Research paper

"You don't have to squirrel away in a staircase": Patient motivations for attending a novel supervised drug consumption service in acute care

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ABSTRACT

Background: Acute care hospitals have been described as a high risk environment for people who use drugs (PWUD). Formal and informal bans on drug use can lead patients to conceal their use and consume under unsafe circumstances. Provision of hospital-based supervised consumption services (SCS) could help reduce drug-related harms and improve patient care. However, no peer-reviewed research documents patient experiences with attending SCS in this setting. To address this gap, the present study examines key factors that shape patients' decisions to attend or not attend a novel SCS embedded within a large, urban acute care hospital in Western Canada.

Methods: We adopted a focused ethnographic design and conducted 28 semi-structured interviews with SCS-eligible patients. We examined participant accounts thematically, and Rhodes' "Risk Environment" framework helped guide our analysis.

Results: Most participants perceived the SCS as a safer environment that made it possible to reduce drug-related risks and avoid using in unsafe areas of the hospital where they could be caught by staff, security, or police. However, some participants did not trust that the SCS would provide adequate protection from criminalization, which motivated them to avoid the site. Several participants also worried about the potential for unwanted changes to their patient care following SCS use. Physical site and policy limitations, such as eligibility requirements and a lack of infrastructure to support supervised inhalation, were additional reasons for not attending the SCS.

Conclusion: PWUD in this study attended the hospital-based SCS in an attempt to reduce risks associated with their hospital stay. However, we note a number of access barriers that should be addressed to ensure optimal uptake. Wider provision of SCS in acute care requires both changes to the hospital environment and broader drug policy reform.

Introduction

People who use drugs (PWUD) have emergency department visits and hospitalization rates 4.8 and 7.1 times that of the general population (Lewer et al., 2019). Despite their overrepresentation in acute care, hospitals have been described as high-risk environments for PWUD (McNeil, Small, Wood, & Kerr, 2014; Strike et al., 2020). A significant proportion of PWUD continue to use drugs while hospitalized, irrespective of formal or informal bans on drug use (Grewal et al., 2015). To avoid detection, PWUD frequently consume drugs alone, in concealed areas of the hospital (e.g., private washrooms), and with unsterile sup-

plies - activities that increase risk of overdose morbidity and mortality, and HIV or hepatitis C transmission (Grewal et al., 2015; Markwick, McNeil, Small, & Kerr, 2015).

Patients who are caught using drugs in hospital may leave against medical advice or be involuntarily discharged, banned from returning, or even be arrested by police (McNeil et al., 2014). Conflicts between hospital staff and PWUD are also well documented. Staff often perceive PWUD as untrustworthy and undeserving of high quality care, and PWUD frequently report inadequate pain and withdrawal management, and stigma and discrimination (Pauly, McCall, Browne, Parker, & Mollison, 2015; Strike et al., 2020). Negative encounters with staff can contribute to substandard care, persistent unmet healthcare needs,

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and poor health outcomes (Merrill, Rhodes, Deyo, Marlatt, & Bradley, 2002; Pauly et al., 2015). Thus, there is an urgent need to adopt new approaches to caring for PWUD to reduce hospital environment risks and ensure that all patients receive high quality, equitable, and compassionate care regardless of substance use history.

Implementing supervised consumption services (SCS) in acute care is one potential strategy. SCS are safe spaces where individuals can use pre-obtained drugs with sterile supplies and under the supervision of trained staff without the risk of criminal prosecution (Kennedy, Karamouzian, & Kerr, 2017; Potier, Laprévote, Dubois-Arber, Cottencin, & Rolland, 2014). SCS were developed as part of a harm reduction approach that emphasizes non-judgemental and person-centered care, patient autonomy, safety and security, and strengthened connections to health and social supports (Kappel, Toth, Tegner, & Lauridsen, 2016). In community settings, SCS have been shown to reduce the risk of blood-borne infection transmission and overdose death, decrease drug use in public spaces, and facilitate access to drug use treatment and medical care, without increasing drug-related crime or disorder (Davidson, Lambdin, Browne, Wenger, & Kral, 2021; Kennedy et al., 2017; Potier et al., 2014). Research has also shown that PWUD perceive SCS as safer and less stigmatizing than other drug use environments because of reduced risk of contact with security personnel and police (McNeil & Small, 2014).

