

10th ANNUAL E-MENTAL HEALTH CONFERENCE

VIRTUAL CARE IN TIMES OF CRISIS AND
BEYOND

Summary Report

“Never let a good crisis go to waste.”

— Louise Bradley

INTRODUCTION AND OPENING REMARKS

The 2021 E-Mental Health Conference brought together speakers and guests in a virtual format to discuss the ongoing evolution of e-mental health technologies and practices, with a particular lens on lessons learned from the COVID-19 pandemic and how those may apply going forward.

In her opening remarks, MHCC president and CEO **Louise Bradley** noted that the pandemic has created and exacerbated challenges, especially for vulnerable individuals. Increased social isolation, anxiety, and social distress have raised the risks of psychological crisis, and isolation and physical distancing have made it harder to access services and supports. In Canada, this is leading to historic levels of overdose cases, alcohol-related mortalities, and reduced capacity for care.

Well-resourced, web-based virtual care and other e-mental health solutions can solve many of these challenges. But more Canadians need access to broadband connectivity to use them, and e-mental health apps need to be standardized through proper accreditation and evaluation to ensure safety and quality. It is also vital to ensure that digital tools are used to provide compassionate, person-centred care.

MODERATOR

Michael Krausz
Director, Addiction Psychiatry
Institute of Mental Health
University of British Columbia

SPEAKER

Louise Bradley
President and Chief Executive Officer
Mental Health Commission of Canada

“We’re harnessing the power of hipsters.”

— Andrew Slater

DAY ONE

KEYNOTE: VIRTUAL CARE IN A PUBLIC HEALTH CRISIS

Andrew Slater kicked off the keynotes by describing how New Zealand’s National Telehealth Service (NTS) played a vital role in delivering virtual health care during the COVID-19 crisis.

The NTS was founded in 2015 to address the challenges of legacy health-care delivery models, including a lack of integration and innovation. It brings a variety of services together under one umbrella, with an open platform for patient-focused services via computer, app, live chat, and other modalities. It is designed to ensure that high-quality care reaches all New Zealanders, including Maori, Pacific, and deprived communities, and to prioritize innovation, allowing for partnerships with private companies that encourage the development of new ideas and technologies.

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Michael Krausz
Director, Addiction Psychiatry
Institute of Mental Health
University of British Columbia

SPEAKER

Andrew Slater
Chief Executive Officer
Homecare Medical

The NTS saw a significant jump in demand for its services during the pandemic, with the mental health services team answering 24 per cent more contacts than the previous year. The 1737 helpline for mental health and addiction services saw an increase of 64 per cent in contacts over the same period.

Outreach and marketing have been key to the success of the NTS, particularly targeted messaging over social media. One campaign to nudge Maori and Pacific youth into Piki, an emotional well-being and peer support program, was so successful that registration had to be paused. (The campaign was co-designed by Maori, LGBTIQ, and Pacific youth.) For the 1737 service, a focus group of 44 participants was used to create 60 different ad variations across digital platforms targeted at priority populations and key ethnic groups.

Slater said the NTS shows that a digital health ecosystem can be a powerful tool to reach underserved populations and connect the unconnected.

BREAKOUTS

The Day 1 morning breakouts featured the following presentations:

<p><i>Enhancing Connections: Developing a Provincial Guideline on Virtual Walk-In Models</i></p> <p>Jana Kocourek, Melissa Edwards, David Willis, Britt-Mari Sykes</p> <p>A workshop on the development of a provincial guideline for virtual walk-in clinics, with a focus on key aspects of evidence-based implementation, such as leadership drivers, organization drivers, and competency drivers.</p>	<p><i>Online Substitution and Public Health Emergency Overdose</i></p> <p>Pouya Azar, Nickie Mathew, Michael Krausz</p> <p>An overview of the origins and trajectory of the overdose crisis, along with a conceptual framework for a virtual substitution clinic.</p>	<p><i>Apps and Digital Mental Health Supports During the Pandemic</i></p> <p>Lydia Sequiera, Iman Kassam, Peter Cornish</p> <p>A look at how digital interventions can support mental health during and after the pandemic.</p>
<p><i>How to Select a Mental Health App</i></p> <p>Danielle Impey, Sapna Wadhawan</p> <p>A workshop on selecting e-mental health apps and supporting the implementation of digital health services in practice.</p>	<p><i>How to Use Data to Improve Health Care in a Public Health Crisis</i></p> <p>Craig Hutton</p> <p>An exploration of statistical and machine learning techniques for modern psychiatric epidemiology research to address the operational challenges of the opioid crisis.</p>	<p><i>COVID-19 Crisis Management with Online Platforms</i></p> <p>Jean Westenberg, Puneet Seth</p> <p>A look at how health care has evolved in the context of the patient and the opportunities and challenges in building a patient-centred future.</p>

