

A Descriptive Comparison of Substance Use Services in Recovery and Isolation Sites for People Experiencing Homelessness During the COVID-19 Pandemic, Boston and Toronto

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Keywords

COVID-19 pandemic, homelessness, substance use, harm reduction

In Canada and the United States, COVID-19 infections have disproportionately affected people experiencing poverty and homelessness.^{1,2} In both countries, underfunding of affordable housing and shelter systems has resulted in inadequate infrastructure and services, placing people using these systems at increased risk for COVID-19.³ During March to April 2020, infection rates among US shelter staff members and guests ranged from 1%-17% and 4%-66%, respectively, prompting a recommendation for universal COVID-19 testing in shelters.⁴ A study in Ontario found that, compared with housed people, people with a recent history of homelessness were nearly 4 times more likely to receive a positive test result for COVID-19, were 20 times more likely to be hospitalized, and had a 5 times higher 21-day mortality.⁵ The ongoing waves of COVID-19 in North America and the lack of adequate infrastructure for the growing population of people experiencing homelessness (PEH) highlight the need for urgent implementation of programs and services that permit physical distancing to prevent viral spread.⁶⁻⁹

Substance use disorders are more prevalent among PEH than among people who are stably housed, posing additional pandemic-related challenges for this population.¹⁰ The COVID-19 pandemic exacerbated risks for people who use substances. People who use illegal drugs are frequently arrested and incarcerated,¹¹ and jails and prisons have emerged as centers for COVID-19 outbreaks and deaths.¹² Toxicity of the illicit drug supply increased during the pandemic.¹³ Harm reduction and substance use treatment services that traditionally relied on in-person interactions have reduced services and hours of operation because of physical distancing guidelines. National overdose deaths increased

191% from January to April 2020 compared with the same months in 2019 in the United States and increased 54% from April to June 2020 compared with the same months in 2019 in Canada.^{14,15} The worsening overdose crisis highlights the importance of incorporating strategies to support people who use substances as a part of public health responses to COVID-19.

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Both Boston, Massachusetts, and Toronto, Ontario, contended with early COVID-19 surges and instituted responses for PEH. The first case of COVID-19 in Massachusetts was reported in Boston on February 1, 2020,¹⁶ and by late March, universal testing in a large shelter in Boston revealed that 36% of guests had received a positive test result for COVID-19.¹ Toronto, which has the largest shelter system of any city in Canada, also had outbreaks of COVID-19, with approximately 600 COVID-19 cases in shelters alone by mid-June 2020.¹⁷

Both cities created isolation and recovery units for PEH in collaboration with public health departments, academic institutions, substance use services, harm reduction workers, community-based advocates, and community organizations serving PEH. These facilities differed from other isolation sites described in the literature because an integral aspect of these responses included addressing substance use and treatment.^{18,19} However, these cities faced different challenges and opportunities in addressing substance use because of their distinct public health approaches to substance use and differing legal and policy contexts. In this commentary, we examine the experiences in Boston and Toronto in addressing substance use in COVID-19 isolation and recovery settings. We outline how institutional, regional, and federal drug policies and substance use services facilitated or impeded care for PEH who used substances during the pandemic. We further reflect on how these experiences can inform policies for ongoing and future responses for PEH who use drugs during public health emergencies.

Establishment of Isolation and Recovery Sites

Boston

In partnership with the Massachusetts Department of Public Health, Boston Medical Center (BMC)—New England's largest safety-net hospital—opened the COVID-19 Recuperation Unit (CRU) on April 9, 2020, in a vacant hospital building. From April 9 through June 4, 2020, a total of 226 people received care in the CRU, 94 (42%) of whom reported active substance use at the time of admission. In total, 11 (5%) people required transfer to higher-level care for a COVID-19–related complication, 16 (7%) people left before being medically cleared from isolation, and 7 (3%) people had nonfatal overdoses. No fatalities occurred during the CRU's operation.²⁰

Toronto

In Toronto, the first physical distancing Recovery and Isolation Site (RIS) for PEH was established in April 2020 and maintained through collaboration with a provincially funded inner-city health network, University Health Network (a large academic teaching hospital), a downtown

community health center, social services partners, and the local public health department. Three sites were initially established, and 1 site was still active as of June 2021. The active site is a 30- to 40-minute drive from downtown Toronto, separating many people from their communities and regular drug supply sources. Since April 2020, >1700 people have been admitted. Four deaths, all suspected overdoses, occurred in the Toronto RIS.