Provision of SCS in acute care could achieve similar benefits by helping reshape aspects of the hospital risk environment for PWUD and better align acute care with specific population needs (McNeil, Kerr, Pauly, Wood, & Small, 2016). They have the potential to strengthen patient-provider relationships and improve care experiences and retention by encouraging open conversations about drug use, and could help reconcile moral distress hospital staff experience in choosing between enforcing formal or informal bans on drug use, or turning a blind eye (Pauly, Wallace, & Barber, 2018). However, to our knowledge, no peer-reviewed literature has evaluated the provision of SCS for acute care hospital patients.

To address this gap, we conducted a mixed method process evaluation of the first and only known SCS globally that is designed for hospital patients (Dong, Brouwer, Johnston, & Hyshka, 2020). The overall goal of our evaluation was to support further refinement of this service model and inform efforts to implement SCS in other acute care settings. In evaluating health service innovations, a key first step is to assess accessibility and uptake (Da Silva, Contandriopoulos, Pineault, & Tousignant, 2011). This is especially critical for hospital-based SCS, given the significant challenges PWUD conventionally face in accessing high quality acute care. We therefore sought to examine patients' motivations for attending an SCS in acute care, and identify aspects of the hospital risk environment that influence accessibility.

Overview of the acute care supervised consumption service

The SCS was implemented in a large, urban acute care hospital in Western Canada in April 2018, with the input of PWUD, medical/harm reduction experts, and hospital staff (Dong et al., 2020). The hospital applied for and received an exemption under Section 56.1 of Canada's *Controlled Drugs and Substances Act* from the federal Minister of Health (Health Canada, 2018). During the study, the SCS was available to inpatients, and beginning in October 2019 post-triage emergency department patients. Patients enrolled with the SCS were protected from prosecution for drug possession while accessing the SCS, while carrying substances for the purpose of consumption in the SCS to and from the site (while within the boundaries of the hospital), and when storing substances in their patient room. In addition, the hospital was operating under a formal substance use policy, stating that patients were not to be discriminated against or excluded from care on the basis of substance use (Alberta Health Services, 2013).

Patients could inject, ingest, or insufflate pre-obtained legal or illegal drugs. Most patients attending the SCS were connected to the hospital's addiction medicine consult team (AMCT) (described in detail by

Hyshka et al., 2019), which operates the SCS and frequently refers eligible patients there. To encourage SCS uptake, SCS staff and AMCT staff conduct outreach to eligible patients on hospital units and offer patients one-on-one tours of the space. Patients attending the SCS complete an intake and consent process on their first visit and in subsequent hospital admissions, and provide their name during every SCS visit to confirm hospital registration. Patients also disclose what type of drug they plan to use and route of consumption (e.g., injection). SCS use is tracked in a dedicated database and hospital units receive a standard notification when a patient visits the site to promote care continuity. The SCS environment and clinical procedures are described in detail elsewhere (Dong et al., 2020).

Methods

The rationale for the present study and broader research project evolved through consultations with our research team's community advisory group (coordinated by ST and GS and convened since 2014) comprised of approximately one dozen people (number varying according to individual member circumstances) with lived experience of substance use and hospital use. Members were recruited through a local PWUD advocacy group. Advocacy group members with an interest in research engagement self-select to attend regular meetings with the academic researchers (GS, EH, KD) and affiliated trainees and staff. Community advisory group members provided input on our data collection strategy and instruments, approved our study protocol, and reviewed and commented on the preliminary findings. Members receive cash honoraria for their time and expertise.

