**SCOVID-19 QUICK RESPONSE** Report

Newfoundland & Labrador Centre for Applied Health Research

# Innovative Interventions to Support Mental Wellness and Minimize Harms during the COVID-19 Pandemic

## Disclaimer

This *Quick Response Report* was published on December 11, 2020. Given the rapidly changing nature of the coronavirus pandemic, some of the references included in this report may quickly become out-of-date. We further caution readers that researchers at the Newfoundland & Labrador Centre for Applied Health Research are not experts on infectious diseases and are relaying work produced by others. This report has been produced quickly and it is not exhaustive, nor have the included studies been critically appraised.

Some text below has been highlighted for emphasis.

# **Original Inquiry**

What innovative interventions have been implemented in other jurisdictions to support mental wellness and to minimize harms during the COVID-19 pandemic in select sub-populations?

## Summary

- For the purposes of this report, we understood "innovative interventions" to mean internet-based interventions.
- For the purposes of this report, we defined "select sub-populations" as senior citizens, youth, and Indigenous populations, but also searched for interventions to support mental wellness in the general population.
- A wide range of government agencies and health organizations have launched and publicized internet-based interventions to help support mental wellness during the COVID-19 pandemic.
- Available evidence suggests that self-guided internet-based interventions, especially those based on Cognitive Behavioural Therapy (CBT), can be effective in improving wellbeing and reducing the symptoms of mental disorders.
- Available evidence suggests that although self-guided interventions can improve mental health, they are not as effective as, and should not replace, clinician-led interventions.
- Clinician-led mental health services delivered via internet or other related technologies can provide patients with timely, effective, and accessible treatment.



## **Guidance from Health Authorities**

World Health Organization. <u>Mental health and psychosocial considerations during the COVID-19</u> <u>outbreak</u>. March 18, 2020.

"WHO and public health authorities around the world are acting to contain the COVID-19 outbreak. However, this time of crisis is generating stress throughout the population. The considerations presented in this document have been developed by the WHO Department of Mental Health and Substance Use as a series of messages that can be used in communications to support mental and psychosocial well-being in different target groups during the outbreak."

#### Health Canada. Wellness Together Canada. April 15, 2020.

- "<u>Wellness Together Canada</u> will connect Canadians to peer support workers, social workers, psychologists and other professionals for confidential chat sessions or phone calls, and will make it easier to find credible information and help address mental health and substance use issues."
- "Accessible 24/7. No fees, ever. For everyone."

#### Centres for Disease Control (CDC). How Right Now. 2020.

- "How Right Now is an initiative to address people's feelings of grief, loss, and worry during COVID-19."
- This CDC website includes links to resources on how to talk about mental health (<u>LINK</u>), free guided online mindfulness practice sessions (<u>LINK</u>), tips for coping with loss (<u>LINK</u>), and guidance for coping with stress during COVID-19 (<u>LINK</u>), among others.

#### Health Canada. Mental Health Commission of Canada-E-Mental Health. 2020.

- "E-mental health delivers timely, effective mental health services by using the internet and other related technologies. Shown to be as effective as face-to-face treatment, emental health can provide the right care solutions when and where people need it."
- There is a list of evidence-informed resources including a Toolkit for E-Mental Health Implementation (<u>LINK</u>); Mental Health, Technology and You (<u>LINK</u>); Mental Health Apps: How to Make an Informed Choice (<u>LINK</u>); and Re-Aiming E-Mental Health: A Rapid Review of Current Research (<u>LINK</u>).

#### Health Canada. Fountain of Health- Taking Care of Your Mental Health: You are Worth It! 2020.

- "Fountain of Health provides "paper and app-based tools for clinicians to use in frontline care to invite and support health behavior change in 5 key health areas known to support long-term well-being. All our clinical resources are free and available for use from the website."
- This Health Canada website also provides links to websites that provide services to help manage stress that are centred on deep breathing (<u>LINK</u>), yoga (<u>LINK</u>), mindfulness (<u>LINK</u>), and self-compassion (<u>LINK</u>).