Goals and Services

Harm reduction. In both sites, the guiding principle of care was to retain people at the facilities during their period of isolation to allow them to recover or isolate in a safe space and to prevent community spread of COVID-19. This approach necessitated a focus on harm reduction. Therefore, teams focused on addressing people's self-reported substance use needs and goals, such as minimizing discomfort, reducing or abstaining from nonprescribed substance use, and reducing the harms of substance use while in the facilities. Harm reduction specialists, many with lived experiences of substance use, provided onsite staffing, emotional support, crisis de-escalation, and education for clinical and operational staff members to increase comfort with and understanding of harm reduction practices.

Boston. The CRU had difficulty applying harm reduction principles because of current US drug policy and institutional culture. Both federal law and Massachusetts state law prohibit supervised consumption sites. Other harm reduction approaches, such as managed alcohol programs (prescribed alcohol, such as beer or wine, for people with severe alcohol use disorder)²¹ and safer supply programs (prescription medications, such as short-acting opioids, for people who use nonprescribed opioids as an alternative to the toxic illicit drug supply),²² are restricted by the Controlled Substances Act²³ and other legislation. Legal restrictions on supervised consumption sites, concerns about safety among staff members and onsite security personnel, and concerns about public perception that drug use was permitted in the CRU prohibited onsite drug and alcohol consumption and distribution of harm reduction equipment. An eventual compromise included distribution of naloxone and sterile syringes at discharge, plus a policy of having clinicians rather than security personnel address the use of nonprescribed drugs.

Toronto. From early on in Toronto, leadership and staff members agreed that rapid innovation in harm reduction programming would be required in the RIS. The RIS established a low-barrier managed alcohol program that waived traditional requirements of severe alcohol use disorder,²¹ in which clients received scheduled drinks based on their usual reported consumption and physician consultation. The RIS offered safer supply hydromorphone, which could be used by oral, intranasal, or intravenous routes, in addition

to opioid agonist therapy with methadone, buprenorphine, or slow-release oral morphine.²⁴ Staff members provided widespread naloxone, sterile equipment distribution, and provision of in-room supervision of injection or telephone check-ins. Supervised consumption of illicit drugs is legal in Canada in sites with an exemption from federal drug laws. The RIS received federal exemption to establish supervised consumption services—one for people under investigation and one for people who received a positive test result for COVID-19—on June 16, 2020. The RIS-based supervised consumption services operated with a single staff member or peer witnessing injection. Based on preliminary data, prescribed hydromorphone is the most common substance used in the onsite supervised consumption services. No fatal overdoses occurred during witnessed injections; the 4 suspected overdose fatalities in the RIS were all unwitnessed.

Substance Use Treatment

Although harm reduction approaches in Boston and Toronto differed, substance use treatment was similar, except for opioid use. Screening for substance use and withdrawal was common to the admissions processes. Both sites offered benzodiazepines for sedative-hypnotic or alcohol withdrawal and stimulant intoxication, prescribed stimulants for stimulant craving and withdrawal, pharmacotherapy for alcohol use disorders, and buprenorphine for withdrawal and opioid use disorder treatment.

Boston. In the CRU, because of federal regulations that limit methadone access to federally regulated opioid treatment programs, methadone was initially available for established clients of opioid treatment programs.²⁵ After extensive work with BMC's inpatient pharmacy and US Drug Enforcement Administration agents, the CRU received access to onsite methadone administration. Methadone became available for new initiations in the last 2 weeks of operation. Six people were successfully initiated on methadone treatment and admitted to local opioid treatment programs upon discharge.

Toronto. In Canada, methadone, like buprenorphine, is available through physician prescription and pharmacy dispensation. In addition, slow-release oral morphine is used in Canada as part of the continuum of care for opioid use disorder treatment.²⁶ The RIS offered all 3 medications,²⁷ and many clients who had been disconnected from substance use care initiated and continued treatment.