We adopted a focused ethnographic design - an applied qualitative research method frequently used to study highly fragmented or specialized areas of society, including various healthcare settings (Knoblauch, 2005). Compared to traditional ethnography, focused ethnography is more time-limited and targeted, and designed to elicit information on a distinct issue, problem, or experience within a discrete community, organization, or context (Cruz & Higginbottom, 2013; Mayan, 2016; Wall, 2014). Focused ethnography typically employs semi-structured interviews addressing specific research aims, and often limits or forgoes participant observation (Cruz & Higginbottom, 2013; Higginbottom, Pillay, & Boadu, 2013; Mayan, 2016). This method was well-aligned with our objective to understand patients' perspectives on the hospital SCS, and helped generate practical information directly relevant for refining the SCS service model and improving patient care.

From May-November 2019 we conducted 28 semi-structured interviews with SCS eligible participants (e.g., registered inpatients or triaged emergency department patients who reported recent or current illegal drug use) who were offered access to the SCS and attended or did not attend the service. Hospital AMCT staff assisted with recruitment by acting as intermediaries between our research team and potential participants. AMCT staff approached a diverse range of patients (e.g. based on age, gender, type(s) of drug use). AMCT staff then referred interested patients to a member of our research team (BK) to discuss the possibility of participating in the study and to provide informed consent. Sample characteristics are provided in Table 1. Of the 28 participants with whom we spoke, 20 told us that they had attended the SCS at least once.

Interviews were audio-recorded and conducted in a hospital location of the participant's choice that permitted confidentiality (e.g., patient room, private indoor or outdoor sitting area). An interview guide was developed and pilot tested with members of the community advisory group. The guide elicited information about participants' drug use, barriers and facilitators to SCS delivery, SCS impacts on patient care and health outcomes, and recommendations for improvement. Interviews were led by BK with assistance from HB. Both researchers were trained in qualitative research with structurally vulnerable populations. On average, interviews lasted one hour and were transcribed verbatim. We deidentified transcripts using pseudonyms and any potentially identify-

Table 1
Sample characteristics (*N* = 28).

Use of supervised consumption service during a hospital admission	
Yes	20 (71%)
No	8 (29%)
Age	
Mean	36 years (SD 9.6; Range 23–65)
Gender	
Woman	13 (46%)
Man	15 (54%)
First Nations, Inuit, or Métis	
Yes	16 (57%)
No	12 (43%)
Drug use duration	
Average	18 years (SD 7.3; Range 2–30)
Primary drug used	
Opioids	18 (64%)
Stimulants	8 (29%)
Opioids and stimulants equally	2 (7%)
Preferred route of consumption	
Intravenous	21 (75%)
Inhalation	6 (21%)
Insufflation	1 (4%)

ing details about each participant were omitted. Participants received a $30.00 CAD honorarium.

Transcripts were managed using ATLAS.ti and examined using latent content analysis (Mayan, 2016). The main analyst (BK) reviewed all the transcripts and field notes before coding the data inductively and descriptively, attending specifically to participants' accounts of their encounters with staff, impressions of the SCS, and other aspects of the hospital risk environment which shaped motivations to either attend or not attend the SCS. We then applied Rhodes' (2002) Risk Environment framework to organize our codes into categories, and develop the categories into higher level themes that described factors influencing SCS uptake (Braun & Clarke, 2012). The "Risk Environment" framework has been widely applied in drug policy research as it is helpful for conceptualizing the physical, social, economic, and policy environments in which drug-related harms are produced and mitigated (Rhodes, 2002). The framework also encourages a focus on social contexts and environmental factors that contribute to drug harm, as opposed to more biologically-determined or individualistic approaches that focus on drug use behavior alone (Rhodes, 2002). We deemed the framework to be especially useful for examining SCS accessibility given previous research describing the acute care hospital as a risk environment for this patient group (McNeil et al., 2014).

We employed multiple strategies to ensure rigor in our data collection and analysis, including developing an audit trail, recording field notes during and after each interview, close examination of negative cases, double-coding (in which a second team member [HB] reviewed a subset of transcripts for coherence and accuracy), and regular team discussions during the analysis process. Findings were checked with members of the community advisory group, who concurred with our interpretation of the data. The data analyzed herein are part of larger study that received ethics approval from the University of Alberta's Health Research Ethics Board.