Public Health Agency of Canada (PHAC). Centre for Addiction and Mental Health- National Programs. 2020.

- "<u>BounceBack</u><sup>®</sup> is a free program from the Canadian Mental Health Association (CMHA) designed to help adults and youth 15+ manage low mood, mild to moderate depression, anxiety, stress or worry. Working with workbooks and a trained coach to guide you and encourage you to reflect, BounceBack<sup>®</sup> can help you build skills to improve your mental health."
- "<u>Peer support</u> is emotional and practical support between two people who share a common experience, such as a mental health challenge or illness. A Peer Supporter has lived through that similar experience, and is trained to support others."
- <u>Recovery Colleges</u> offer online courses targeting aspects of recovery. Examples of courses include "Road to Recovery" (<u>LINK</u>), "Coping with current events series" (<u>LINK</u>), "Stress management" (<u>LINK</u>), and "Self-compassion" (<u>LINK</u>).

#### PHAC. Centre for Addiction and Mental Health- <u>Apps for Mental Health</u>. 2020.

• "The apps listed below were created by different organizations but all can be used to help manage stress related to the COVID-19 pandemic. All apps have been reviewed and were selected because of their evidence base, ease-of-use and privacy protocols. These apps are consistently recommended by psychiatrists from across the country who use apps in their general mental health practice and are only a few examples of the large number of digital tools that may be helpful."

Royal Australian College of General Practitioners. <u>e-Mental Health: A guide for GPs</u>. September 2015.

• "The Guide is intended to provide advice of a general nature in the absence of a significant body of evidence on how to use e-mental health resources in the primary care setting."

# Government of UK. <u>Guidance for the Public on the Mental Health and Wellbeing Aspects of</u> <u>coronavirus (COVID-19)</u>. November 4, 2020.

- "This guide provides advice on how to look after your mental health and wellbeing during the COVID-19 outbreak."
- This guide provides links to services such as scheduling 'check in and chat' appointments with the NHS Volunteer Service for those with mental health issues or those feeling isolated (<u>LINK</u>), looking after physical wellbeing through healthy meal ideas (<u>LINK</u>) and keeping active at home (<u>LINK</u>), sleeping well (<u>LINK</u>), and mental wellbeing audio guides to help improve your mood (<u>LINK</u>).

### Alberta Health Services. Virtual Mental Health. 2020

• Provides several links to addiction community online meetings, along with mental health online sessions, and Alberta Health Services supports.



- "An Alberta-based innovation, <u>Text4Hope</u> is an evidence-based tool that helps people identify and adjust the negative thoughts, feelings and behaviours a pandemic might be expected to provoke. Through a set of daily messages, people receive advice and encouragement helpful in developing healthy personal coping skills and resiliency."
- "<u>Togetherall</u> is a clinically moderated, online peer-to-peer mental health community that empowers individuals to anonymously seek and provide support 24/7."
- Addiction and Mental Health COVID-19 Newsletters give "a brief summary of the latest literature and resources regarding the effect of COVID-19 on addiction and mental health. It is compiled by the Knowledge Exchange team of Alberta Health Services Provincial Addiction & Mental Health.

Health Canada. National Initiative for Care of the Elderly-Talk2NICE. 2020.

- They "offer a free, over the phone, friendly outreach and brief support services for older adults and persons with disabilities."
- You can also refer people from the community who you know are socially isolated by filling out a <u>referral form</u>.

#### Health Canada. Canadian Coalition for Seniors' Mental Health- COVID-19 Resources. 2020.

• This site has activities to do while physical distancing (<u>LINK</u>), mental health support lines for seniors in Canada (<u>LINK</u>), tips for battling anxiety during this public health situation (<u>LINK</u>), and virtual visits toolkit (<u>LINK</u>).

