DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

National Institute on Drug Abuse

Overdose Prevention Centers

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EXECUTIVE SUMMARY

In its report on the fiscal year (FY) 2021 appropriations bill for the U.S. Department of Health and Human Services (HHS), the House Committee on Appropriations stated the following:

> *"The Committee recognizes that Overdose Prevention Centers, or Supervised Consumption Sites, are part of a larger effort of harm reduction interventions intended to reduce the risk of drug overdose death and reduce the spread of infectious disease. The Committee directs [the National Institute on Drug Abuse (NIDA)], in consultation with the [Centers for Disease Control and Prevention's (CDC's)] Division of Injury Prevention and Control, to provide a report to the Committee and post publicly, no later than 180 days after the enactment of this Act providing an updated literature review and evaluation of the potential public health impact of Overdose Prevention Sites in the U.S."* (House Report 116-450, Pages 120-121)

The following report has been prepared by the National Institutes of Health (NIH) in collaboration with the CDC, HHS, in response to this request.

INTRODUCTION

According to the CDC, over 70,000 Americans died from drug overdoses in 2019.[1] Provisional 2020 data show further worsening drug overdose numbers[2] and one of the sharpest increases in annual drug deaths since 2016, when increased availability of synthetic opioids like fentanyl drove up the number of fatalities associated with the opioid overdose epidemic. This negative trend has been a significant contributor to decreases in overall life expectancy as observed in the United States[3] and British Columbia.[4]

The majority of the over 800,000 drug overdose deaths in the United States over the past two decades involved opioids, including prescription opioid analgesics, heroin, and fentanyl. Currently, deaths involving fentanyl, cocaine, and methamphetamine are continuing to rise.[1] According to the annual National Survey on Drug Use and Health administered by the Substance Use and Mental Health Services Agency (SAMHSA), the estimated number of people who injected drugs (PWID) in 2019 were 2.7, 2.4, and 2.1 million for heroin, cocaine, and methamphetamine use, respectively.[5] In addition to overdose, injection drug use (IDU) is also associated with increased prevalence of human immunodeficiency (HIV) and hepatitis C (HCV) viral infections: Approximately 1 in 10 HIV[6] and 8 in 10 HCV[7] diagnoses are estimated to occur among PWID. This high rate of transmission translates into prevalence of between 6.8-10.7 percent[8] for HIV and 65-70 percent[7,9] for HCV among PWID. In the midst of a drug overdose epidemic that continues to cause alarming levels of morbidity and mortality, there is a crucial need for expanded and/or innovative prevention solutions.

Harm reduction encompasses a set of practical strategies aimed at reducing the morbidity and mortality associated with drug use. Prominent examples of harm reduction programs include provision of sterile syringes for injection of illicit drugs through syringe services programs (SSPs)[10] and distribution of naloxone, a lifesaving opioid overdose-reversal medication, to lay persons, law enforcement, and other first responders.[11] These strategies have been shown to contribute to reduced viral transmission risk[12] and decreased opioid overdose mortality,[13] respectively, but wider uptake of these practices is critical.

Overdose prevention centers (OPCs) are a harm reduction strategy that has operated around the world for decades, though there are no OPCs operating legally in the United States. OPCs are professionally supervised facilities where persons who use drugs can consume them under controlled conditions. Their primary goals are to reduce the acute risks of disease transmitted through needle sharing, prevent drug-related overdose deaths, and connect persons who use drugs with addiction treatment and other health and social services. If effective, OPCs could be a useful addition to the range of targeted approaches already available for slowing down and eventually reversing the devastating impact of the opioid crisis.[14]

BACKGROUND

OPCs, often referred to as supervised consumption sites (SCS), safer consumption spaces, supervised injection facilities (SIFs), safer injection facilities, drug consumption rooms, supervised drug consumption facilities, or safer drug use services, are facilities intended to reduce the health and environmental risks often associated with public injection, like discarded syringes and related litter,[15] incarceration,[16] the spread of infectious disease,[17] and fatal drug overdose. These facilities fit into a continuum of harm reduction services and are designed to

provide a space for people to consume pre-obtained drugs in controlled settings, under the supervision of trained staff, and with access to sterile supplies for smoking, insufflating, or injecting drugs.[18] Participants can also receive health care, counseling, and referrals to health and social services, including drug treatment.

