



Research Letter | Substance Use and Addiction

First 2 Months of Operation at First Publicly Recognized Overdose Prevention Centers in US

Alex Harocopos, PhD, MSc; Brent E. Gibson, PhD; Nilova Saha, LCSW; Michael T. McRae, PhD; Kailin See; Sam Rivera; Dave A. Chokshi, MD, MSc

Introduction

In New York City (NYC), there were 2062 overdose fatalities in 2020, the deadliest year on record for NYC and the US. Fentanyl and its analogs were the most common substances involved in overdose deaths in NYC, present in 77% of such deaths in 2020. A characteristic of fentanyl-involved overdose is rapid onset of overdose symptoms; however, with timely administration of oxygen or naloxone, deaths can be averted.

In response to unprecedented numbers of overdose deaths, on November 30, 2021, NYC implemented overdose prevention center (OPC) services at 2 syringe service programs operated by OnPoint NYC. Also known as supervised consumption sites, OPCs are health care facilities that aim to improve individual and community health, increase public safety, and reduce consequences of drug use, including overdose deaths, public drug use, and syringe litter.^{3,4} Operating in more than 10 countries, OPCs offer supervised, hygienic spaces in which people can use preobtained drugs and access services, onsite or by referral, to health and mental health care, drug treatment, and other social supports.^{3,4} While previous research documented operations at an underground US OPC,⁵ use of sanctioned sites has not yet been studied, to our knowledge. This study describes the first 2 months of operation and use at the first 2 publicly recognized US OPCs.

Methods

Because data were collected for program evaluation and presented in aggregate, the NYC Department of Health and Mental Hygiene Institutional Review Board (IRB) determined that this quality improvement study was not human participants research and so IRB approval and informed consent were not required. This study is reported following the SQUIRE reporting guideline.

Data were collected by program staff from individuals using services at 2 OPC sites at intake and before each subsequent use of OPC services. Outcome data related to OPC visits (eg, staff interventions to mitigate overdose risk) were also recorded. Using a unique identifier, OPC participant data were then matched with data indicating uptake of additional services provided at the syringe service program. Descriptive statistics (frequencies and percentages) were calculated using SAS statistical software version 9.4 (SAS Institute).

Results

Between November 30, 2021, and January 31, 2022, 613 individuals used OPC services 5975 times across 2 sites. Most individuals identified as male (78.0%), and 55.3% identified as Hispanic, Latino, or Latina. The mean (range) age was 42.5 (18-71) years. A plurality of individuals (36.9%) reported being street homeless. Fewer than one-fifth of individuals (17.8%) were living in their own rooms or apartments (**Table**).

In self-reported data, the drug most commonly used across 2 sites was heroin or fentanyl (73.7%) and the most frequent route of drug administration at the OPC was injection (65.0%).

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Invited Commentary

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Among all participants, 75.9% reported that they would have used their drugs in a public or semipublic location if OPC services had not been available (**Figure**).

During the first 2 months of OPC operation, trained staff responded 125 times to mitigate overdose risk. In response to opioid-involved symptoms of overdose, naloxone was administered 19 times and oxygen 35 times, while respiration or blood oxygen levels were monitored 26 times. In response to stimulant-involved symptoms of overdose (also known as overamping), staff intervened 45 times to provide hydration, cooling, and de-escalation as needed. Emergency medical services responded 5 times, and participants were transported to emergency departments 3 times. No fatal overdoses occurred in OPCs or among individuals transported to hospitals.