#### PHAC. Centre for Addiction and Mental Health- Geriatric Telemedicine Clinic. 2020

• "This service provides patients aged 65 and over with geriatric psychiatry consultations including: medication review, diagnostic assessment of common psychiatric disorders, and behavioural management of dementia. Patients aged 60 to 64 will be considered on a case-by-case basis. The Ontario Telemedicine Network scheduling office will work with CAMH, the patient's telemedicine site and the patient/patient's family to schedule the appointment."

#### CDC. Support for Teens and Young Adults. 2020.

- Provides tips for managing stress in teens and young adults.
- Information on topics such as Learn about COVID-19 (<u>LINK</u>), finding ways to relax like meditation (<u>LINK</u>), and coping with grief (<u>LINK</u>).

#### Health Canada. Jack.org - COVID-19 Hub. 2020

• "Jack.org, <u>School Mental Health Ontario</u> and <u>Kids Help Phone</u> have partnered to bring you all the information needed in one easy-to-access hub so that youth mental health remains top of mind, and our communities are able to easily access the education, tools, support and reliable information they need. Please share widely with the young people in your life."



### PHAC. Centre for Addiction and Mental Health- Telemental Health. 2020.

• "The CAMH Telepsychiatry Service provides consultation and assessment for general psychiatry, whereby clients are placed on a waitlist to be assessed by the first available psychiatrist. CAMH Telepsychiatry has also partnered directly with Family Health Teams to provide both direct and indirect client care, as well as with Keewaytinook Okimakanak Telemedicine (KOTM) to provide care to clients in numerous First Nations communities in Ontario."

#### Health Canada. Hope for Wellness Chat. 2020

- "The Hope for Wellness Help Line offers immediate mental health counselling and crisis intervention to all Indigenous peoples across Canada."
- "Experienced and culturally competent Help Line counsellors can help if you: want to talk, are distressed, have strong emotional reactions, are triggered by painful memories."
- "Phone and chat counselling is available in English and French. On request, phone counselling is also available in: Cree, Ojibway, Inuktitut."

## Systematic Reviews

Liverpool, et al. <u>Engaging Children and Young People in Digital Mental Health Interventions:</u> <u>Systematic Review of Modes of Delivery, Facilitators, and Barriers</u>. Journal of Medical internet Research, June 23, 2020.

• This review identified 6 modes of delivery of DHIs [digital mental health interventions] for CYP [children and young people] with MH [mental health] issues: websites, games and computer-assisted programs, apps, robots and digital devices, virtual reality, and mobile text messaging. Overall, 2 themes emerged, highlighting intervention-specific and person-specific barriers and facilitators to engagement in DHIs. In addition, the findings of this review suggest a high average retention rate of almost 80% when the identified modalities were evaluated. Knowledge of these approaches, including influencing factors to usage from the perspective of the CYP, provided information that can be used to design and evaluate new DHIs."

Fortuna, et al. <u>Digital peer support mental health interventions for people with a lived</u> <u>experience of a serious mental illness: Systematic review</u>. JMIR Mental Health, April 3, 2020.

• "Peer-delivered and technology-supported interventions demonstrated the most promising evidence for both self-reported biomedical and psychosocial outcomes. Attrition rates varied greatly through all digital peer support platforms. Studies with the highest level of digital health engagement employed active community engagement methods or a combination of active and consultative community engagement methods to develop digital peer support interventions."

Lawes-Wickwar, et al. <u>Application and Effectiveness of Telehealth to Support Severe Mental</u> <u>Illness Management: Systematic Review</u>. JMIR Mental Health, November 21, 2018.



- "Telephone support was found effective in improving medication adherence and reducing the severity of symptoms and inpatient days. Computer-assisted cognitive rehabilitation was effective in improving cognitive function. The impact of telehealth on other outcomes was inconsistent."
- "A growing variety of telehealth technologies are being used to support the management of SMI. Specific technology types have been found to be effective for some outcomes (eg, telephone and remote medication monitoring for adherence to treatment), while other types of telehealth technologies (eg, delivery of patient education using computers) had no benefit over traditional nurse-based methods and were less acceptable to patients."