“We believe completely virtual opioid treatment is possible.”

— Nathaniel Day

IGNITE TALKS

The first “speed round” of presentations at the conference looked at online service delivery and the impacts of COVID-19. **Danielle Taubman** described how once-skeptical providers at the University of Michigan Depression Center gained enthusiasm for video visits in the pandemic. **Nathaniel Day** explained how Alberta Health Services now uses Zoom to deliver person-centred opioid dependency care, with high satisfaction and zero-day median wait times. **Jennifer Joseph** profiled a certificate program that builds providers’ competencies in digital health service delivery. **Lenka Vojtila** described how the Technology-Enabled Collaborative Care (TECC) platform gives online access to a full virtual care team through a

MODERATOR

Marisha Boyd, Research Assistant
Addictions and Concurrent Disorders
Research Group
University of British Columbia

single care coordinator. **Michelle Smith and Kate Longpre** wrapped up the session with a review of how BounceBack’s low-intensity CBT-based service has adapted to meet increased demand with fresh approaches and flexible service delivery.

“How can we use [social media data] in an ethical and responsible manner?”

— **Munmun De Choudhury**

KEYNOTE: OPPORTUNITIES AND CHALLENGES OF SOCIAL MEDIA IN DIGITAL MENTAL HEALTH

Social media data such as Facebook and Twitter posts can provide insight into mental health — and can potentially act as predictors of mental health crises.

Munmun De Choudhury described a study that looked at new mothers’ social media data, examining posts nine months before and after moms announced a birth on social media. It found that several markers, including reduced activity and interaction, negative affect, and increased use of pronouns, could serve as a predictor for post-partum depression.

MODERATOR

Daniel Vigo
Assistant Professor
University of British Columbia

SPEAKER

Munmun De Choudhury
Associate Professor
Georgia Institute of Technology

Another study looked at 12 American campuses that experienced gun violence, showing how stress and anxiety levels increased, but so did community interaction and banding together. This information could prove useful for helping school administrators create policies and practices to deal with the mental health effects of these incidents.

At the population level, De Choudhury described a third study that applied an algorithm measuring depression to Twitter and Facebook posts. When mapped to actual data for depression and anxiety, the algorithm was quite effective at predicting mental illness at a population level. Finally, De Choudhury discussed research on the use of social media data to predict potential relapses for people living with schizophrenia. While there were some false negatives and positives, the correlation was strong enough to suggest that social media posts may be an effective tool for providing clinicians with evidence to create tailored, proactive treatments.

Taken together, the studies suggest that social media can be used on an individual, community, and population level to proactively identify people in distress and connect them to the services and resources they need.

BREAKOUTS

The Day 1 afternoon breakouts featured the following presentations:

