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ORIGINAL ARTICLE

Service use and program-level impacts of a collaborative hospital-community emergency department diversion program for people experiencing alcohol and opioid intoxication

Nick Kerman[1] · Kate Hayman[2,3] · Natasha Vitkin[1,4] · Ryan Peter Strum[5] · Florencia Leston[6] · Dana Luchsinger[7] · Lorie Steer[6] · Sarah Coyle[1] · Erin O'Connor[2,3] · Michael Anderson[8] · Andrew Boozary[1,9]

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Abstract

Objectives People experiencing substance use problems frequently use emergency departments (EDs). Some ED visits may be safely divertible to non-medical settings. This study evaluated the service use and program-level impacts of the Stabilization and Connection Centre (SCC), an ED diversion program for people experiencing alcohol and/or opioid intoxication in Toronto.

Methods This retrospective cross-sectional study used administrative data from 1/1/2023 to 12/31/2024 to describe SCC visitor volumes and characteristics. Poisson and linear regression models were fitted to examine the temporal and environmental correlates of SCC visit counts, and differences in lengths of stay and paramedic transition times at the SCC compared to patients presenting to two nearby EDs for substance intoxication.

Results There were 4574 SCC visits during its first two operational years, with most visitors being male, 24–54 years of age, and homeless. Lengths of stay at the SCC ($M = 10.11$ h, $SD = 8.38$) were significantly longer than in the comparison group visiting the ED ($M = 4.61$ h, $SD = 4.22$). Paramedic transfer of care times were also significantly shorter at the SCC ($M = 7.20$ min, $SD = 3.62$) than the ED ($M = 34.10$ min, $SD = 45.22$). SCC visits were significantly lower during the winter and weekdays, but higher on days when nearby EDs were busier and during the week when monthly income support payments are issued.

Conclusion The SCC was associated with some intended program-level outcomes in the forms of safe ED diversions of patients experiencing intoxication and reduced paramedic transfer of care times.

Résumé

Objectifs Les personnes ayant des problèmes d'usage de substances ont souvent recours aux services des urgences (SU). Certaines de ces visites peuvent être déroutées sans danger vers des structures non médicales. Nous avons évalué l'utilisation des services du Stabilization and Connection Centre (SCC), un centre s'inscrivant dans un programme de déroutement des personnes aux prises avec une intoxication à l'alcool et/ou aux opioïdes à Toronto, et ses effets au niveau du programme.

✉ Andrew Boozary
andrew.boozary@uhn.ca

1 Gattuso Centre for Social Medicine, University Health Network, Toronto, ON, Canada

2 Emergency Medicine, University Health Network, Toronto, ON, Canada

3 Department of Medicine, University of Toronto, Toronto, ON, Canada

4 Data & Analytics, University Health Network, Toronto, ON, Canada

5 Toronto Paramedic Services, City of Toronto, Toronto, ON, Canada

6 Urban Health and Homelessness Services, The Neighbourhood Group Community Services, Toronto, ON, Canada

7 Parkdale Queen West Community Health Centre, Toronto, ON, Canada

8 Inner City Health Associates, Toronto, ON, Canada

9 Institute of Health Policy, Management and Evaluation, University of Toronto, Toronto, ON, Canada

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Méthodes Nous avons mené une étude transversale rétrospective utilisant les données administratives du 1er janvier 2023 au 31 décembre 2024 pour décrire le volume des visites au SCC et les caractéristiques des visiteurs. Nous avons adapté des modèles de régression linéaire et de Poisson pour examiner les corrélats temporels et environnementaux du nombre de visites au SCC et les différences entre les durées de séjour et les temps de transition des ambulanciers paramédicaux au SCC et pour les patients s'étant présentés dans deux SU voisins en raison d'une intoxication par une substance.
Résultats Il y a eu 4 574 visites au SCC au cours de ses deux premières années d'activité; la plupart des visiteurs étaient des hommes, avaient entre 24 et 54 ans et étaient sans abri. Les durées de séjour au SCC (M = 10,11 heures, DS = 8,38) étaient significativement plus longues que dans le groupe témoin ayant visité les SU (M = 4,61 heures, DS = 4,22). Les temps de transfert de garde des ambulanciers paramédicaux étaient aussi significativement plus courts au SCC (M = 7,20 min, DS = 3,62) qu'aux SU (M = 34,10 min, DS = 45,22). Les visites au SCC diminuaient significativement l'hiver et les jours de semaine; elles augmentaient les jours où les SU voisins étaient occupés et la semaine du versement des paiements mensuels de soutien du revenu.
Conclusion Le SCC était associé à certains résultats attendus au niveau du programme, soit le déroutement sans danger des patients des SU aux prises avec une intoxication et la réduction des temps de transfert de garde des ambulanciers paramédicaux.