Results

Section 1: Facilitators of supervised consumption service uptake

"Nobody is going to get pricked": Preventing drug-related health risks in hospital

Participants characterized the SCS as a safer environment that made it possible to reduce harms associated with using drugs while hospitalized, contrasting the SCS and its supports to unmonitored private

or semi-private spaces within the hospital (e.g., patient rooms locked washrooms, parkades, stairwells) where they would otherwise consume drugs. Participants emphasized that they attended the SCS to avoid potential overdose in unsafe areas of the hospital, where they were likely to be alone and out of reach of emergency overdose care. In contrast, the SCS provided overdose monitoring and response as required. The need for overdose monitoring was largely driven by concerns about highly potent synthetic opioids in the unregulated drug supply, especially fentanyl. As "Paul" told us, he had previously experienced overdoses elsewhere in the hospital and now attended the SCS to avoid the risks associated with these drug use settings:

> I've overdosed quite a bit and well, I've overdosed three times outside of it and overdosed I don't know how many times in there . . . I stopped doing that [using drugs outside of the SCS]. Now I just use in the site . . . I didn't want to use in my room.

Many were also motivated to attend the SCS to access sterile injection supplies (e.g., syringes, cookers, alcohol swabs, ties) to reduce their blood-borne infection risks. Some of these participants told us that sterile supplies were otherwise difficult to acquire in the hospital, as "Jacob" described: "[AMCT peer support worker] asked me if I still do drugs and if I still do intravenous drugs . . . [the SCS will] supply me with clean everything, which I didn't have. I had dirty stuff on me." Some participants worried that bringing supplies upon admission or asking for supplies from inpatient unit or emergency department staff could lead to stigma or judgement and potentially negative changes to patient care (e.g., sudden changes to amount or frequency of pain medication, conflicts with staff).

In contrast, attending the SCS gave participants the option to avoid direct discussions about drug use with unit staff that could lead to confrontation, and access sterile supplies and engage in safer drug use practices. Although the units did still receive a procedural notification (a standardized fax to the admitting unit) each time a registered patient attended the SCS. This information was received and filed with other patient chart documentation. Medical or nursing staff would only become aware of the SCS visit if/when they received this supplementary material. Further, as long as patients were present on the unit when required to receive medical care, they were typically not obligated to tell unit staff where they were going when they left the unit. Some participants who had attended the SCS also told us that they took additional supplies with them for use outside of the SCS, primarily for times when getting there was too difficult (e.g., when they felt too unwell to walk to the SCS, which was located in an area of the hospital that was a 5–10 min walk from the emergency department and most inpatient units), or for after hospital discharge.

Safe disposal of used supplies was also an important motivator for SCS attendance. Participants discussed not wanting to have to hide clean or used supplies or having to dispose of them unsafely (e.g., in drawers, in sides of beds, flushing down hospital toilets). Instead, participants described attending the SCS because it allowed them to minimize risk of needlestick injuries for themselves, hospital staff, other patients, and visitors. For example, "George" told us that he was concerned about staff experiencing injuries from unsafely disposed needles. For him, the SCS made it "totally safer for everybody . . . nobody is going to get pricked, especially the nurses and stuff like that by someone's dirty needle."

"The cops can't bother you there": Seeking protection from social violence in the hospital

Participants further characterized the SCS as a safer drug use environment as they explained how the SCS offered protection from the real or perceived social violence of hospital care in the context of criminalization. Accessing the SCS helped participants circumvent pressures to "hide" or "sneak around" the hospital to avoid "getting caught" using drugs by hospital staff, security guards, police, or peace officers (i.e. civil officers with more law enforcement authority than security but less than

police, who are sometimes employed in Canadian hospitals). Although the hospital operated under a formal harm reduction-oriented policy stating that patients should not be excluded from acute care on the basis of substance use, many patients assumed that the hospital completely banned illegal drugs, or were nevertheless fearful of incidental encounters with authorities. In contrast, the SCS explicitly offered sanctioned and witnessed use, which reduced the need for participants to hide their drug use in ways that made it potentially harmful. "Russell" described never consuming drugs outside of the hospital SCS for this reason:

> I don't . . . the cops can't bother you there . . . bother you, search you . . . [I]t's really nice not to have to look over your shoulder and there's nowhere else really that I can think of . . . where you could do that right? Sit down and get comfortable.

