SPECIAL SECTION ON SUBSTANCE USE: COMMENTARY



## Expanding supervised injection facilities across Canada: lessons from the Vancouver experience

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## Abstract

The opioid crisis has led to an unprecedented rise in the number of overdose deaths across Canada. In response, there has been an expansion of supervised injection facilities (SIFs), with several new SIFs approved or under review across the country. Much of the evidence for the benefits of SIFs in reducing overdose mortality, infectious-related complications, and public disorder comes from Insite in Vancouver, North America's first SIF. While implementing SIFs in other Canadian cities is a major step forward in combating the opioid epidemic, the diversity within our country's socio-demographic and political landscape leaves the application of SIFs in these new settings a matter of uncertainty. This commentary highlights key lessons learned from Vancouver and the potential modifications required to enhance implementation in other cities to ensure the success of new SIFs across Canada.

## Résumé

La crise des opioïdes a mené à une hausse sans précédent du nombre de décès par surdose au Canada. Il y a eu en réponse une expansion des sites d'injection supervisée (SIP), avec plusieurs nouveaux sites approuvés ou à l'étude au pays. Une grande partie des preuves que les SIP réduisent la mortalité par surdose, les complications liées aux infections et le désordre public viennent d'Insite à Vancouver, le premier SIP en Amérique du Nord. La mise en place de SIP dans d'autres villes canadiennes est un grand pas en avant dans la lutte contre l'épidémie d'opioïdes, mais la diversité du paysage sociodémographique et politique du Canada crée de l'incertitude quant aux demandes de création de SIP dans de nouveaux milieux. Nous présentons ici les principaux enseignements de l'expérience de Vancouver et les modifications qu'il pourrait falloir apporter pour faciliter la mise en place de nouveaux SIP dans d'autres villes pour en assurer le succès partout au Canada.

Keywords Harm reduction · Drug overdose · Intravenous injections

Mots-clés Réduction des dommages · Mauvais usage des médicaments prescrits · Injections veineuses

Canada's opioid crisis has renewed attention for the need to expand evidence-based interventions for people who inject drugs (PWID). Supervised injection facilities (SIFs) are one

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such key intervention; numerous studies have shown benefits, including reduction in overdose deaths (Marshall et al. 2011), public disorder (Wood et al. 2004), and infectious disease transmission (Bayoumi and Zaric 2008), while remaining cost-effective (Bayoumi and Zaric 2008). Initially designed as a harm reduction intervention in response to the HIV epidemic, Vancouver's first SIF, Insite, has evolved to become an integral part of the local response to the opioid crisis; since opening in 2003, over three million clients have attended Insite and over 5000 overdoses have been reversed without a single death (Vancouver Coastal Health 2017a). As a result of the Government of Canada's commitment to facilitate timely review and implementation of proposals for new SIFs, Health Canada announced approval of several new SIFs, including those in Toronto, Montreal, Edmonton, Vancouver, Surrey, and Victoria, with several more proposals under review across

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the country. This decision was a departure from the previous Conservative Government's Bill C-2 which was replaced by Bill C-37 under the new Liberal party leadership, thereby reducing the number of conditions that needed to be met before a SIF could be opened (Government of Canada 2016). SIFs have been proven as a key harm reduction and policy tool to combat the rising death toll related to opioids. Their successful implementation is critical to ensure the effective use of resources, taking into account the socio-economic, demographic, and geographic differences across cities and provinces. Lessons learned from the Vancouver experience with Canada's first SIF can inform implementation of new sites in Canada.