Ali, et al. <u>Online Peer-to-Peer Support for Young People With Mental Health Problems: A</u> <u>Systematic Review</u>. JMIR Mental Health, May 19, 2015.

• "This systematic review identified an overall lack of high-quality studies examining online peer-to-peer support for young people. Given that peer support is frequently used as an adjunct to Internet interventions for a variety of mental health conditions, there is an urgent need to determine the effectiveness of peer support alone as an active intervention.

## Other Review Articles

Marciniak, et al. <u>Standalone Smartphone Cognitive Behavioral Therapy–Based Ecological</u> <u>Momentary Interventions to Increase Mental Health: Narrative Review</u>. JMIR Mental Health, November 12, 2020.

"Results show that EMIs can be successfully delivered via smartphones, significantly
increase well-being among users, and reduce symptoms of mental disorders. Designs and
quality of the studies reviewed using a rational app design were heterogeneous. Across
studies, EMIs were generally accepted by users with various age, sex, education
background, and professions and were shown to be effective treatments for a broad
range of psychological symptoms."

Fischer, et al. <u>Rapid Review and Meta-Meta-Analysis of Self-Guided Interventions to Address</u> <u>Anxiety, Depression, and Stress During COVID-19 Social Distancing</u>. Frontiers in Psychology, October 28, 2020.

• "In summary, the current evidence suggests that a number of self-guided interventions suitable for at-home practice during lockdown and physical distancing are effective to for improving mental health. Specifically, we recommend interventions based on cognitive behavioral therapy, mindfulness, and acceptance-based activities, selected positive psychology activities, physical exercise, and music as useful first-line mental health interventions. However, these activities are not as effective as in-person and group based therapeutic interventions, and so they should not replace clinician-guided interventions for individuals and groups in need."



Di Carlo, et al. <u>Telepsychiatry and other cutting-edge technologies in COVID-19 pandemic</u>: <u>Bridging the distance in mental health assistance</u>. The International Journal of Clinical Practice, September 18, 2020.

• 'TP [telepsychiatry] can capably respond to the mental health needs of people in isolation or quarantine, reducing infection risk. TP observes social distancing, avoids care interruptions and increases public health outcomes. Considering that psychiatric population is more vulnerable to stress than general population, a disruption in care is concerning as it may increase the risk of symptom exacerbation and relapse. TP is precious to ensure continuity of care for these populations at higher risk of decompensation'

Evans, et al. <u>Rapid Synthesis: Assessing the Effectiveness of Virtual Care for Adults with Mental</u> <u>Health and/or Addictions Issues.</u> Hamilton: McMaster Health Forum, July 29, 2020.

- "Virtually delivered psychotherapy is generally as effective as face-to-face care for people with mood, anxiety, and traumatic stress disorders, but 'working alliance' may be weaker than in face-to-face care"
- "Digital interventions that include peer-to-peer networks as a component may be effective in reducing symptoms and increasing knowledge, but the contribution of peer support to the outcomes of multicomponent interventions is unclear; and online peer networks for people with serious mental illness may benefit from clinician moderators."

Goodarzi, et al. <u>Depression in community residing elders (DIRE): A rapid review of depression</u> <u>telemedicine interventions for older adults living in the community</u>. Ottawa: Canadian Institutes of Health Research, June 22, 2020.

- "CBT adapts well to a remote intervention setting as it is a meant to be a structured and collaborative activity. This format works well for the telephone or internet CBT, as the participants are given access to a structured course where they work through chapters or modules weekly. The addition of clinician guidance, as was done in several studies, allows for ongoing feedback and reinforcement with the patient mirroring in-person CBT."
- "The included RCTs reported few barriers to the uptake of remote interventions, and satisfaction with the intervention was high in RCTs that examined this."