<p><i>Chat Bots, Artificial Intelligence, and Human Interaction</i></p> <p>Daniel Vigo, Julia Pei, Melissa Verschagin, Angel Wang, Calista Leung</p> <p>A workshop highlighting the progress of the Student E-Mental Health Project and the ways artificial intelligence and machine learning can be used to predict risk and tailor treatment pathways.</p>	<p><i>The Future of eMH in Remote and Excluded Populations with Empathic AI</i></p> <p>Anil Thapliyal, Erica Lloyd, Jane Burns</p> <p>A discussion of artificial intelligence and its interface with humans, focusing on performance and well-being, disability and care, and safety online.</p>	<p><i>Using Games in Youth Mental Health Care: The SPARX and HABITs Projects</i></p> <p>Grant Christie, Karolina Stasiak, Sarah Hopkins</p> <p>A demonstration of how CBT and other mental health treatment principles have been incorporated into a number of “serious games” being developed and evaluated in New Zealand.</p>
<p><i>Neural Networking: Putting AI into Mental Health Practice</i></p> <p>David Wiljer, Lydia Sequiera</p> <p>A workshop introducing participants to the basic concepts of AI, with insights into emerging AI technologies in the mental health field and the practical application of AI in the health-care context using a suicide decision support case study.</p>	<p><i>Using Machine Learning to Determine Risk Factors of Fatal Overdose</i></p> <p>Alireza Kazemi, Andy Tai</p> <p>A presentation on how machine learning can select risk factors that contribute to fatal overdose, based on a sample of data collected by the BC Centre for Disease Control.</p>	<p><i>Collecting and Using Data to Fuel Service Innovation and Digital Solutions for Youth Mental Health</i></p> <p>Alisa Simon, Darren Mastropaolo, Jean Westerberg</p> <p>A discussion of how to collect and leverage data to create better e-mental health solutions for youth.</p>

“Do we need to reinvent the wheel, or can we do a ‘brag-and-steal’ from [other countries] and shorten the time frame?”

— Anil Thapliyal

PANEL DISCUSSION: TECHNOLOGICAL CATCH-UP IN CANADA — WHAT ARE OUR OPTIONS IN DIGITAL HEALTH?

While the topic was “catching up,” **Fraser Ratchford** noted that Canada has been doing digital health for 20 years. **Ed Mantler** cited the “spin-up” of Wellness Together Canada in under two weeks as an example of effective, results-oriented collaboration, based on established work within Stepped Care 2.0. **Anil Thapliyal** referenced the eMHIC’s five domains of successful digital health: (1) evidence, (2) lived experience, (3) workforce development, (4) strategy and policy, and (5) industry engagement.

The panellists agreed that good implementation — change management, digital health literacy, tools, and guidelines — is key and that outdated procurement and a lack of sustainable, predictable funding are common barriers. **Damon Ramsey** said the notion of “outcomes based” still has to shift from provider-defined parameters to service users’ expectations, echoing **Louise Bradley** that recovery needs to be at the heart of e-mental health. The panel agreed that COVID-19 proves change is possible, that the best apps and tools only deliver value with good implementation, and that people matter, not the technology. “If we lead with technology, we’ve already failed.”

Suggested resources

A few links were posted in the online chat for further information:

MODERATOR

Michael Krausz
 Director, Addiction Psychiatry
 Institute of Mental Health
 University of British Columbia

PANELLISTS

Damon Ramsey
 CMIO and VP, Collaborative Health
 TELUS Health

Fraser Ratchford
 Senior Director, Stakeholder
 Engagement
 Canada Health Infoway

Anil Thapliyal
 Executive Director
 eMental Health International
 Collaborative (eMHIC)

Ed Mantler
 Vice-President, Programs and Priorities
 Mental Health Commission of Canada

- [MHCC e-mental health resources](#)
- [eMHIC global leaders and experts collaborative](#)

DAY TWO

“We must find ways to work with each other so we can find better success.”

— Yuri Quintana

KEYNOTE: GLOBAL SYNERGY AND HOW TO BUILD MOMENTUM

Yuri Quintana emphasized that, as e-mental health programs and services become more common, it is increasingly important to properly evaluate their efficacy, scale them up, and build a global e-mental health system. Thousands of mental health and addictions apps are available in Canada, but the research into their efficacy is very limited. Nor are there established, useful frameworks for qualitative evaluation. The App Evaluation Project is looking to create a new standard to help assess these apps using robust metrics while identifying opportunities to scale them up and improve their reach.