Keywords Substance use · Emergency room visits · Sobering center · Paramedics · Ambulance diversion

Mots-clés Utilisation de substances · Consultations en service d'urgence hospitalière · Centre de dégrisement · Auxiliaires médicaux · Déroutement d'ambulances

Introduction

Overcrowding in emergency departments (EDs) is a growing issue in Canada that has been recently characterized as a crisis (Varner, 2023). The challenge, which has been complicated in recent years by hospital understaffing issues, may contribute to longer waiting times and increased likelihood of people leaving without receiving care (McNaughton et al., 2024; Varner, 2023). Longer ED lengths of stay are also associated with higher mortality risk in the subsequent week following a visit (Guttmann et al., 2011). Overcrowding also disrupts adjunct service systems due to transfer of care delays, which can hinder the capacity of paramedics to respond to 9-1-1 calls (Strum et al., 2026). Service innovations have been developed across the country in response to these trends, from virtual EDs to diversion programs, with the dual aim of reducing pressures on hospital systems, and improving patient care experiences and outcomes.

People experiencing substance use problems have high ED use. A retrospective study found that 1.2% of all ED visits in Ontario over a 14-year period were attributable to alcohol use, with acute intoxication being the most common presentation (Myran et al., 2019). Further, this study observed that visits for acute intoxication had increased 86.9% from 2003 to 2016 (Myran et al., 2019). Similar trends have been observed for opioid use as well. Opioid-related ED visits in Canada increased 106.5% between 2016 and 2024, whereas responses by emergency medical services related to opioid use increased 109.2% from 2017 to 2024 (Substance-related Overdose and Mortality Surveillance Task Group, 2026). The high rates of ED use among people who use substances can be shaped by their histories within the healthcare system, including past experiences of stigmatization (Rajab et al., 2023). For example, a cohort study conducted in Baltimore, Maryland, found that people who had experienced drug use-related discrimination in a healthcare setting were more likely to subsequently use EDs (Eschliman et al., 2024). However, people who use substances also report that EDs are not consistently able to adequately address their health needs (Rajab et al., 2023). The severity of this issue is intensified by research demonstrating that patients who present to EDs for substance-related reasons are at heightened mortality risk post-visit, especially for frequent ED users (Krawczyk et al., 2020; Moe et al., 2022). Thus, there is a critical need for health services that can concurrently alleviate non-emergent substance use-related pressures on EDs, integrate person-centred supports and practices for people who use substances, and facilitate connections to needed supports.

Diversion interventions, such as sobering centres, have been developed in some North American cities to alleviate substance use-related impacts on EDs. Sobering centres refer to programs typically outside of hospitals and jails that are intended to provide a safe, short-term environment and respite for individuals to sober from intoxication (Warren et al., 2016). Although these services are principally used for alcohol intoxication, some also support individuals experiencing drug use and impairment (e.g. Jarvis et al., 2019). Available onsite supports vary between programs, ranging from non-medical observation to the provision of integrated medical,

case management, and peer support services (Warren et al., 2016). Many sobering centres are distinct from detoxification programs, as they provide limited or no pharmacological interventions for withdrawal management.