Noone, et al. <u>Video Calls for Reducing Social Isolation and Loneliness in Older People: A Rapid</u> <u>Review.</u> Cochrane Database of Systematic Reviews, May 22, 2020.

• "Based on this review there is currently very uncertain evidence on the effectiveness of video call interventions to reduce loneliness in older adults. The review did not include any studies that reported evidence of the effectiveness of video call interventions to address social isolation in older adults. The evidence regarding the effectiveness of video calls for outcomes of symptoms of depression was very uncertain."



Internet-Delivered Cognitive Behavioural Therapy for Major Depressive Disorder and Anxiety Disorders: Recommendations. Ottawa (ON): CADTH (CADTH Optimal Use Report; vol. 8, no. 2c), March 2019.

- "These CADTH Health Technology Expert Review Panel (HTERP) recommendations aim to address this policy question: Should Internet-delivered cognitive behavioural therapy (iCBT) be offered to people with mild to moderate major depressive disorder or anxiety disorders?...The recommendations were developed following HTERP deliberations over multidisciplinary evidence...conducted by CADTH"
- "HTERP recommends that guided Internet-delivered cognitive behavioural therapy be offered to adults with mild to moderate major depressive disorder and/or anxiety disorders."

Internet-Delivered Cognitive Behavioural Therapy for Major Depressive Disorder and Anxiety Disorders: Patients' Perspectives and Experiences, Implementation, and Ethical Issues. Ottawa (ON): CADTH (CADTH Optimal Use Report; vol. 8, no. 2b), February 2019.

- "While studies generally reported participant acceptance of iCBT, it was clear that a onesize fits-all solution is not applicable. As such, the included studies spoke to the importance of individual "fit" of iCBT that could relate to a patient's learning style as well as mental health and engagement needs."
- "While a minority of represented participants valued the freedom to navigate iCBT by themselves and at their own pace, therapist involvement or support was generally valued. Furthermore, a blended approach between iCBT and face-to-face therapy was supported by many participants as it provides the opportunity for greater tailoring and individual support."

The following articles are preprints and have not been peer-reviewed. They report new medical research that has yet to be evaluated and so should not be used to guide clinical practice.

Barnett, et al. <u>Remote working in mental health services: a rapid umbrella review of pre-COVID-19 literature</u>. medRXiv, November 30, 2020.

• "Research across a range of mental health conditions suggests that tele-mental health is potentially an effective, feasible and acceptable tool for providing mental health treatment, at least when interventions are relatively well-designed and well-planned, as has tended to be the case in research studies. Comparability in terms of symptom improvement and satisfaction to face-to-face methods suggests the move to tele-mental health to sustain mental health services during the pandemic has probably been a reasonable one, although the context of this emergency implementation has been very different from most research studies."



## **Expert Opinion**

Doan, et al. From Pandemic to Progression: An Educational Framework for the Implementation of Virtual Mental Healthcare for Children and Youth as a Response to COVID-19. Journal of Contemporary Psychotherapy, October 23, 2020.

• "There is scant guidance available for clinicians on how to address unique considerations for the virtual mental healthcare of children and youth as clinicians rapidly shift their practices away from in-person care in the context of the COVID-19 pandemic. Therefore, we bridge this gap by discussing a six-pillar framework developed at Hospital for Sick Children (SickKids) in Toronto, Ontario, Canada, for delivering direct to patient virtual mental healthcare to children, youth and their families... It encourages the clinician to consider patient, caregiver, and provider factors to maximize the success of VMHC."

# Roncero, et al. <u>The response of the mental health network of the Salamanca area to the COVID-19 pandemic: The role of the telemedicine</u>. Psychiatry Research, July 2, 2020.