Currently, evaluations tend to be short term, with small sample sizes, no standard metrics, no replication, and no system for disseminating results. The App Evaluation Project’s formal framework uses standardized scales and looks at a number of metrics for every app, including efficacy, privacy, short- and long-term outcomes, design, and data management. The framework also seeks to compare the app to other modalities of care, such as in-person visits. Essentially, the framework hopes to identify which apps are most useful at specific points in an individual’s journey — connecting the right app to the right person at the right time.

MODERATOR

Umberto Volpe
 Medical Director, Department of Psychiatry, Università Politecnica Delle Marche, Ancona, Italy
 Chair of the EMH section of the European Association of Psychiatry (EPA)

SPEAKER

Yuri Quintana
 Chief, Division of Clinical Informatics BIDMC
 Harvard Medical School

BREAKOUTS

The Day 2 morning breakouts featured the following presentations:

<p><i>E-Mental Health Catch-Up: Online Health Innovation in Germany</i></p>	<p><i>A Web-Based Student Mental Health Clinic at an Egyptian University</i></p>	<p><i>E-Mental Health in South America: Experiences in Colombia</i></p>	<p><i>The APEC Digital Hub for Mental Health: Digital Mental Health and Equity in the Asia-Pacific</i></p>
<p>Michael Krausz, Maurice Cabanis, Kimia Ziafat</p>	<p>Mostafa Kamel, James Wong</p>	<p>Laura Ospina Pinillos, Fiona Choi</p>	<p>Raymond Lam, Jill Murphy</p>
<p>A workshop on the innovative work being conducted in Germany in the e-mental health sphere.</p>	<p>A presentation on the creation of a virtual clinic for university students at Tanta University in Egypt.</p>	<p>A session exploring the promise of health information technology (HIT) interventions to expand the reach of adequate-quality mental health care across wide geographic areas, with lower costs and relatively rapid, centralized scaling of interventions.</p>	<p>An introduction to the APEC Digital Hub for Mental Health with a focus on two ongoing Digital Hub projects.</p>

“In health care, ‘harm’ means medical errors. But in mental health, poor collaboration causes harm.”

— Aidan Scott

IGNITE TALKS

The second Ignite Talks session kicked off with **Melissa Vereschagin’s** account of how intensive co-development fundamentally shaped an e-tool on substance use and mental health for post-secondary students. **Cheryl Forchuk and Jonathan Serrato** shared results from a community model smart technology trial in which people with more complex needs improved their physical and mental health through technology use at home. **Hargun Kaur and Maleesha Paskarathas** talked about bringing digital compassion to dialogues with youth about cannabis and mental health. **Lena Quilty** highlighted the evidence gaps in digital health effectiveness for women/females and people with experience of trauma. **Aidan Scott** drew on personal experience to explain why the Speakbox tool suite focuses on collaboration and relationships across the care continuum. **Steph Kershaw** wrapped the discussion up with an overview of Cracks in the Ice, an Australian app that breaks through structural, geographic, and attitudinal barriers to fight stigma and increase knowledge about “crystal meth.”

MODERATOR

Marisha Boyd, Research Assistant
Addictions and Concurrent Disorders
Research Group

“Compassion doesn’t mean disempowering patients or seeing them as not bringing strength. We need to be critical in how we think about compassion.”

— Allison Crawford

PANEL DISCUSSION: DIGITAL COMPASSION — WITHOUT COMPASSION, THERE IS NO CARE

This panel discussion examined the role of technology in compassionate care. How do we lead with care in the age of technology? How do we ensure digital compassion?

Digital tools can be both a barrier to compassion and an enabler. **Stephanie Sliemers** described filling out mental health questionnaires on an iPad before two separate medical appointments. In the first, her response did not seem to have been read, but in the second, using the app sparked a conversation that helped her feel heard, respected, and at the centre of compassionate care.