Insite is located within Vancouver's Downtown Eastside (DTES) neighbourhood. Throughout the 1990s, this area was becoming one of the largest open injecting drug scenes in the world with an extremely high density of PWID, estimated at nearly 5000 people within only a few square kilometres (City of Vancouver 2013). This was attributed to a number of factors related to the extensive network of lowincome housing and single residency occupancy hotels set in a port city with readily accessible illegally imported heroin which became an open-air injecting environment. These were remarkably unsafe and unhygienic spaces, owing to poor sanitation and no access to sterile injecting supplies. Insite, situated at the epicentre of this open drug scene, saw a 35% reduction in overdose mortality in the 500 metres surrounding the site (Marshall et al. 2011). However, whereas one facility reached a large number of PWID in Vancouver, populations are more dispersed elsewhere in Canada, including both Toronto and Montreal. Findings from cost-effectiveness studies have therefore suggested multiple, smaller SIFs in these settings (Enns et al. 2016; Jozaghi et al. 2013; Jozaghi and Jackson 2015). Mobile sites, such as the one in Montreal, may offer the ability to reach a more dispersed population of PWID when combined with a fixed site as travel to a SIF has been shown to limit its use (Petrar et al. 2007). As further sites expand within Canada, ensuring SIFs are placed in high proximity to PWID is essential to enhance service delivery.

Studies showing the cost-effectiveness of proposed SIFs, including Toronto and Montreal, have been integral to their expansion (Enns et al. 2016; Jozaghi et al. 2013). Most of these studies are based on the cost structure of Insite and other urban SIFs. However, it will be important to find ways to adapt these services to less densely populated regions with a reduced ability to take advantage of economies of scale. For example, the HIV epidemic in Saskatchewan is primarily affecting more remote First Nations communities driven by injection drug use. In rural areas, solutions may include satellite mobile SIFs in combination with a fixed site, no-frills sites, or sites established as off-shoots of local extended-hour harm reduction, acute care, primary care, or within established housing services. Thinking creatively to offer SIF services

in a range of Canadian settings can lower operating costs and ensure this service can be expanded to areas where it is needed most.

The peer-driven organization Vancouver Area of Drug Users Network (VANDU) has been highly influential in advocating for PWID in the DTES and throughout Vancouver (McNeil et al. 2014). Their established unsanctioned, peerdriven injection site showed the ability to operate SIFs at a grassroots level. Individual peers, or "harm reduction champions", have demonstrated great success connecting a large number of PWID in Vancouver, thereby creating a linked network of peers to disseminate harm reduction education and service provision (Bouchard et al. 2018). This can extend beyond SIFs to bring peer-led overdose prevention services such as naloxone training and administration into the community. Encouraging peer-driven service implementation and dissemination of harm reduction knowledge has the potential to enhance the impact of SIFs in new settings.

The massive spike in opioid-related overdose deaths seen in Vancouver has largely been attributed to the prevalence of the highly potent synthetic opioid, fentanyl, within the drug supply (British Columbia Coroner Service 2017). The proportion of overdose deaths in BC where fentanyl is detected has increased from 4% in 2012 to 61% in early 2017 (British Columbia Coroner Service 2017). The presence of fentanyl in the drug supply is now rapidly moving eastward. Additionally, while fentanyl has been primarily detected in heroin (Vancouver Coastal Health 2016), the most commonly used opioid in Vancouver and Montreal, it has also been detected in cocaine, the most frequently injected opioid in Eastern Canada. "Drug checking" was introduced at Insite to provide harm reduction education, supervision, and overdose response services for PWID and to monitor the presence of fentanyl in drug samples for surveillance purposes. Data from Insite has shown that over 80% of drugs checked at the SIF contained fentanyl (Vancouver Coastal Health 2016). Drug checking has shown promise as an effective harm reduction strategy; PWID were 10 times more likely to reduce their dose if the sample tested positive for fentanyl, and this was associated with a 25% reduction in overdose events (Vancouver Coastal Health 2017b). As fentanyl continues to spread throughout Canada, drug checking at SIFs may help PWID reduce overdose risk and help inform health officials regarding fentanyl contamination of the local drug supply. It will also be critical to ensure the capacity for overdose reversals with an adequate supply of naloxone and personnel trained in its use.