Care Delivery and Continuity

Boston. In the CRU, relationships and communication with harm reduction specialists, BMC's addiction consult service, and its affiliated substance use bridge clinic facilitated substance use treatment. These partnerships expedited withdrawal management and substance use treatment, discharge

planning, and connections to community substance use resources, including medication programs. The CRU's connection to clinical care at BMC assisted other aspects of care, including transfers to the emergency department, access to medical imaging, treatment for behavioral health issues, and discharge planning to primary care.²⁰ A centralized electronic medical record system allowed for case management, discharge planning, and data collection across the medical center. Despite these coordinated care efforts, some people were discharged back to the street if community shelter beds were full at the time of discharge.

Toronto. The multiagency collaboration in Toronto forged new and creative partnerships between harm reduction specialists and medical practitioners. A committee, including physicians and harm reduction specialists, established overarching guidelines for care and 24-hour telephone consultation and substance use-related prescribing. The committee supported training and skill building among the RIS physician and nurse practitioner staff members. However, transitions in care as people entered and left the RIS posed challenges. The RIS electronic medical system was accessible only to internal staff members, meaning external health care providers could not access RIS records. In addition, the harm reduction team did not have access to the electronic medical record system—and wrote their notes separately—leading to barriers in communication across the multidisciplinary teams. Upon discharge from the RIS, follow-up care was often fractured because people were frequently placed in longer-term shelter hotels far from their previous community. Furthermore, only a small number of prescribers in Toronto were willing to continue prescriptions for safer supply, mostly within established programs, which were often full because of high demand. Therefore, these medications were typically discontinued upon discharge while opioid agonist therapy would be continued. Discontinuation posed a potential increased risk of overdose as a result of loss of tolerance after discharge, particularly among people who preferred safer supply alone (Table).

Reflections

Our experiences show how the COVID-19 pandemic created opportunities to challenge existing policies on harm reduction and substance use. For example, the CRU acquired onsite methadone access through collaboration and advocacy among pharmacy, hospital, and drug enforcement leadership. In the RIS, harm reduction and clinical partnerships moved to incorporate safer supply and managed alcohol programs previously limited to a small number of specialized programs. However, challenges also arose. In the CRU, because of security personnel concerns about safety, harm reduction supplies were not distributed. Some people at the CRU were discharged to the street because of limited access

Table. Services offered in isolation and recovery units, Boston, 2020, and Toronto, 2020-2021

Boston and Toronto	Boston—COVID-19 Recuperation Unit	Toronto—Recovery and Isolation Site
Harm reduction		
<ul style="list-style-type: none"> • Integration of community-based harm reduction experts • Widespread naloxone distribution 	<ul style="list-style-type: none"> • Sterile syringe distribution at the time of discharge 	<ul style="list-style-type: none"> • Sterile syringe distribution at admission • Supervised consumption space • Managed alcohol program^a • Safer supply program^b
Substance use treatment		
<ul style="list-style-type: none"> • Universal substance use screening • Pharmacy-dispensed buprenorphine • Withdrawal management • Alcohol use disorder treatment • Prescribed stimulants for withdrawal/cravings 	<ul style="list-style-type: none"> • Methadone coordination with opioid treatment programs^c 	<ul style="list-style-type: none"> • Pharmacy-dispensed methadone • Slow-release oral morphine for opioid use disorder
Care delivery and continuity		
<ul style="list-style-type: none"> • Case management for discharge planning • Continuation of opioid agonist therapy on discharge to community 	<ul style="list-style-type: none"> • Integrated with BMC's EMR, substance use, and discharge planning services 	<ul style="list-style-type: none"> • Independent EMR not accessible to external health care providers • Available shelter beds after discharge often in new, distant communities

Abbreviations: BMC, Boston Medical Center; EMR, electronic medical record.

^aManaged alcohol: clients were provided scheduled drinks by harm reduction staff members based on their usual alcohol consumption after a consultation occurred with on-call physician.