Although sobering centres and related diversion interventions have not been extensively researched, there is evidence that the intervention is associated with cost reductions from preventable ED visits (Marshall et al., 2021). Further, research on the profiles of individuals who repeatedly visited a sobering centre over a 1-year period showed that this group was more likely to have histories of homelessness, liver disease, diabetes, depression, psychosis, and drug use disorders compared to single-visit users (Smith-Bernardin et al., 2017). These findings suggest that sobering centres may be particularly important as an accessible, low-barrier service for vulnerable populations with complex needs. Evaluations of sobering centres and related interventions in Canada are even more limited. Although there are over a dozen sobering centres in Canada (National Sobering Collaborative, n.d.), to our knowledge, only one has been described in the literature. Notwithstanding methodological limitations in how service use was measured, a case study of a sobering centre in Calgary, Alberta, estimated that the program was associated with fewer days in hospital, ED visits, and police interactions (Turner, 2015). Not all diversion interventions have a sobering centre model. A recent evaluation of a diversion program for people experiencing homelessness in Ottawa found that the intervention effectively supported people who otherwise may have visited an ED, the majority of whom were experiencing substance intoxication (Seliga et al., 2025).

Given the important, albeit underdeveloped, role of ED diversion interventions in substance use service continuums, more evidence is needed to better understand how these services can be implemented to address community needs. Accordingly, this retrospective cross-sectional study examined the service use and program-level impacts of the Stabilization and Connection Centre (SCC), a collaborative hospital-community ED diversion program for people experiencing alcohol and/or opioid intoxication, between January 1, 2023, and December 31, 2024. In particular, the objectives of the study were to (1) describe the frequency and contextual correlates of SCC use during its first two operational years, (2) describe the characteristics of SCC visitors, and (3) compare paramedic transition times for SCC visitors to a comparison group of individuals presenting to two nearby EDs for substance intoxication. The evaluation was approved by the quality improvement review committee at the University Health Network, which also involved a review and formal exemption by the institution's research ethics board (22–0498). Reporting follows the REporting of studies Conducted using Observational Routinely-collected health Data (RECORD) statement (Benchimol et al., 2015; see Supplementary File 1).

Methods

Intervention description and setting

The SCC is a 10-bed service in Toronto intended to divert individuals experiencing intoxication from local EDs, and provide person-centred care and connections to follow-up services. The SCC has some similarities with sobering centres, but the intervention offers enhanced onsite supports with a harm reduction and trauma-informed orientation. Operating under a hospital designation, the SCC launched in December 2022 and operates 24/7 in a non-medical community setting. It is located across the street from a large teaching hospital within the same organizational network. Program staffing is provided by two community agencies with expertise in harm reduction and service delivery to people who use substances. The hospital is involved in administrative and practice oversight of the program.

The program model, including admission pathways, staffing model, roles and responsibilities, available supports, and established policies and procedures, is shown in Table 1. Individuals are eligible to access the SCC if they are ≥ 16 years of age, are experiencing suspected alcohol or opioid intoxication, have normal vital signs, and do not have any physical trauma or other medical concerns requiring physician assessment. Individuals requiring acute medical intervention, exhibiting violent or aggressive behaviour, or who have not ingested or been exposed to alcohol or an opioid toxin are ineligible. Walk-ins are not permitted and the maximum length of stay is 24 h. Substance use is not permitted while staying at the SCC.

Sample

All individuals who used the SCC between January 1, 2023, and December 31, 2024 were included in the study. A comparison group was also generated of patients presenting to two EDs operated by the same hospital network as the SCC over the same period to examine differences in care and transition times. Eligibility criteria for the comparison group were as follows: arrived to hospital by ground ambulance; aged ≥ 16 years; Canadian Triage and Acuity Scale score of 2–5; International Statistical Classification of Diseases, 10th Revision (ICD-10) primary diagnosis of acute intoxication, harmful use, dependence syndrome, other disorder, or unspecific disorder for alcohol (F10.0–F.10.2, F10.8, F10.9), opioids (F11.0–F11.2, F11.8, F11.9), or multiple drug use and use of unknown psychoactive substances (F19.0XX–F19.3XX, F19.8XX, F19.9XX); and a discharge disposition that did not include being admitted to hospital, or transferred to another acute care facility, ED, or correctional institution.