Despite initial concerns that SIFs promote drug use and discourage PWID from seeking treatment, studies have shown that SIFs are associated with increased access to addiction treatment (Wood et al. 2006). Vancouver's SIFs offer a wide range of ancillary services, including nursing care, social workers, referral to residential treatment or detoxification centres including Onsite, a 24-hour facility located above Insite, and access to trained addiction medicine physicians for opioid agonist therapy, such as methadone and buprenorphine. Users of SIFs are often extremely marginalized and have limited prior contact with the medical or addiction treatment community, thereby offering a crucial point of entry into care, particularly with the involvement of peer support workers on site. The recently published British Columbia Centre on Substance Use operational guidelines for SIFs highlight the importance of including peers, First Nations Elders, or other nonmedically trained community members in the planning and operation of SIFs to enhance delivery (British Columbia Centre on Substance Use 2017). Once engaged in care, sufficient resources to provide addiction services are also needed. Provincial and local health authorities can support physician and other health care professional training in addiction medicine in anticipation of an increase in demand for further harm reduction and substance use treatment services following implementation of new SIFs. A qualitative study examining barriers to care for PWID in Saskatoon highlighted the importance of expanding educational tools to care providers to help reduce stigma and enhance compassionate, effective care delivery (Lang et al. 2013). SIFs are in a unique position to integrate the pathways to addiction care that are not readily accessible or approachable for PWID, families, and health care providers alike.

The opening of an SIF should seek buy-in from local law enforcement, health policymakers, and community stakeholders. While there have been concerns raised regarding the impact of SIFs on economic viability and community safety, implementation of Insite was shown to reduce public disorder, including reductions in discarded syringes and public injection drug use (Wood et al. 2004). Community engagement throughout planning and implementation phases for a new SIF is essential. Additionally, working with law enforcement is essential as police presence at SIFs poses a significant barrier to their use if clients fear harassment or arrest. Locally, police have referred clients found injecting in public to Insite dating back to 2003, and the Vancouver Police Department has publically advocated for expansion of evidence-based addiction services including SIFs (DeBeck et al. 2008). The response in other provinces and cities still remains contentious in some areas. While no longer opposing the establishment of SIFs, the view of the Ontario Association of Chiefs of Police is that SIFs must work towards a "main goal of rehabilitation, rather than simply reduce the potential harm to users" (Ontario Association of Chiefs of Police 2017). Engagement with local police departments around all new SIFs is an essential component of stakeholder engagement to facilitate uptake of SIF services by PWID.

In conclusion, the expansion of SIFs represents a major step forward for Canada. For communities dealing with growing HIV rates linked to injection drug use or rising death tolls from opioid overdose, lessons learned from the Vancouver experience and an understanding of the differing sociodemographic and geographic nature of our cities can inform the smooth and rapid implementation of new SIFs and ensure their future success.