^bSafer supply: hydromorphone, which could be used by oral, intranasal, or intravenous routes, was offered in addition to opioid agonist therapy with methadone, buprenorphine, or slow-release oral morphine to those who did not plan to stop nonprescribed opioid use.

^cThe COVID-19 Recuperation Unit was granted access to onsite methadone administration in the last 2 weeks of operations.

to community shelter beds. In Toronto, discharges to longer-term shelter hotels away from people's previous community supports complicated follow-up and continuity of care. The lack of support for, and comfort with, safer supply by most prescribers in Ontario meant that such medications were typically discontinued at discharge, which may have contributed to harm.^{28,29} These experiences highlight the need to change drug and substance use treatment policies and services to facilitate responses for PEH during public health emergencies.

Calls to Action to Support Public Health Responses for PEH

Although novel COVID-19 vaccines are approved in both countries, community spread continues, and COVID-19 public health responses are still needed. In addition, future global epidemics will arise. An urgent need exists to develop sustainable integrated models of care for PEH that include harm reduction and substance use treatment services. Research on best delivery practices is needed and can be guided by our experiences.

Immediate Calls to Action

Establish community partnerships among community-based organizations, hospitals, and academic institutions. The integration

of community-based harm reduction programs and staff members was integral for addressing the needs of people who use drugs and alcohol in isolation sites. Both sites developed and operated through new academic, public health, and community partnerships. Research examining the impact of such partnerships on care coordination and access to services among PEH is needed.

Increase and integrate the harm reduction workforce. Harm reduction specialists filled a vital role in educating staff members about substance use, engaging with clients, and mitigating the real and perceived power imbalances between PEH and health care professionals. Qualitative studies assessing how the integration of harm reduction specialists within such settings affected retention and treatment satisfaction are underway in Toronto and will help inform which aspects of these services had the greatest impact.

Screen for substance use disorders and provide substance use disorder treatment services within programs for PEH. Screening for substance use disorders and providing harm reduction and treatment services within programs for PEH are necessary given the high rates of substance use disorders and drug use in this population.^{30,31} Care coordination is critical, and evaluation of transitions to and from COVID-19 isolation sites for PEH will inform

our understanding of short- and long-term substance use and other health-related outcomes to guide future public health responses.

Future Calls to Action

Although establishing hotel sites that promote physical distancing and isolation is a step toward minimizing the harms of COVID-19 among PEH, the following steps are necessary to address the root causes of the overdose and housing crises.

Liberalize drug use and treatment policies for substance use disorders. The COVID-19 pandemic highlights a need to liberalize policies that minimize the harms of substance use. Particularly in the United States, although restrictions on buprenorphine access have been relaxed to help mitigate challenges with transitions in care, methadone access remains limited, and restrictions must be lightened. Supervised consumption sites should be legalized in the United States. Research underway in Canada is examining the impact of safe supply programs to guide future implementation efforts, and the province of British Columbia is considering decriminalizing drug use to reduce the number of overdose deaths.

Address the housing crisis. The lack of stable affordable housing will continue to drive the marginalization of PEH and will be exacerbated by ongoing and future public health crises if not addressed. Both countries must develop national sustainable housing strategies that include Housing First models with harm reduction and substance use services for PEH who use drugs and alcohol.

Conclusion

The COVID-19 pandemic has exacerbated the housing and overdose crises facing PEH who use drugs and alcohol. It also inspired the implementation of collaborative programs that challenge present drug and addiction policies. These experiences present a roadmap for ongoing and future public health responses for PEH during public health crises (Box).

Authors' Note

The authors Miriam T.H. Harris and Samantha Young contributed equally to this work as co-first authors.

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Box. Calls to action that would support public health responses for people experiencing homelessness

Immediate

- Establish community partnerships among community-based organizations, hospitals, and academic institutions.
- Increase and integrate the harm reduction workforce.
- Screen for substance use disorder and provide substance use disorder treatment and harm reduction services within programs for people experiencing homelessness.

Future

- Liberalize drug use and treatment policies for substance use disorder.
- Develop national Housing First strategies in consultation with people experiencing homelessness.

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