Table 1 Stabilization and Connection Centre (SCC) program model

Model component	Description
Admission pathways	• Direct ground ambulance transport • Redirection to the SCC following an assessment by a physician at one of the two participating EDs • Referral from community partner agencies
Staffing model	• Two harm reduction workers per shift • Two peer workers per shift • Two follow-up workers covering 70 h per week • Two personal support workers covering 70 h per week • One community-based security guard per shift
Roles and responsibilities	• Harm reduction workers: liaise with arriving paramedical personnel, conduct intake assessments, provide harm reduction supports, conduct wellness checks, lead crisis and overdose response interventions • Peer workers: welcome and orient visitors to the program, provide socio-recreational supports, assess the need for post-discharge supports and liaise with follow-up workers as needed, support patients with transportation to their discharge location • Follow-up workers: develop individualized short-term case management and discharge plans, liaise with clinicians and shelter system service providers, coordinate referrals to health services and community resources • Personal support workers: provide assistance with activities of daily living, lifts and transfers, and bedmaking and laundry
Available supports	• Provision of a bed for short-term stabilization • Continued monitoring and de-escalation support • Access to onsite meals, non-alcoholic beverages, a shower, laundry services, and socio-recreational supports • Information about and referrals to substance use support, harm reduction, and homeless services • Connection to a follow-up worker for short-term case management and referral coordination
Medical directives and operating policies	• Medical directives exist to permit (a) the transport of individuals via ambulance to the SCC and (b) SCC staff to support overdose response (e.g., naloxone and oxygen administration, cardiopulmonary resuscitation use) • Standard operating procedures exist to support clinical care, operations, and visitor management, including for challenging issues (e.g., bathroom monitoring for overdose prevention, onsite substance use, bed bug prevention and management, onsite police interactions)
Adverse and risk issue management	• Strict adherence to intake criteria, including normal vital signs prior to program admission or medical clearance by an ED physician • On-call physician available 24/7 to advise on withdrawal symptoms and other medical issues • SCC visitors transferred to hospital if in need of medical care • Onsite adverse events involving health and safety incidents are documented and reviewed

ED emergency department, *SCC* Stabilization and Connection Centre

Data sources

Retrospective administrative data on program operations were analyzed. Visits to the SCC were initially logged in a program database until May 23, 2024, after which point service use information was entered into the electronic health record (EHR) of each visitor. Information collected in these databases included: age, sex, housing status (limited data availability after May 23, 2024), admission and discharge dates and times, referrals provided during visit, self-reported type of intoxication, transfers to hospital, and discharge locations. Information on the times when paramedic personnel enter and leave the building where the SCC is located was also registered. The hospital network's EHR system was also used to obtain daily total visits, paramedic offload times, and lengths of stay for all ED visits that met the aforementioned comparison group eligibility criteria over the two-year observation period. Data on ED visits were obtained via request to the appropriate hospital department, which provided the dataset to the authors who applied the eligibility criteria.

Several other types of data were generated to explore the environmental and temporal correlates of SCC use. Publicly available data on daily mean temperature and precipitation from two reporting stations in Toronto (Toronto City and Toronto City Centre) were obtained (Government of Canada, 2025). A proxy variable was computed for a 7-day period beginning when monthly government income support payments are issued (also known as "cheque week"), given previous research demonstrating that this period is associated with higher overdose rates in communities and shelters in Canada (Kerman et al., 2025; Otterstatter et al., 2016). For

this analysis, the 7-day period began on the last business day of each month, which is the Ontario Works payment date, followed by the subsequent 6 days. Calendar variables for day of the week and season were also computed. Datasets were linked for analysis based on date.

Data analysis

Descriptive statistics were initially used to describe the characteristics of SCC visitors and lengths of stay. Chi-squared tests were also used to examine differences in housing status and substance intoxication by age group (transition-aged youth between 16 and 24 years; adults aged 25–64 years; older adults aged ≥ 65 years). A Poisson regression model was fitted to examine the temporal and environmental predictors of daily SCC visit counts. Six predictors were used: (1) weekday (7 days); (2) season; (3) income support payment week; (4) daily mean temperature; (5) daily total precipitation; and (6) daily number of visits to the two EDs within the same hospital network. All variables were entered into the model in a single step. Findings from the Poisson regression model are presented as incidence rate ratios (IRRs), with 95% confidence intervals (CIs). Linear regression models were also fitted to examine differences in lengths of stay and paramedic transition times at the SCC compared to the two EDs, adjusting for date and patient age. Because there were different transfer of care procedures and measurement approaches at the SCC compared to the EDs, the paramedic onsite times at the SCC omitted the amount of time it takes for paramedics to support patients out of the ambulance (see the limitations section for further details).

