskilling of healthcare providers through reliance on technology, neglected system and content maintenance, and financial viability may impact the effectiveness of these systems (Sutton et al., 2020). It is clear that advances in AI and communication between electronic health records and other information systems can support more efficient clinical decision-making processes. Yet, it's crucial to recognize the inherent limitation of AI systems in providing explanations for their algorithmic decision-making, and the risks that this poses.

> *"Digital service delivery should be overseen by regulatory bodies and have very high ethical standards, with the caveat that small, innovative projects be allowed to flourish within them. As we develop these standards, we have to be really careful that it does not stifle innovation."*
>
> **—**
> **Sonia Kumar**
> BodyPeace

How Does Media Literacy Fit into the Recommendations?

When we talk about media literacy, often it's in regards to a skillset— the critical review, evaluation and interpretation of mass media to determine accuracy or credibility of content. Research suggests, however, that participatory human-centred design processes involving individuals with lived and living expertise in the co-development of digital solutions go beyond the development of this specific skill. **Participatory co-design processes have the capacity to positively impact one's own digital and mental health literacy,** and has been found to build confidence in one's decision-making about treatment options, while also building awareness on the different kinds of care one has available to them (Evans et al., 2023).

RECOMMENDATION #2

Establish Youth Engagement in the Design, Implementation and Quality Improvement of Next-Gen Solutions in YMHSU as a Standard of Care Delivery

01

Digital solutions created for youth must be designed with youth. To ensure that youth voices and experiences are at the core of the development and monitoring process, **Canada's YMHSU sector must adopt policies that mandate meaningful engagement of lived expertise** at all levels of the decision-making process.

Meaningful engagement goes beyond just including youth in designing solutions — it also includes having them serve a pivotal role in setting standards of care, deciding on governing structures, influencing quality improvement processes, and overseeing these digital interventions.

Actionable Strategy: Youth Advisory Councils are a mechanism government and donor-funded initiatives can leverage to meaningfully engage young people. These councils should include diverse representation of lived expertise, including equity-deserving identities, as well as mechanisms for feedback processes to drive continuous quality improvement. By actively involving youth in these co-design processes, digital solutions and their supporting policies can better reflect their needs, preferences and lived experiences.

02

Policies must address potential impacts on health equity as well as health disparities amplified by the widespread shift to virtual YMHSU services.

Actionable Strategy: Future research should prioritize developing and understanding strategies that ensure digital solutions are accessible and easy to use, particularly in media literacy. Research should also reflect the impact of inadequate access to technology or a safe, private space to use technology at home. Furthermore, future work in this area should thoroughly and systematically evaluate how digital solutions, developed through meaningful co-design processes with lived experts, affect health equity. This evaluation is crucial for the success and scaling up of digital health pilot projects.

RECOMMENDATION #3

Prioritize Funding of Digital Solutions Serving as Necessary Alternatives to In-Person YMHSU Supports

01

To ensure digital interventions are recognized as critically important alternatives to traditional, in-person YMHSU services, **sustained funding for the development, implementation, and maintenance of technologies must be prioritized**.

Allocated funds should also support research, knowledge mobilization activities, pilot programs, and the scaling up of successful digital interventions. Funding mechanisms should be adaptable to the evolving landscape of technology and health interventions. This flexibility is essential for encouraging sector growth and the ability to adapt to the evolving needs of youth. If done sufficiently, this policy approach will expand access to services and improve outcomes.

02

Funding must reflect a commitment to effectively overcome barriers to care that are common in Canada, such as accessibility, and lack of culturally safe and competent services.

According to the Canadian Institute for Health Information (2022), more than half of young Canadians who sought mental health services in the past six months reported difficulty accessing them. Factors like long wait times, geographic disparities in services, lack of integration, and issues within the primary healthcare system all contribute to this (Moroz et al., 2020; Murray & Knudson, 2023). Digital solutions are a promising alternative within the continuum of in-person community-based services, particularly for rural and remote communities.

03

Healthy equity approaches are both a process and an outcome, and **we must look beyond individual factors related to healthy equity and consider the health system as a social determinant of health** (Crawford & Serhal, 2020).

Actionable Strategy: Collaborative efforts and sustained funding between the Canadian government, private sectors, and service providers can support the development and implementation of policies that address health equity considerations and ensure fair service delivery. Policies should reflect the importance of reliable and affordable internet access as a social determinant of health in order to build a more inclusive, connected, and healthier society.

> "the concept of digital human rights is a new concept, but increasingly salient as our world becomes more centered on digital technology. It becomes harder to move through the world without access to the internet. *I think this issue with access manifests in ways that we don't expect.*"
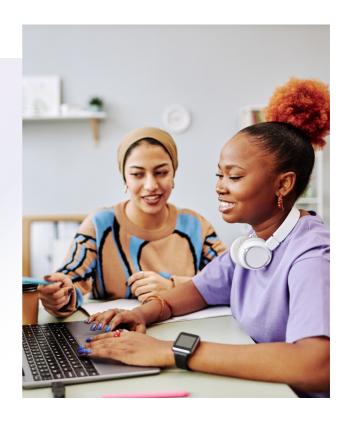>
> —
>
> **Shannon Thom**
>
> Youth Expert & Frayme Groundbreaker

> "We know our mental health system is failing young people. We can't just keep saying 'it's not working'. *The reality is that young people expect that our technology is going to keep up with what they are using in their everyday lives*, including the tools that use AI. Safety guardrails are critical and have to be in the center of youth services, but there is such tremendous potential to allow us to not only serve more young people, but serve them faster, and make our frontline stronger"
>
> —
>
> **Alisa Simon**
>
> Kids Help Phone

Looking Ahead

By establishing a unified approach, Canada's YMHSU sector can ensure consistency, safety, and effectiveness in providing technology across diverse regions and contexts. Sustained investment and collaboration with stakeholders, including experts in youth mental and substance use, technology developers, regulatory bodies, and most importantly, youth, are essential to the success of this framework.

Resources

Frameworks

- Homewood Research Institute's App Evaluation Framework
- CAMH's Digital Health Equity Framework
- Evaluating and Improving e-Mental Health Services: A guiding framework for evaluating e-mental health services
- Centre for Digital Health Evaluation's Pan-Canadian Digital Health Evaluation Framework

Tools

- Stepped Care 2.0
- MIRA: The Mental Health Virtual Assistant
- Tamarack Institute's TOOL | Community of Practice
- Mental Health Commission of Canada's Toolkit for e-Mental Health Implementation
- A Preventative Online Mental Health Program for Youth (POMHPY)
- The Anishinaabek Youth Ambassadors Tech Camp

About Frayme

Frayme is a network of over 400 member organizations from across Canada, working to collaborate, build connections, and increase efficiencies in an under-resourced, under-serviced youth mental health and substance use system. Our work is further shaped by over 300 lived experts who identify as youth, caregivers, and advocates.

Frayme stands as Canada's only national trusted bridge, bringing together knowledge, evidence and stakeholders in the youth mental health and substance use sector. We are driven by the need to improve outcomes for youth, their caregivers, and communities. We achieve this by empowering the system to access, implement, and gauge the impact of the best evidence within their unique contexts.

Our work is firmly rooted in social justice and is further informed by the complex and intersectional issues that impact the mental wellness of youth, their families and communities today. We understand that the best evidence implemented in the wrong context or under wrong circumstances will fail and we try to support the system to avoid such inefficiencies.

Learn More About Frayme's Impact

Let's Connect
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