Many participants were fearful that using drugs outside of the SCS could lead to getting "kicked out" or "banned" from the hospital, thereby interrupting their medical treatment and worsening their health. As "Ashley" explained: "You don't have to squirrel away in a staircase and risk getting caught and getting kicked out of the hospital. Because if they catch you doing dope where you're not supposed to, they'll just kick you out." Others who had attended the SCS further reported doing so to avoid potential arrest for using or possessing drugs on hospital property. For example, "Philip" told us that he had been incarcerated in the past and that using the SCS helped minimize his fear of this recurring: "[I]t's safer. I don't have to worry about anything. [W]hen you have a safe, secure place to get high at, a lot of the mental stress of being caught or going to jail, it's alleviated."

In addition to concerns about interactions with authorities, some participants went to the SCS after being warned against on-unit drug use by hospital staff (e.g., nurses, physicians). Given that possessing drugs for use outside the SCS remained illegal under federal law, participants explained that staff either sternly or gently told them to not consume illegal drugs on the unit, and that if they needed to use drugs, they should attend the SCS. As "George" experienced:

> [B]efore I went over to the SCS for the first time, I used in my room . . . And I think I nodded out for a bit and I had something left on my tray . . . so I kind of got shit. . . "If you want to use or whatever, use over there."

Section 2: Barriers to supervised consumption service uptake

"There's a catch here": Abiding structural-environmental barriers

While many participants attended the SCS because they viewed it as a safer environment in comparison to other drug-use spaces in the hospital, others were not quite convinced. Despite the SCS being an intervention specifically designed to provide a safer space for in-hospital drug use, many participants continued to perceive or experience the hospital environment as unsafe, and this apprehension extended to the SCS. Multiple participants told us that they did not trust that the hospital SCS would provide adequate protection from criminalization.

The hospital operates within a broader structural context in which security guards patrol the facility, and law enforcement are often present on the campus for various reasons (e.g. accompanying someone in police custody while they receive medical care; investigating a criminal complaint). Participants described how prior experiences of being "followed", "stopped", or "kicked out" of hospitals by security were a main reason for not attending the SCS. Many did not trust the intentions of the site, believing that it could be a "trap" with the ulterior motive of identifying and arresting PWUD. As "Rachel" described upon hearing that the hospital provided an SCS for patients who use drugs, "I was like well, there's a catch here. Cops are going to [be] waiting or security's going to kick me out."

Even those who ultimately *did* attend the SCS told us that fear of law enforcement delayed their initial uptake, and caused them to consume

drugs in unsafe areas of the hospital in lieu of attending the SCS. For some of these participants, attending the SCS for the first time required significant work on behalf of the AMCT staff or other PWUD to build trust and help them overcome their fear. For example, "Joy" told us about a conversation that she had with her friend before she attended the SCS, in which her friend tried to convince her that it was safe.

> At first, I thought people were lying to me . . . "They're just going to call the cops and get arrested you idiot." "No, I've actually went there and done it!" "Why would you do that? Now they're going to follow you around because they're going to wait until you get a bunch of dope and then they're going to arrest you then."

Despite enrolled SCS patients being explicitly exempted from the application of federal drug laws within the SCS, as well as when possessing drugs elsewhere in the hospital, participants still worried that their engagement in the SCS would trigger increased surveillance and harassment from hospital security or law enforcement. Participants feared that they might encounter these authorities on their way to the SCS, or outside the SCS after attending it. Participants especially had concerns about potentially having their drugs confiscated, being prematurely discharged and/or banned from the hospital, or being arrested. "Christine" shared:

> [I]t's a no-no to everybody, it's a bad thing . . . [I]f you were to lock yourself in the bathroom, security is to catch you injecting in the bathroom, you'd get kicked off the property. They'd be scared to get charged for [going to the SCS], you know? Yeah, that's the big fear.