Data from the SCC's first operational month (December 2022) were excluded to enable analysis of a more stable program model. Visits with paramedic onsite times of < 1 min at the SCC and EDs were excluded due to infeasibility of such transfer of care lengths. Seven ED visits with paramedic offload times exceeding 1000 min were also excluded due to suspected or confirmed measurement error. There was a small amount of missing data (4.0%) for paramedic transition times, which was slightly higher for ED visits than SCC service use (5.2% and 2.8%, respectively); these cases were removed from the linear regression model analyses. All analyses were performed using SPSS 30.

Results

There were 4574 visits to the SCC during its first two operational years. As shown in Table 2, most visitors were male ($n = 3258$, 72.1%) and between the ages of 25 and 64 years ($n = 3427$, 74.9%). Among SCC visitors for whom there were available housing status data, the majority were experiencing homelessness ($n = 1646$, 51.7%). However, homelessness was lower among transitioned-aged youth ($n = 48$, 16.7%) compared to adults aged 25–64 years ($n = 1289$, 64.5%) and older adults ($n = 44$, 40.0%; $^2 = 249.94$; $p < 0.001$). See Supplementary File 2 for characteristics of the ED comparison group ($N = 3990$).

Almost two-thirds of SCC visitors had used alcohol ($n = 2931$, 64.1%), whereas 41.0% ($n = 1876$) had used one or more drugs. Transition-aged youth ($n = 412$, 82.9%) and older adults ($n = 166$, 85.1%) were more likely to have used alcohol than adults aged 25–64 years ($n = 2146$, 62.6%; $^2 = 112.66$; $p < 0.001$). An inverse pattern was observed for drug use (transition-aged youth: $n = 113$, 22.7%; adults aged 25–64 years: $n = 1469$, 42.9%; older adults: $n = 30$, 15.4%; $^2 = 122.31$; $p < 0.001$).

The mean length of stay at the SCC was 10.11 h ($SD = 8.38$). A small number of SCC visitors required transfer to hospital ($n = 289$, 7.1%), which would be largely the result of needing medical care or symptoms requiring clinical assessment, but not necessarily in relation to intoxication. Among the 289 visitors who were sent to hospital, transfers occurred 11.16 h ($SD = 9.31$) into their SCC stays, on average, with few transfers occurring within the first hour post-SCC admission ($n = 19$, 6.6%). Compared to ED lengths of stay ($M = 4.61$ h, $SD = 4.22$) and after adjusting for date and patient age, the linear regression model showed that SCC stays were significantly longer, with a moderate effect size ($B = 0.38$, 95% CI = 0.37–0.40, $p < 0.001$).

Overnight homeless services were one of the most common referrals being provided to SCC visitors ($n = 268$; 5.9%), though many additional individuals experiencing homelessness had shelter beds to which they were returning post-SCC discharge. Referrals to substance use support and harm reduction services were fewer (Table 2).

Service use predictors

As shown in Table 3, the number of SCC visits was significantly lower during the winter and weekdays. Visits were higher during income support payment week (IRR = 1.23; 95% CI = 1.15–1.31, $p < 0.001$). In addition, SCC visits were also 1.15 times higher (95% CI 1.10–1.20, $p < 0.001$) for each additional 30 patients who presented daily to the two EDs within the same hospital network. The two climate predictors had more negligible effects on SCC service use.

Transfer of care

At the SCC, paramedics were onsite for a mean 7.20 min ($SD = 3.62$), whereas the average paramedic offload time for

Table 2 Characteristics of non-unique SCC visitors ($N=4574$, unless otherwise noted)

Characteristic	*n*	%
Sex [a]		
Male	3262	71.3
Female	1248	27.3
Age		
16–24 years	471	10.3
25–64 years	3427	74.9
≥65 years	190	4.2
Housing status ($N=3183$)		
Homeless	1646	51.7
Housed	1082	34.0
Unknown	441	13.9
Substance intoxication		
Alcohol	2931	64.1
Drug [b]	1876	41.0
Unknown	83	1.8
Referral to overnight homeless services (emergency shelters, warming centres, 24-h drop-ins)	268	5.9
Referral to substance use support services (e.g. RAAM, detoxification, addiction, and concurrent disorders treatment)	121	2.6
Referral to harm reduction supports	72	1.6
Transfers to hospital ($N=4084$)	289	7.1

