Innovation Through Virtualization: Crisis Mental Health Care during Covid-19

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ABSTRACT

The covid-19 pandemic created major challenges for mental health crisis care. Our crisis centre in Winnipeg, Manitoba rapidly virtualized the full spectrum of services offered with remarkable uptake, resulting in avoided hospitalizations and reduced transmission risk for covid-19. We must determine how to best adopt these approaches into post-pandemic crisis care.

Keywords: crisis services, virtual care, innovation, pandemic

RÉSUMÉ

La pandémie de Covid-19 a engendré des défis majeurs quant à la prestation des soins en santé mentale en période de crise. Notre centre de crise de Winnipeg, au Manitoba, a rapidement virtualisé la gamme complète des services offerts, et ce, avec succès, permettant ainsi d'éviter des hospitalisations et de diminuer les risques de transmission de la Covid-19. Il s'agit maintenant de convenir de la meilleure façon de mettre en pratique de telles approches dans l'offre de soins de crise postpandémie.

Mots clés : soins de crise, soins virtuels, innovation, pandémie

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The team acknowledges the invaluable contributions of the front-line providers working at our centre who embraced the rapid virtualization of services and continued to provide high quality care to our patients/clients and their families. We thank key leadership from the Department of Psychiatry and Shared Health Manitoba. We also extend gratitude to our administrative leads, managers, and physician assistant team for assistance in rapidly coordinating new services and being flexible to learn quickly and change often. The authors declare that there are no conflicts of interest. This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

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The needs of those with mental illness do not disappear during a pandemic and may actually increase due to the effects of social distancing, infection-related fear, and self-isolation, amidst concerns of increasing domestic violence, financial stress, and stigma (Brooks et al., 2020). The crisis setting is a critical portal of access for individuals with mental health needs; among young persons, up to 50% of healthcare access occurs through crisis services, namely emergency departments or urgent care clinics (Butler et al., 2017). The onset of the covid-19 pandemic and the associated public health restrictions has posed major challenges to care delivery for highly vulnerable individuals in crisis settings. Although telephone-based crisis care is commonly used to provide urgent support, such as suicide hotlines, the breadth of crisis support is more often provided through in-person contact occurring in emergency departments and urgent care settings, and through specialized clinics and programs. Additionally, front-line staff working in already high stress, high demand clinical settings have been required to rapidly adapt to changing roles and clinical practices.

To address the quickly changing context for mental health care imposed by the covid-19 pandemic, the Manitoba Crisis Response Centre (CRC) rapidly virtualized services by shifting care to remote service recipients remaining at home or in a quarantined environment whenever possible. Located in Winnipeg, the facility is a stand-alone, 24/7 walk-in mental health facility that has offered centralized access to care for individuals age 18 and over from across the entire city (adult population approximately 600,000) since 2013. The facility is linked to a 24/7 mobile crisis line, daytime emergency psychiatry services, psychiatric inpatient care, and a crisis stabilization unit (CSU), as well as outpatient post-crisis services including psychiatry clinics, brief therapy services, and large psychoeducation classes teaching skills to manage symptoms and prevent future crises. In 2019, the CRC had 8,000 in-person visits and another 12,000 calls to its mobile crisis line, providing the vast majority of mental health crisis care in Manitoba. The visits and calls in 2020 have demonstrated similar usage trends, albeit with a shift to some in-person care that has occurred virtually as a result of the pandemic. The primary innovative feature of the program we have developed in response to the covid-19 pandemic is the delivery of full spectrum virtual care in a non-scheduled clinical setting with high acuity mental health presentations.

The authors of this article represent the director of the CRC (LU), psychiatrist and medical director of the CRC (JMB), the clinical specialist on service during the covid-19 rapid response (DCS), and a virtual care expert and psychiatrist working at the CRC (JMH). This team developed the core components of the service innovation and coordinated its widespread roll-out across our program.