- "The COVID-19 pandemic reached world-wide causing a great impact on healthcare services. The aim of this work is to describe the response of the Mental Health Network of the Salamanca' Area (Spain) to this crisis and the reorganization of its resources within the first 8 weeks after the state of alarm was declared."
- "[R]adical re-adaptation of the Psychiatry service was carried out in three main aspects: generalized implementation of telemedicine, physical shutdown of the resources, and reorganization of human resources with those professionals who were not off work due to COVID nor were included in the COVID teams."
- "[T]he assertion can be made that close, multidisciplinary support via telephone, although provisional as management strategy, seems to be effective to minimize relapses, with the patients experiencing a similar subjective perception of support. Furthermore, home treatment stands as a way of avoiding hospitalization and infection."

## Razai, et al. <u>Mitigating the Psychological Effects of Social Isolation during the Covid-19</u> <u>Pandemic.</u> BMJ, May 21, 2020.

• "Social isolation during the covid-19 pandemic is likely to have adverse psychological effects, particularly in high risk individuals. Primary care has unique strengths, including continuity of care, that lend themselves to alleviating psychological harm via evidence based approaches including video consultations and social prescribing."

Galea, et al. <u>The Mental Health Consequences of COVID-19 and Physical Distancing: The Need</u> <u>for Prevention and Early Intervention.</u> JAMA Internal Medicine, April 10, 2020.

• "While the literature is not clear about the science of population level prevention, it leads us to conclude that 3 steps, taken now, can help us proactively prepare for the inevitable increase in mental health conditions and associated sequelae that are the consequences of this pandemic. First, it is necessary to plan for the inevitability of loneliness and its



sequelae as populations physically and socially isolate and to develop ways to intervene. The use of digital technologies can bridge social distance, even while physical distancing measures are in place. Second, it is critical that we have in place mechanisms for surveillance, reporting, and intervention. Third, it is time to bolster our mental health system in preparation for the inevitable challenges precipitated by the COVID-19 pandemic."

Sansom-Daly, et al. <u>Consensus Among International Ethical Guidelines for the Provision of</u> <u>Videoconferencing-Based Mental Health Treatments.</u> JMIR Mental Health, June 6, 2016.

• "This synthesis of guidelines provides a foundation for clinicians and researchers utilizing e-mental health worldwide. The lack of specific guidance relating to special populations is an area warranting further attention in order to strengthen mental health professionals' and researchers' capacity to ethically and effectively tailor e-mental health interventions to these groups."

Gaebel, et al. <u>European Psychiatric Association (EPA) Guidance on the Quality of eMental</u> <u>Health Interventions in the Treatment of Psychotic Disorders</u>. European Archives of Psychiatry and Clinical Neuroscience, February 13, 2016.

• "In summary, the studies reviewed here provide strong evidence that web- and mobilebased interventions for people with schizophrenia and/or other psychotic disorders are feasible and acceptable both for patients and caregivers."

# Primary Research

Bäuerle, et al. <u>E-mental health mindfulness-based and skills-based 'CoPE It' intervention to</u> <u>reduce psychological distress in times of COVID-19: study protocol for a bicentre longitudinal</u> <u>study.</u> BMJ Open, August 13, 2020.

- "'Coping with Corona: Extended Psychosomatic care in Essen' (CoPE) is a structured clinical approach to support psychologically burdened people in Essen, Germany. As an integral part of the 'CoPE' concept, the e-mental health intervention 'CoPE It' offers a web-based, self-guided approach to provide support to counteract psychological strain, which is directly or indirectly caused by the coronavirus. The objective of this study is to assess the efficacy of the e-mental health intervention 'CoPE It' in a longitudinal study design."
- "Our preliminary findings from a longitudinal assessment will suggest whether the selfguided e-mental health intervention 'CoPE It' is an efficient approach to support burdened people in times of COVID-19."

Ben-Zeev, et al. <u>Augmenting Evidence-Based Care with a Texting Mobile Interventionist: A Pilot</u> <u>Randomized Controlled Trial</u>. Psychiatric Services, July 7, 2020.