Cells may not sum to 100% due to missing data, whereas substance intoxication exceeds 100% due to categories not being mutually exclusive

SCC, Stabilization and Connection Centre; *RAAM*, Rapid Access to Addiction Medicine

[a]Some data are collected on gender, but likely underestimate the number of transgender and nonbinary service users, so these data are withheld

[b]Refers to any drug excepting alcohol. Although opioids were the primary drug used by SCC visitors, it was infeasible to accurately estimate what proportion involved and did not involve opioids due to unreliable data fields, as well as self-reported uncertainty about the types of drugs used

Table 3 Temporal and environmental predictors of SCC service use

Predictor	IRR	95% CI	*p*
Weekday (ref: Sunday)			
Monday	0.50	0.44–0.57	<0.001
Tuesday	0.61	0.55–0.69	<0.001
Wednesday	0.64	0.57–0.71	<0.001
Thursday	0.66	0.59–0.73	<0.001
Friday	0.72	0.65–0.80	<0.001
Saturday	1.00	0.91–1.10	0.97
Season (ref: winter)			
Spring	1.41	1.26–1.58	<0.001
Summer	1.39	1.20–1.61	<0.001
Fall	1.39	1.25–1.54	<0.001
Income support payment week each month	1.23	1.15–1.31	<0.001
Daily mean temperature	1.01	1.00–1.01	0.05
Daily total precipitation	1.00	1.00–1.00	0.80
Daily emergency department visits within hospital network (30-patient increment)	1.15	1.10–1.20	<0.001

the comparison population at the two EDs was 34.10 min ($SD=45.22$). Adjusting for date and patient age, the linear regression model showed that the SCC had significantly shorter offload times, with a moderate effect size ($B=0.39$, 95% CI = 0.37–0.41, $p<0.001$).

Discussion

The role of ED diversion interventions in substance use service continuums in Canada has been minimally evaluated as an approach for diverting individuals experiencing intoxication from local EDs and improving the provision of person-centred care. Examining the SCC, a 10-bed diversion program in Toronto, this study showed that there were significantly shorter paramedic offload times at the site than what was observed for a similar group of patients presenting at two nearby EDs. Few SCC visitors were also transferred to hospital. These findings align with past research that showed individuals who are intoxicated can be safely transported to alternate service destinations,

such as sobering centres, enhancing efficiencies within the health service system (Marshall et al., 2021; Smith-Bernardin et al., 2019). As paramedic availability is a growing issue in many cities (Strum et al., 2022), the shorter offload times for non-emergent patients at the SCC are instrumental for increasing the capacity of paramedics to respond to life-threatening 9-1-1 calls in the community.

The SCC was fairly well used in its first two operational years, with a daily average of more than six visitors, though referral rates were lower. There was also preliminary evidence of different types of visitors. Consistent with past research on the characteristics of sobering centre service users (Smith-Bernardin et al., 2017), adults who are homeless and experiencing drug and/or alcohol intoxication represented a sizeable number of SCC visitors. However, the SCC also supported a smaller group of housed adolescents and young adults who mostly used alcohol, suggesting versatility in who can be supported by the intervention. Future research to develop a typology of service users would be beneficial for understanding how this type of intervention can address the variable and unique support needs among individuals experiencing intoxication. As for the lower referral rates, these may be the result of several factors, including some visitors already being connected to community-based services and systems-level access barriers (e.g. long waiting lists for and unpredictable bed availability at withdrawal management services, SCC morning discharges frequently occurring before outpatient clinics offering substance use treatment are open). However, because data on referrals made by follow-up workers post-SCC visit were unavailable, the findings likely also underestimate referral rates to some extent.