"They are going to look down on me again because of my use":
Social-environmental concerns

SCS uptake was also hindered by certain dynamics of the relationships between patients and their care teams. Specifically, patients worried that unit staff would stigmatize them, judge them, or otherwise sanction them if they accessed the SCS. As described previously, hospital units received a standardized notification each time a patient attended the SCS. Many participants felt that this procedure could compromise their confidentiality and disclose their drug use to members of their care team who they did not want to share this with. This social-environmental barrier was both a deterrent for participants who had not attended the SCS, and an ongoing concern for some who had. "Eve" discussed her thoughts on SCS documentation:

> Most people are afraid to go to the safe consumption site because they don't want [news of their drug use] to come back to their unit. I find that those people who don't want to use the site because they don't want people to find out they're using, are the ones using the washrooms and stuff.

Many participants expressed concern that if unit staff learned of their ongoing drug use, it could negatively impact their care. These fears were commonly based on past interactions with healthcare providers where they faced judgement and stigma from staff as a result of their drug use. "Kristin" described avoiding the SCS for this reason: "That's one reason why I won't go there . . . I'm really kind of afraid that they are going to look down on me again because of my use." Some were also worried that they might receive less timely care, that staff would be more avoidant or hands off, or that they could be moved to a different unit if they were to attend the SCS.

Others expressed concerns that they could face abrupt changes to medications they were receiving to treat pain or withdrawal. This was especially true for participants who had *not* attended the SCS, as this group often recounted prior negative experiences (again, unrelated to SCS attendance) where hospital staff had suspected them of diverting medications, changed their medication regimes, or exercised extra scrutiny when dosing their medications. For example, "Rhianna" feared

experiencing reductions to her pain medications if she were to attend the SCS: "Well, we don't want to get caught cheeking it and get cut off your meds that you're getting, right? A lot of people I know survive off of it."

"On the way to the injection site, I'm smoking dope": Policy environment features that limited SCS uptake

Many participants also described access barriers associated with the hospital policy environment, such as SCS rules and regulations. During these interviews, consumption in the SCS was only available to inpatients and triaged emergency department patients. Consequently, some participants did not attend the SCS because they did not want family or friends who had come to visit them in hospital having to use drugs alone. These participants described how drug use was sometimes an embedded aspect of their relationships with others (e.g., with intimate partners, friends, family) and inherently social. They highlighted the contradiction between being frequently warned not to use drugs alone (e.g. to prevent fatal overdose), and the exclusionary policies of the hospital SCS which left visitors to use alone in unsafe areas of the hospital. "Dianne" explained that sometimes when she had visitors, she would go into hospital washrooms with them because she worried about them overdosing.

> [I]f you're with somebody . . . and if they're not a patient here . . . they're going to dip in here and go use the washroom. And if they're doing heroin and, because we don't know right. There's been like how many people have gone down . . . So, sometimes to go in with them it's okay.

Overall, the majority of participants (including those who had and had not attended the SCS) believed that most in-hospital drug use outside of the SCS was occurring amongst non-patients (e.g., visitors). When we asked participants about whether the eligibility policy should change, several participants - especially those who had not attended the SCS - expressed that the SCS should accommodate visiting PWUD. However, many who had attended the SCS felt that the site should remain available to patients only, or that it should allow one guest to accompany a patient at a time. This latter group worried that the hospital and/or SCS could become too busy, or that their safety could be compromised if the SCS fully opened to non-patients. For example, "Malcom" (a patient who had attended the SCS) told us that he preferred that the SCS remain for patients only for personal safety reasons.

> I stay by myself for the most part and I'm not affiliated with any gangs or anything like that . . . I don't think the hospital should have that mix . . . I think it would be too much. It's a safe place.