Gillian Strudwick related a story about the need for new digital tools, contrasting her experience growing up visiting her father at a factory in Peterborough, where computerized tools were ubiquitous, with entering health care, where patient records were kept on paper. She also spoke about the experience of using virtual neighbourhood walk-throughs to help a client find a new apartment, sparking discussion in the process about what was important to him in an apartment, in a neighbourhood, and in his community. This, Strudwick said, showed her how digital tools can be used to reveal very

MODERATOR

David Wiljer
Executive Director, Education
Technology Innovation
University Health Network

PANELLISTS

Gillian Strudwick
Scientist and RN, CAMH

Allison Crawford
Associate Chief, Virtual Mental Health
and Outreach, CAMH

Stephanie Sliemers
Manager, Simulation & Digital
Compassion, CAMH

Maria Athina Martimianakis
Associate Professor and Director of
Medical Education Scholarship
Department of Paediatrics, Faculty of
Medicine, University of Toronto

human needs.

Allison Crawford spoke about what it means to be a compassionate organization. Organizations need to think of themselves as part of a network of care, connected to communities that are increasingly further afield and to patients who have differential access to care. She presented an [infographic](#) that explored both digital compassion and digital self-compassion.

Maria Martimianakis spoke about the burden of change. As innovations in digital technology push e-mental health forward, organizations need to examine the burden of change. Research shows that organizations that are constantly evolving can place an undue burden on their employees by asking them to rethink and relearn what it means to “care well.” These paradigm shifts can challenge people’s values because when they no longer see themselves reflected in the organizational culture, they may feel disaffected and rejected. True change requires the organization to ensure that its employees still see themselves as part of the solution.

BREAKOUTS

The Day 2 afternoon breakouts featured the following presentations:

<p><i>Co-designing Online Solutions for Youth Mental Health</i></p> <p>Andrew Johnson, Sara Daou, Alexxa abijacoude, David Wiljer, Kimia Ziafat</p> <p>A seminar introducing participants to the concepts and techniques of co-design and co-development for online solutions.</p>	<p><i>Online Interaction: Potential for a Therapeutic Relationship?</i></p> <p>Heather Hadjistavropoulos, James Wong</p> <p>A look at evidence related to online therapeutic relationships and research on how therapist behaviours are generally recommended for building online therapeutic alliances.</p>	<p><i>Psychiatry of Tomorrow: Physical-Digital Integration</i></p> <p>Michael Krausz, Vijay Seethapathy, Andy Tai</p> <p>A session that asked how we can make the best possible use of different treatment settings — physical health clinics with direct interaction and online resources — accessible everywhere and at any time.</p>
<p><i>Transitioning a Therapy Dog Program Online During the COVID-19 Pandemic</i></p> <p>Ben Carey, Alexandria Pavelich, Shaneice Fletcher-Hildebrand, Tonya Wirchenko, Zaphod</p> <p>An interactive workshop introducing participants to the latest evidence on the role of therapy dogs and sharing how the “PAWS Your Stress” therapy dog program uniquely transitioned to a virtual format in response to the pandemic.</p>	<p><i>Co-design in Practice: WalkAlong for Youth Mental Health</i></p> <p>Fiona Choi, Marisha Boyd, Alireza Kazemi</p> <p>A participatory session where attendees could discuss and develop ideas on engagement strategies for an online mental health platform with a youth focus (walkalong.ca).</p>	<p><i>Meaningful Consent in an E-Mental Health Space</i></p> <p>Abigail Carter-Langford, Nelson Shen, Jean Westenberg</p> <p>A conversation and an exploration of what meaningful consent should look like in an e-mental health environment.</p>

“Thank you for sharing part of yourselves over the past three days.”

— David Wiljer

CONCLUSION AND CLOSING REMARKS

David Wiljer said e-mental health represents a sea change for mental health. In the past pandemic year, there have been vast advancements, with a flood of new services placing the person seeking care at the centre of the design.

SPEAKER

David Wiljer
Executive Director, Education
Technology Innovation
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He recapped the themes of the conference, noting that discussions have moved from scaling up to sustaining success, that collaboration is critical for connecting to the unconnected, and that virtual care needs to be integrated as a model for delivery rather than a new, discrete silo. Shifting from reactive to proactive approaches is also important, as is relying on data and evidence to drive innovation and integration. The goal, he said, is a future where compassionate digital care is equitable and available to all, with a focus on developing the workforce so virtual care can be delivered effectively and safely and be person centred through co-creation with service users.