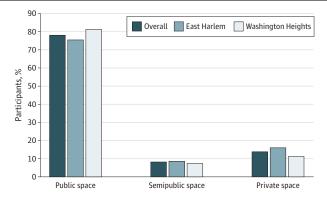
Table. Demographic Characteristics by Enrollment Site^a

Characteristic	Participants, No. (%)		
	Total (N = 613)	East Harlem (n = 405)	Washington Heights (n = 208)
Gender identity			
Man	478 (78.0)	326 (80.5)	152 (73.1)
Woman	123 (20.1)	72 (17.8)	51 (24.5)
Transgender woman	10 (1.6)	5 (1.2)	5 (2.4)
Nonbinary or GNC	2 (0.3)	2 (0.5)	0
Race and ethnicity ^b			
Hispanic, Latino, or Latina	339 (55.3)	223 (55.1)	116 (55.8)
Non-Hispanic			
Black	109 (17.8)	92 (22.7)	17 (8.2)
White	146 (23.8)	79 (19.5)	67 (32.2)
Other race	14 (2.3)	8 (2.0)	6 (2.9)
Declined to answer or missing	5 (0.8)	3 (0.7)	2 (1.0)
Age group, y			
18-29	59 (9.6)	25 (6.2)	34 (16.3)
30-39	187 (30.5)	110 (27.2)	77 (37.0)
40-49	207 (33.8)	144 (35.6)	63 (30.3)
50-59	122 (19.9)	93 (23.0)	29 (13.9)
≥60	38 (6.2)	33 (8.1)	5 (2.4)
Housing status			
Homeless on street	226 (36.9)	123 (30.4)	103 (49.5)
Renting apartment	106 (17.3)	71 (17.5)	35 (16.8)
Shelter or SRO	108 (17.6)	81 (20.0)	27 (13.0)
Staying with family or friends	62 (10.1)	33 (8.1)	29 (13.9)
Own home	3 (0.5)	1 (0.2)	2 (1.0)
Declined to answer or missing	108 (17.6)	96 (23.7)	12 (5.8)

Abbreviations: GNC, gender nonconforming; SRO, single room occupancy.

- ^a Data source was OnPoint NYC overdose prevention center enrollment, November 30, 2021, to January 31, 2022.
- ^b Race and ethnicity were self-identified and were collected because of a commitment to measuring reach and access of overdose response programs to assess potential disparities in care. Original survey categories for race and ethnicity were Asian, Black, Hawaiian or Pacific Islander, Hispanic or Latino, Native American or Alaskan Native, and White. Latino or Latina includes individuals of Hispanic origin based on ancestry reported at enrollment, regardless of reported race. Black and White race categories do not include individuals of Latino or Latina origin. Non-Hispanic was added to Black and White categories because individuals who identified as Hispanic, Latino, or Latina were not included in these groups. Native American or Alaska Native and Native Hawaiian or Pacific Islander groups were collapsed because numbers were small. Other race includes Asian, Middle Eastern or North African (write-in responses), Native American or Alaska Native, and Native Hawaiian or Pacific Islander.

 $Figure.\ Reported\ Drug\ Use\ Location\ If\ Overdose\ Prevention\ Center\ Was\ Not\ an\ Option$



Data source was OnPoint overdose prevention center enrollment, November 30, 2021, to January 31, 2022. Additional categories not displayed in this figure are other (0.6%) and missing or decline to answer (2.5%). Private space indicates own residence or other's residence; public space, street, sidewalk, underpass, park, or between cars; semipublic space, public bathroom, subway station, syringe service program bathroom, hotel, shelter, or building roof, hallway, or basement.

More than half of individuals using OPC services (52.5%) received additional support during their visit. This included, but was not limited to naloxone distribution, counseling, hepatitis C testing, medical care, and holistic services (eg, auricular acupuncture).

Discussion

This quality improvement study found that during the first 2 months of operations, services at 2 OPCs in NYC were heavily used, with early data suggesting that supervised consumption in these settings was associated with decreased overdose risk. Data also suggested that OPCs were associated with decreased prevalence of public drug use. Findings are limited by the short study period and lack of a comparison group with individuals not participating in OPC services. Additional evaluation may explore whether OPC services are associated with improved overall health outcomes for participants, as well as neighborhood-level outcomes, including public drug use, improperly discarded syringes, and drug-related crime.