Some also reported not being able to attend the SCS as it was not designed or equipped to support supervised drug inhalation. This prevented uptake for three participants who had not attended the SCS, while six others who had used the service did not use it consistently as they alternated between smoking and injecting drugs while hospitalized. These participants described smoking in unsafe areas of the hospital or going off-site to do so. For example, "Rachel" discussed having to smoke drugs in hospital washrooms on her way to the SCS: "I only inject methamphetamine. So, I only use that there and then usually on the way to the injection site, I'm smoking dope in the bathroom."

Amongst the eight participants who had not attended the SCS, more than half still cited a need for sterile supplies. One described getting supplies at the SCS regularly and leaving the hospital property to consume their drugs, while three others said that they were dispensed supplies from the hospital AMCT staff at their bedside. Remaining participants described bringing their own supplies, trying to abstain from illegal drug use while hospitalized, or having no money or drugs with them as reasons for declining to attend the SCS while in the hospital.

Discussion

Our findings highlight how PWUD perceive hospital-based SCS as a safer environment in contrast to other areas of the hospital where they would otherwise consume drugs. Participants described attending the SCS because they viewed it as a sanctioned drug use space that enabled them to reduce a number of drug-related risks. However, even though SCS are an intervention specifically designed to provide a safer space for drug use, participants described how accessibility of the SCS was limited by the broader environmental and policy contexts in which it operates.

Hospital environment risks identified by participants in our study have previously been documented in other hospitals and in the community (Markwick et al., 2015; Pauly et al., 2015; Strike et al., 2020). For example, outside of the hospital PWUD report experiencing conflict with security guards and police, overdosing without access to emergency care, and difficulties employing safer drug use practices (e.g., using sterile supplies, using with others) (Collins et al., 2019; Shaw et al., 2015). In acute care settings, PWUD have similarly described risk environment features that exacerbate drug-related harms and likelihood of premature discharge (McNeil et al., 2014). While our findings illustrate that PWUD attend hospital-based SCS to help avoid some of these risks, our results also suggest that past negative hospital experiences and social and structural forces limit at least some patients' willingness to attend this service.

Strategies may be needed to address behavior change amongst healthcare providers, especially to promote non-judgemental and non-stigmatizing attitudes. Other drug use and mental health research has identified providers feelings of competence, perceived social/professional role, and personal beliefs as core components of effective health policy implementation (Beenstock et al., 2012; Michie et al., 2007). One framework that may be useful in developing behavioral change policies is structural competency, which emphasizes broadening care providers' viewpoints to include understanding of higher-level, structural factors that impact patients (Metzl & Hansen, 2014). This knowledge could help providers to better understand patients' challenges and priorities and improve patient-provider interactions (Metzl & Hansen, 2014). We also identified a need for future research to examine the attitudes and practices of security and law enforcement in how they interact with hospitalized PWUD in order to identify avenues for engagement, training, and education, and further protect and promote the rights of all PWUD to access high quality hospital care, irrespective of drug prohibition laws and criminalization.

There is also a need to structure hospital-based SCS operations in a way that can promote trust and rapport with patients. Some participants were skeptical whether the SCS could fully protect them from criminalization, but in a few instances, support from AMCT staff or peers was enough to overcome these concerns. Staffing hospital-based SCS with healthcare staff who have lived experience of substance use or a mix of healthcare staff and peer outreach workers, as well as expanding peer involvement outside of hospital SCS (e.g., integrating them on hospital units and within AMCTs) could encourage SCS uptake and promote feelings of comfort and trust (Hyshka et al., 2019; Kennedy et al., 2019). Future research should also investigate whether hospital-based SCS may be perceived by patients as more accessible if they are operated by an external organization with whom patients already have strong rapport, and that is able to provide services discretely and maintain anonymity. In particular, external organizations that are led by PWUD or those with lived experience may be well-positioned to overcome patient reticence towards hospital-based SCS. As others have identified, the medical rationalities of healthcare and public health often conflict with the social realities of drug use (Duff, 2015; Fischer, Turnbull, Poland, & Haydon, 2004). It is possible that shifting SCS oversight to an external organization could increase accessibility by mitigating institutional control and surveillance over hospitalized PWUD (Fischer et al., 2004) and by providing a more comfortable social environment. However, improving uptake should be balanced with the potential for poorer outcomes if a pa-

tient has an adverse reaction after returning to the unit and staff are not aware of their recent drug use.