The evaluation findings also highlighted temporal fluctuations in SCC service use, with higher use during the weekends, non-winter months, and income support payment weeks. The latter aligns with past research that has shown greater use of substance use services at the beginning of the month among various populations (Rosen, 2011). Enhancing system flow during this period from diversion programs to longer-term stabilization and treatment services may be appropriate. However, this may be challenging if there is increased demand across the substance use service continuum during income support payment weeks. Another significant predictor of SCC volumes was the number of daily ED visits within the same hospital network. This positive correlation of higher SCC visitor volumes on days where nearby EDs are experiencing the same is preliminary evidence of the SCC's utility as a diversion program for mitigating ED overcrowding. Further, as SCC lengths of stay were more than twice as long as those for the ED, the SCC may be facilitating a less rushed care experience due to fewer competing bed pressures. A priority for future research should be the examination of care experiences and outcomes among visitors to sobering centres and related diversion interventions, and how this compares to ED use.

This retrospective study had several important limitations. First, paramedic transfer of care processes and available data were not identical between the SCC and comparison EDs. Because of this, paramedic onsite times at the SCC omitted the duration it takes paramedics to support patients out of the ambulance and into the building where the program is located. Experiential knowledge suggests that this is conservatively no more than 5 min. As for paramedic offload times in the EDs, these conclude when transfer of care is complete and omit the time it takes for paramedics to exit the ED (i.e. a part of post-transfer of care hospital time that was captured in the SCC data). Second, generation of the ED comparison group was limited by available data, with no known validation studies of the selection algorithm. Because information was not available on patient vitals and secondary presenting problems, it is likely that not all individuals in the comparison group would have been eligible for diversion to the SCC. Third, the lack of operational definitions or greater specificity on the types of drugs that SCC visitors had used prior to admission prevented a more robust analysis of intoxication patterns within the cohort. Given that individuals' substance use may not be known or accurately reported at admission, it is key for sobering centres and diversion interventions to collect comprehensive data on all substances ingested by visitors to inform care planning and evaluation. Fourth, analyses were performed at the visit level, without the ability to identify repeat and single-time visitors. As a result, visitor characteristics in the sample may be skewed by repeat visitors, with past research on a sobering centre suggesting that this group tends to be older and more likely to be homeless than single-time visitors (Smith-Bernardin et al., 2017). Relatedly, the transition to documenting visits in the hospital network's EHR involved the removal of visitors' housing statuses. If there had been a shift in the proportion of SCC visitors experiencing homelessness during the 7.25 months for which these data were unavailable, this could have affected the study findings.

Conclusion

This study highlighted that an ED diversion program for people experiencing alcohol and/or opioid intoxication in Toronto was well used during its first two operational years and associated with some positive program-level impacts for connected EDs and paramedic services. The intervention could contribute to the mitigation of ED overcrowding and paramedic transfer of care delays. More research is needed on the effects that diversion programs have on patients, including their care experiences in these settings and access

to other substance use services, as well as health systems in other urban settings.

Contributions to knowledge

What does this study add to existing knowledge?

- The Stabilization and Connection Centre (SCC), a 10-bed emergency department diversion program for people experiencing alcohol and/or opioid intoxication, was associated with longer lengths of stay and faster transfers of care by paramedics compared to a cohort of patients accessing two nearby emergency departments within the same hospital network.
- Visits to the SCC were higher during non-winter seasons and a 7-day period each month beginning when government income support payments are issued, and on days when there were more patients in the hospital network's emergency departments.

What are the key implications for public health interventions, practice, or policy?

- Individuals experiencing alcohol and/or opioid intoxication meeting pre-established program criteria can be safely supported in a non-medical community setting as an alternative to accessing the emergency department, with only a small proportion requiring transfer to hospital during their stays at the SCC.
- Hospital-community emergency department diversion programs for substance intoxication may help to alleviate emergency department overcrowding and reduce paramedic transfer of care delays, while offering an opportunity to improve person-centred care.

Supplementary Information The online version contains supplementary material available at https://doi.org/10.17269/s41997-026-01255-1.

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Data availability De-identified data may be available upon request pending review and approval by the Research Ethics Board at the University Health Network.

Code availability Not applicable.

Declarations

Ethics approval All procedures were in accordance with the ethical standards of the Quality Improvement Review Committee at University Health Network (#22–0498), which deemed further review of the evaluation by the institution's Research Ethics Board to be unnecessary, and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards.

Consent to participate Not applicable.

Consent for publication Not applicable.

Conflict of interest The authors declare no competing interests.

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