ARTICLE INFORMATION

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Corresponding Author: Alex Harocopos, PhD, MSc, New York City Department of Health and Mental Hygiene, 42-09 28th St, Floor 19-81, Queens, NY 11101 (aharocopos@health.nyc.gov).

Author Affiliations: New York City Department of Health and Mental Hygiene, Queens, New York (Harocopos, Saha, McRae, Chokshi); OnPoint NYC, New York, New York (Gibson, See, Rivera).

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Concept and design: All authors.

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Invited Commentary | Substance Use and Addiction

Overdose Prevention Centers: An Essential Strategy to Address the Overdose Crisis

Elizabeth A. Samuels, MD, MPH, MHS; Dennis A. Bailer, PRS; Annajane Yolken, MPH

In 2021, more than 107 000 people died from a drug overdose in the US, ¹ a 15% increase from 2020. Deaths involving cocaine increased 23%, and deaths involving methamphetamines or other stimulants increased 34%. ¹ Death rates are increasing the most rapidly among people experiencing homelessness² and among American Indian or Native American, Black, and Latinx individuals. ³

These staggering numbers demonstrate an urgent need for immediate action. In recent years, there has been expansion of proven harm reduction strategies to reduce overdose deaths. Harm reduction is a way of approaching and caring for people who use drugs that centers people's dignity, humanity, and autonomy to reduce harms associated with substance use. It uses practical strategies to meet people where they are to improve individual and community well-being and health. Decades of robust research on harm reduction strategies, specifically syringe services and naloxone distribution, demonstrate that these strategies are associated with reduced morbidity, mortality, and transmission of infectious diseases and improved individual health outcomes and services engagement and that they have high cost-effectiveness.

The use of overdose prevention centers (OPCs) is an evidence-based harm-reduction intervention that, until recently, has not been available in the US. OPCs, which are sometimes referred to as supervised consumption centers, are places where people can consume preobtained drugs in a monitored setting where staff can immediately intervene in the event of an overdose. People who use the centers can be provided or linked to wraparound services, including other harm reduction services, basic needs (eg, housing or food), medical services, and addiction treatment. There are more than 120 OPCs in 10 countries across Europe, Australia, and Canada. Models range from peer-run facilities to mobile units and medical models colocated with addiction treatment programs. Regardless of model type, all OPCs provide a safe, nonjudgmental setting with staff trained to intervene in the event of an overdose and provide individualized support and linkage to services. ^{4,5}

Research has found that OPCs are associated with benefits for individuals who use the centers and neighborhoods where the centers are located. A.5 OPCs have been found to be associated with reduced overdose deaths, substance use-related harms, and all-cause mortality among people who use drugs and to be cost-effective. A.5 OPCs have also been found to be associated with increased treatment engagement, with regular center use, but not with increased drug trafficking, initiation of substance use among people who did not previously use drugs, or resumed use among people in recovery. An evaluation of an unsanctioned US OPC that operated from 2014 to 2021 found high rates of center use without any overdose deaths. For surrounding neighborhoods, OPCs have been shown to be associated with reduced public drug consumption, litter of drug consumption equipment, and crime.

In November 2021, OnPoint NYC opened the first government-sanctioned OPCs in the US. Harocopos et al⁷ describe patient encounters at OnPoint NYC's 2 OPCs in the first 2 months of operation. There were nearly 6000 visits by more than 600 individuals. Among those who used the OPCs, more than one-third of participants were unhoused, a minority of participants (17.8%) had their own room or apartment, and three-quarters of participants reported that they would otherwise have used drugs in a public or semipublic location. Staff intervened 125 times to mitigate overdose risk, which included oxygen or naloxone administration for individuals using opioids, and hydration,

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cooling, or de-escalation for individuals with stimulant-related symptoms (eg, overamping). Individuals were transported to emergency departments 3 times. There were no overdose fatalities.