Hospitals seeking to implement SCS should further consider the needs of visitors, outpatients, and community members. As reflected in our findings, drug use is a social phenomenon and often embedded in relationships with peers, intimate partners, and family members (Bardwell, Kerr, Boyd, & McNeil, 2018; Fairbairn, Small, Van Borek, Wood, & Kerr, 2010). Recent research examining a peer-assisted injection pilot program found that kinship and mutual dependability are key characteristics of drug use networks (Pijl, Oosterbroek, Motz, Mason, & Hamilton, 2021). Thus, restrictive SCS eligibility may neglect the social-environment needs of PWUD, failing to account for the importance of relationships. In the hospital setting, limiting SCS access to registered patients may unintentionally undermine the imperative of SCS to provide a clean and safe space for drug consumption and inadvertently increase risks of drug use for patients and their visitors (Kennedy et al., 2017; Potier et al., 2014).

Likewise, patients who consume drugs by non-injection routes of administration, (particularly smoking) should also be accommodated. Internationally, a significant proportion of community-based SCS accommodate inhalation (Speed et al., 2020), and research suggests that 60% of PWUD would attend a supervised inhalation room on hospital property (Cortina et al., 2018). However, we acknowledge that supervised inhalation may be challenging to integrate into hospitals, given that it would typically require retrofitting ventilation systems, and reconciliation with smoke-free tobacco and cannabis regulations (Sharma, Lamba, Cauderella, Guimond, & Bayoumi, 2017). One way to address this could be through the provision of semi-sheltered supervised inhalation spaces adjacent to the hospital or in an attached or proximal portable building or trailer (Kerr, Mitra, Kennedy, & McNeil, 2017), that aligns with patient and hospital needs until these challenges can be overcome.

However, additional work is needed to advance harm reduction approaches in hospital settings. Optimizing hospital-based SCS service models and staff practices alone are unlikely to overcome patient concerns related to drug criminalization, or prevent drug use from continuing in other areas of the hospital. The fact that some participants in our study avoided a decriminalized space to consume drugs, worrying that it was a trap, indicates that the overriding fear of criminalization is a powerful determinant of inequitable healthcare access for PWUD. This suggests that broader structural-level changes, including decriminalization of drug possession (Csete et al., 2016), and access to prescribed medications as an alternative to illegally obtained substances such as hospital-based injectable opioid agonist programs (Brar, Fairbairn, Colizza, Ryan, & Nolan, 2020; Tyndall, 2020) may be required to transform hospital risk environments and achieve equitable acute care access for PWUD.

There are several limitations to our findings. Our ethics protocol ensured that AMCT staff acted as intermediaries in referring potential participants to our team so that patients did not experience uninvited interactions with research staff. This process could have biased our sample towards those with more favourable views of the SCS. Further, despite best efforts to protect participant confidentiality, some may not have felt comfortable in sharing some opinions of the SCS. Staff perspectives were also not included in this study; however, interviews with staff are being conducted as part of the broader process evaluation. Finally, we did not perform an intersectional analysis to examine potentially unique SCS barriers that Indigenous participants (e.g., First Nations, Métis, Inuit) may have faced. In Canada, Indigenous peoples experience disproportionate rates of harms associated with drug use and face significant barriers to care (Browne et al., 2011). Further research is warranted to understand the perspectives of this patient group on hospital-based SCS.

Overall, our findings suggest that PWUD attend hospital-based SCS to mitigate drug-related and environmental risks. However, introducing SCS - a decriminalized space for drug consumption - into the acute

care setting has not led to universal uptake amongst all eligible patients. Despite SCS provision, an AMCT, and favourable organizational policy in the hospital in which this study was conducted, not all participants felt comfortable accessing this service. Barriers to access detailed herein must be addressed to facilitate uptake and wider provision of SCS in acute care, and promote health equity for PWUD.

Declarations of Interest

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