## References

- Bayoumi, A. M., & Zaric, G. S. (2008). The cost-effectiveness of Vancouver's supervised injection facility. CMAJ, 179(11), 1143–1151.
- Bouchard, M., Hashimi, S., Tsai, K., Lampkin, H., & Jozaghi, E. (2018). Back to the core: a network approach to bolster harm reduction among persons who inject drugs. *Int J Drug Policy*, 51, 95–104.
- British Columbia Centre on Substance Use (2017) Supervised consumption services: operational guidance. Available at: http://www.bccsu. ca/wp-content/uploads/2017/07/BC-SCS-Operational-Guidance. pdf (Accessed 14 Aug 2017).
- British Columbia Coroner Service (2017) Fentanyl-detected illicit drug overdose deaths: January 1, 2012 to February 28. Available at: http://www2.gov.bc.ca/assets/gov/public-safety-and-emergencyservices/death-investigation/statistical/fentanyl-detected-overdose. pdf (Accessed 11 June 2017).
- City of Vancouver (2013) Downtown Eastside: local area profile 2013. Available at: http://vancouver.ca/files/cov/profile-dtes-local-area-2013.pdf (Accessed 13 Sept 2017).
- DeBeck, K., Wood, E., Zhang, R., Tyndall, M., Montaner, J., & Kerr, T. (2008). Police and public health partnerships: evidence from the evaluation of Vancouver's supervised injection facility. *Subst Abuse Treat Prev Policy*, 3(1), 11. https://doi.org/10.1186/1747-597X-3-11.
- Enns, E. A., Zaric, G. S., Strike, C. J., Jairam, J. A., Kolla, G., & Bayoumi, A. M. (2016). Potential cost-effectiveness of supervised injection facilities in Toronto and Ottawa, Canada. *Addiction*, *111*(3), 475–489.
- Government of Canada (2016) Government of Canada announces new comprehensive drug strategy supported by proposed legislative changes. Available at: https://www.canada.ca/en/health-canada/news/2016/12/government-canada-announces-new-comprehensive-drug-strategy-supported-proposed-legislative-changes.html (Accessed 12 Aug 2017).
- Jozaghi, E., & Jackson, A. (2015). Examining the potential role of a supervised injection facility in Saskatoon, Saskatchewan, to avert HIV among people who inject drugs. *Int J Health Policy Manag*, 4(6), 373–379.
- Jozaghi, E., Reid, A. A., & Andresen, M. A. (2013). A cost-benefit/costeffectiveness analysis of proposed supervised injection facilities in Montreal, Canada. *Subst Abuse Treat Prev Policy*, 8, 25. https://doi. org/10.1186/1747-597X-8-25.
- Lang, K., Neil, J., Wright, J., Dell, C. A., Berenbaum, S., & El-Aneed, A. (2013). Qualitative investigation of barriers to accessing care by people who inject drugs in Saskatoon, Canada: perspectives of service providers. *Subst Abuse Treat Prev Policy*, *8*, 35. https://doi.org/ 10.1186/1747-597X-8-35.
- Marshall, B. D., Milloy, M. J., Wood, E., Montaner, J. S., & Kerr, T. (2011). Reduction in overdose mortality after the opening of North America's first medically supervised safer injecting facility: a retrospective population-based study. *Lancet*, 377(9775), 1429–1437.
- McNeil, R., Small, W., Lampkin, H., Shannon, K., & Kerr, T. (2014). "People knew they could come here to get help": an ethnographic study of assisted injection practices at a peer-run 'unsanctioned' supervised drug consumption room in a Canadian setting. *AIDS Behav*, 18(3), 473–485.

- Ontario Association of Chiefs of Police (2017) OACP statement on supervised injection sites [press release]. Available at: http://www. oacp.on.ca/news-events/news-releases/oacp-statement-onsupervised-injection-sites (Accessed 30 Mar 2018).
- Petrar, S., Kerr, T., Tyndall, M. W., Zhang, R., Montaner, J. S., & Wood, E. (2007). Injection drug users' perceptions regarding use of a medically supervised safer injection facility. *Addict Behav*, 32(5), 1088–1093.
- Vancouver Coastal Health (2016) 86% of drugs checked at Insite contain fentanyl. Available at: http://www.vch.ca/about-us/news/newsreleases/86-of-drugs-checked-at-insite-contain-fentanyl (Accessed 10 June 2017).
- Vancouver Coastal Health (2017a) Insite user statistics. Available at: http://www.vch.ca/public-health/harm-reduction/supervisedinjection-sites/supervised-injection-user-statistics (Accessed 7 Sept 2017).
- Vancouver Coastal Health (2017b) Drug checking at Insite shows potential for preventing fentanyl-related overdoses. Available at: http:// www.vch.ca/about-us/news/news-releases/drug-checking-at-insiteshows-potential-for-preventing-fentanyl-related-overdoses (Accessed 13 June 2017).
- Wood, E., Kerr, T., Small, W., Li, K., Marsh, D. C., Montaner, J. S., & Tyndall, M. W. (2004). Changes in public order after the opening of a medically supervised safer injecting facility for illicit injection drug users. *CMAJ*, 171(7), 731–734.
- Wood, E., Tyndall, M. W., Zhang, R., Stoltz, J. A., Lai, C., Montaner, J. S., & Kerr, T. (2006). Attendance at supervised injecting facilities and use of detoxification services. *N Engl J Med*, 354(23), 2512–2514.