The Innovative Practice and Our Experience to Date

Our program has virtualized the delivery of full spectrum crisis care with high acuity mental health presentations. From first contact, we offer virtual crisis mental health assessments to keep individuals in their homes whenever possible. Crisis calls requiring a full mental health assessment are immediately directed to receive this virtually, and low acuity individuals arriving in person are redirected to virtual care whenever safe and feasible. This virtual mental health assessment can result in referral to outpatient virtual services, a referral to a virtual or physical CSU, or referral for an emergent psychiatric assessment (also done virtually). Outpatient services include virtual individual appointments and psychoeducation classes. The virtual CSU provides daily medication reminders by text, virtual support groups, and individual crisis support for a target duration of up to five days while the individual remains in their home. A psychiatric assessment can

lead to an inpatient admission for those who are at highest risk—which can be coordinated directly from the individual's home with the support of family members or by arranging clinical transportation services. We can also arrange a short stay admission to our virtual reassessment and observation unit (ROU). The virtual ROU provides daily psychiatric care and 24/7 on demand crisis support to the individual in their home for up to three days.

All services are delivered virtually by telephone and/or videoconferencing, the latter encouraged where possible. Services are delivered in a stepped care model by a team of mental health clinicians, nurses, physician assistants, psychiatrists and psychiatric trainees. In an effort to maintain social distancing, multidisciplinary staff members across most of the services are designated as the virtual team and work remotely. Additionally, to preserve personal protective equipment, within-facility video assessments to confirmed or suspect covid cases may occur. Our large, 90-minute interactive psychoeducation classes cover introductory skills from cognitive behavioural therapy (4-week program) and dialectical behavioural therapy (8-week program), are each delivered weekly over a group videoconferencing platform with up to 40 attendees registered per class. Actual attendance rates at our classes are about 50–70% of registrants on average, comparable to attendance rates pre-covid when these classes ran in-person. We are using the Zoom videoconferencing platform, with careful security settings in place to protect the confidentiality of our participants. Consent to participate virtually is obtained at the time of referral and registration. Participants may join online or by phone, with the vast majority joining online. All group participants are individually checked in and assessed at the start of class to ensure a safe environment and stable mental status. We encourage interaction throughout through chat (restricted to facilitators only), use of polls, and allowing participants to contribute verbally to discussions. We have 3–4 facilitators per class, depending on class size.

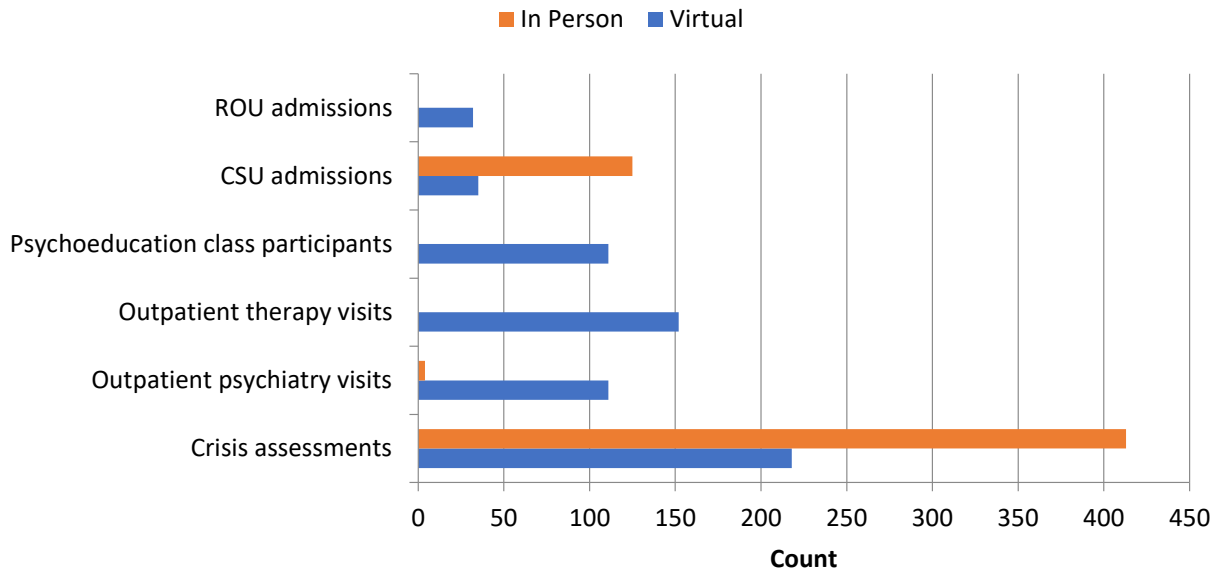
All of our services were rapidly transformed within days to weeks of the announcement of the first covid-19 case in Manitoba (March 12, 2020). Within three weeks, we were fully virtual across the entire spectrum of care. The volumes through our virtual services during the first nine weeks of our local pandemic response are displayed in Figure 1 on the next page. We have received very positive feedback from patients/clients, families, and providers who find the work highly rewarding and patient/client-centred. While we are still working on a comprehensive study of our outcomes as we accumulate more data, we are confident that we have avoided hospital admissions, reduced potential covid-19 transmission, and continued to provide needed care during the pandemic.