This first description of OnPoint NYC suggests not only that OPCs are feasible, but also that individuals who were unhoused, who are at extremely high risk of overdose death, were willing and interested in using OPCs. Interventions at the center to mitigate overdose risk suggest, as previously observed in other countries, that OPCs in the US may provide an effective strategy associated with reduced overdose deaths and reduced public drug consumption.

While OnPoint NYC is the first government-sanctioned OPC in the US, there have been prior attempts to open OPCs in the US that have encountered legal, financial, and logistic challenges. The most well-known of these is Safehouse in Philadelphia, which faces ongoing legal challenges about whether it would violate the federal Controlled Substances Act. Despite these legal challenges, multiple other cities and states have explored opening OPCs. In 2021, Rhode Island, where we work, passed a law allowing for the opening of pilot OPCs licensed and regulated by the state department of health. Two of us (E.A.S. and D.A.B.) had the opportunity to sit on the Rhode Island governor's advisory committee and help craft these regulations.

Stigma and discrimination toward people who use drugs intensify legal, financial, and logistic barriers to opening OPCs. Uncertainty about federal legality has hampered implementation efforts, although some municipalities and states have moved ahead with opening centers to stem devastating increases in overdose deaths. There are also important logistic considerations to opening OPCs, including location, zoning, and insurance. Given increasing death rates among people who use stimulants and racialized criminalization associated with crack cocaine, it is crucial that OPCs ensure space for different modes of drug consumption (eg, smoking, injection, and inhalation) and OPC engagement with community, local, and state stakeholders. OPCs must also be informed by the needs of people whom they aim to help and ensure accessibility and inclusivity to not only have the desired public health impact, but also prevent perpetuating or exacerbating racial and gender inequities. Having supportive laws, municipalities, and positive working partnerships among harm reduction, public health, medical, and government agencies will be key to OPC success.⁴ However, this is not sufficient. To build successful programs, organizations in a position to run OPCs will need funding to build these new programs. Existing harm reduction agencies and organizations already contend with constrained resources, and we cannot ask them to do even more with less.

Evaluation is critical to measuring and improving OPC health outcomes. Despite decades of evidence in other countries, US OPCs will be subject to heightened scrutiny and OPC evaluations will need to be rigorous, high quality, and thoughtfully designed. Inappropriate selection of outcome measurements or expectations for outcomes, for example, may produce measures that do not accurately reflect comprehensive public health outcomes associated with OPCs. Measured outcomes should be appropriate to OPC roles and functions. Previous evaluations conducted internationally and at the unsanctioned US OPC provide models for evaluation and go beyond center operations and individual health outcomes, such as overdose death and services engagement, to also examine neighborhood outcomes. 4 These types of multifaceted evaluations may help assess OPC effectiveness, identify opportunities for improvement, and support implementation.

The opening of OPCs in the US is an important addition to our national overdose-prevention strategy. These centers alone will not solve the overdose crisis but are 1 component of a comprehensive, person-centered strategy to reduce overdose deaths. This includes treating people with dignity, rather than stigmatizing, criminalizing, and incarcerating them, and addressing root causes of substance use, particularly systems that produce health inequities. Since the 1970s, the US has primarily taken a criminal justice approach to substance use, and the country now has more deaths than ever. To prevent further increasing deaths, we can and need to fundamentally transform our approach—and urgently. We cannot afford to wait.

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Corresponding Author: Elizabeth A. Samuels, MD, MPH, MHS, Department of Emergency Medicine, Alpert Medical School of Brown University, 55 Claverick St, Ste 100, Providence, RI 02903 (elizabeth_samuels@ brown.edu).

Author Affiliations: Department of Emergency Medicine, Alpert Medical School of Brown University, Providence, Rhode Island (Samuels); Project Weber/RENEW, Providence, Rhode Island (Bailer, Yolken).

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