• "Our group developed a technology-assisted illness management strategy that is delivered by a texting "mobile interventionist." In this model, a trained community-based



mental health worker engages people with serious mental illness in daily recoveryoriented texting exchanges tailored to their individual needs. Unlike digital health apps or therapeutic websites that can be accessed only on smartphones with computational capacities, practically all mobile phones in use today can technically support this type of texting intervention. Furthermore, the model incorporates the expertise of a clinical workforce that can be trained to deliver targeted patient-centered mobile health (mHealth). Repurposing rather than replacing existing clinical personnel may be more appealing to agencies that are looking to modernize their models of care and may provide a more seamless transition to remote care."

Watts, et al. <u>Telepsychotherapy for Generalized Anxiety Disorder: Impact on the Working</u> <u>Alliance.</u> Journal of Psychotherapy Integration, June, 2020.

• "This study assesses the impact of cognitive—behavioral therapy administered via telepsychotherapy or face-to-face on the quality of the working alliance...Each client and their psychotherapist completed the Working Alliance Inventory every 2 sessions. In the current sample, telepsychotherapy did not interfere with the establishment of the working alliance over the course of the treatment for GAD. On the contrary, clients showed a stronger working alliance in telepsychotherapy delivered in video conference than in conventional psychotherapy. Clients seemed to be more comfortable with telepsychotherapy than psychotherapists. The clinical implications of these findings are discussed."

Farrer, et al. <u>A Novel Multi-Component Online Intervention to Improve the Mental Health of</u> <u>University Students: Randomised Controlled Trial of the Uni Virtual Clinic.</u> Internet Interventions, August 28, 2019.

• "This was the first effectiveness trial of the Uni Virtual Clinic, a comprehensive online intervention for mental health problems and related issues in university students. The trial demonstrated some utility in reducing social anxiety and improving academic self-efficacy among students, and was rated well in terms of satisfaction and usability. Mental health problems developed and untreated at university have lifelong impacts in the workplace, on relationships, and on health in later adulthood. Interventions such as the UVC have the potential to re-imagine the way mental health services are delivered in universities, which may reduce the prevalence of mental disorders in this high-risk population."



## Methodology

Newfoundland and Labrador Centre for Applied Health Research (NLCAHR) COVID-19 Quick Response reports are initiated by, and shared with, our partners in the provincial health system, including the four Regional Health Authorities, the Departments of Health and Community Services and Children, Seniors and Social Development, and public health officials.

NLCAHR staff work with topic submitters to clarify the research question. We then search for related systematic reviews, meta-analyses, other reviews, interim and other guidance statements, primary research, expert opinion and health and science reporting.

We use several search strategies, with a focus on the following databases:

- Alberta Health Services
- <u>CADTH</u>
- <u>Centre for Disease Control</u>
- <u>Centre for Evidence Based Medicine</u>
- <u>Cochrane Collaboration</u>
- <u>COVIDEND: Inventory of best evidence</u> <u>syntheses</u>
- <u>COVID-19 Critical Intelligence Unit</u>
- Evidence Aid
- Guidelines International Network
- Health Canada
- Health Systems Evidence
- <u>HIQA (Ireland)</u>
- Joanna Briggs Institute
- MedRxiv
- <u>National Collaborating Centres on Methods</u> and Tools (NCCMT)

- National Institute for Health and Care Excellence
- <u>National Institutes of Health COVID-19</u> <u>Treatment Guidelines</u>
- National Library of Medicine
- NIPH Systematic Reviews on COVID-19
- Once for Scotland guidance
- PROSPERO
- Public Health Agency of Canada
- <u>Trip Database</u>
- U Penn Center for Evidence-Based Practice
- Usher Network for COVid-19 Evidence
   <u>Reviews</u>
- U.S. Veterans' Affairs (VA) Evidence Synthesis Program
- World Health Organization

This report was prepared by Sarah Mallay and Pablo Navarro.

For more information about COVID-19 Quick Response Reports, contact pnavarro@mun.ca.