LIMITATIONS

The virtualization of this breadth of crisis care is new territory with little known about the risks and benefits. We have run an urgent telepsychiatry service for more than two years and have demonstrated the ability to remotely assess a wide range of high risk mental health needs, including suicide risk and psychosis (Hensel et al., 2020). However, shifting to provide remote care for a higher acuity population may increase the possibility of missing points of intervention, and we need to better understand that risk. The model encourages a more active role of the individual and their supports, and while this may be patient-centred in many circumstances, it could also increase caregiver burden and provoke treatment disengagement in some cases.

Figure 1

Volume of Virtual and In-Person Assessments Completed across the Full Spectrum of Crisis Services Offered in the Nine Weeks after the First Covid-19 case in Manitoba on March 12, 2020



Note. Counts may include the same individual for repeated visits. CSU and ROU admissions are unique admissions to the virtual units. Psychoeducation class participants is a count of all participants who actually attended across all groups (total = 10 groups, range of 3 to 21 participants per group; however, up to 40 participants were registered for some classes). Our usual in-person ROU was closed to all admissions, therapy visits went exclusively virtual, and no psychoeducation groups were held in-person (in-person count = 0 for those services).

ROU: Psychiatry Reassessment and Observation Unit; CSU: Crisis Stabilization Unit.

IMPLICATIONS AND FUTURE DIRECTIONS

This suite of virtual crisis services was implemented to respond to covid-19 public health restrictions. Without that impetus, we may not have developed these services; certainly not as rapidly. As we understand more about the benefits and which individuals are best suited to this mechanism of care delivery, we see a place for this in the post-covid era. In particular, the virtual ROU and CSU are based on a previously studied concept of a virtual ward (Dhalla et al., 2014) that has the potential for substantial health system cost savings and a positive impact on experience of care. Comprehensive evaluation of the impact of these models is needed to inform how to best adopt them over the long term (Shore, Schneck, & Mishkind, 2020).

REFERENCES

Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G. J. (2020). The psychological impact of quarantine and how to reduce it: Rapid review of the evidence. *Lancet, 395(10227)*, P912–P920.

Butler, A., Adair, C., Jones, W., Kurdyak, P., Vidod, S., Smith, M., … Goldner, E. (2017). Towards quality mental health services in Canada: A comparison of performance indicators across 5 provinces. Vancouver, BC: Centre for Applied Research in Mental Health & Addiction (CARMHA).

Dhalla, I. A., O-Brien, T., Morra, D., Thorpe, K. E., Wong, B. M., Mehta, R., … Laupacis, A. (2014). Effect of a post-discharge virtual ward on readmission or death for high-risk patients: A randomized clinical trial. *JAMA, 312,* 1305–1312. doi: 10.1001/jama.2014.11492

Hensel, J., Graham, R., Isaak, C., Ahmed, N., Sareen, J., & Bolton, J. (2020). A novel emergency telepsychiatry program in a Canadian urban setting: Identifying and addressing perceived barriers for successful implementation. *Canadian Journal of Psychiatry*. Epub ahead of print 2020. doi: 10.1177/0706743719900465

Shore, J. H., Schneck, C. D., & Mishkind, M. C. (2020). Telepsychiatry and the coronavirus disease 2019 pandemic—Current and future outcomes of the rapid virtualization of psychiatric care. *JAMA Psychiatry.* Published online May 11, 2020. doi:10.1001/jamapsychiatry.2020.1643