OPCs operate in facilities that adhere to one of three different models of operation: integrated, specialized, or mobile. The vast majority of European OPCs follow the integrated model,[19] which allow supervised drug consumption and provide other survival-oriented services, like provision of food, showers, and clothing; prevention materials; and counseling and other forms of drug treatment. Some facilities, including all facilities in British Columbia, also offer fentanyl test strips to identify fentanyl in a drug sample and encourage more cautious consumption. This practice is gaining in popularity, but more research is needed to determine its impact on drug use behaviors and overdose outcomes.[20] Specialized OPCs offer a narrower range of services directly related to supervised consumption, which include the provision of sterile injection and other drug use materials; advice on health and safer drug use; intervention in case of emergencies; and a space where those using drugs can remain under observation for a period of time after drug consumption. Mobile facilities (currently in operation only in Barcelona, Berlin, and Lisbon)[21] provide a geographically flexible deployment of services, but typically cater to a smaller number of clients than fixed premises.[22]

Historically, the first OPC was opened in Berne, Switzerland in June 1986.[19] Today, there are approximately 76 official facilities operating in 7 countries that report to the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA): 31 in the Netherlands, 24 in Germany, 5 in Denmark, 13 in Spain, 2 in Norway, 2 in France, 1 in Luxembourg, 12 in Switzerland, and 1 in Portugal.[19] The city of Sumy in Ukraine has recently implemented an OPC,[23] which adds to the more than 100 OPCs with a long record of operations around the world.[24] Other nations like Scotland and Ireland do not yet have operational OPCs, though they have proposed or passed legislation to allow for them. Incidentally, a significant number of officially sanctioned OPCs also permit for non-injection routes of consumption; most of these are located in Germany.[18]

In 2001, Australia opened an official OPC on a trial basis. The Sydney Medically Supervised Injecting Centre (MSIC) is a Christian, non-government organization that follows the integrated model of service. In October 2010, legislation was passed to allow the MSIC to operate on an ongoing, rather than trial, basis.[25,26] Four years later, in response to an HIV outbreak in British Columbia, Vancouver became the first North American city to open an OPC, called Insite.[27] As a fully integrated facility, Insite is more akin to a full medical institution, staffed by a team of at least 10 professionals and including a detoxification center on site. Insite has treatment beds and the staff can connect users to addiction services, counseling, and other resources. Insite is supported by the Vancouver health authority, and its operation beyond the pilot phase was also codified in 2010; it now operates under a permanent constitutional exemption[28] to Canada's Controlled Drugs and Substances Act.[29] Since the opening of Insite, Canada has approved the establishment of an additional 36 OPCs, bringing the total number of regional sites to 19 in Ontario, 8 in British Columbia, 5 in Alberta, 4 in Quebec, and 1 in Saskatchewan.[30] In addition to these fixed OPCs, and in an effort to reduce the rising numbers of overdoses, Vancouver has opened approximately six new, so called "pop-up" sites for supervised consumption since 2016. Similar to their European mobile counterparts.[31] these sites do not offer the same medical

expertise or recovery services that full OPCs do. Though not officially sanctioned in Canada, they have been embraced by the city as an additional tool in the battle against opioids. They are easy to set up and can be located (and relocated) wherever they are needed the most.[32] Pop-up injection sites offer a viable alternative to fixed locations but challenges posed by limited space and weather interruptions can undermine the continuity and quality of care they provide.[33] The concept is gaining traction, as similar facilities have been set up in Montreal, Toronto, and other cities. There are now around 25 pop-up sites across Canada.[32]

There are no OPCs operating legally in the United States. The proposed operation of the site Safehouse in Philadelphia was determined to be legal in federal district court in October 2019, but this ruling was overturned in federal appellate court in January 2021.[34] It should be mentioned that there is at least one OPC operating unsanctioned within the United States[35] and that at least 13 OPC sites, including New York City, Philadelphia, Boston, Seattle, Denver, Vermont, Delaware, and San Francisco, have been proposed and waiting approval.[36] Finally, in July 2021, the governor of Rhode Island signed into law a proposal to allow for the operation of OPCs in that state; the Director of the Rhode Island Department of Health is expected to work with advisors to draft regulations governing this process by March 2022.[37]

EFFECTS OF OPC ON MORTALITY

Published evidence and unpublished reports from stakeholders suggest that no client of an OPC has ever experienced death from an overdose within a facility.[35,38,39] For example, an evaluation of the impact of the Medically Supervised Injecting Centre (MSIC) in Kings Cross, Sydney, commissioned by the New South Wales (NSW) Government in 2010 found no overdose deaths at the facility, which had managed 3,426 overdose events since opening.[40] That report concluded it would be "reasonable to assume that a proportion of these overdose-related events managed at the MSIC would have led to overdose injury or overdose death had they occurred in another location (public place or a private dwelling) that did not have accessible medical supervision and intervention." Similarly, millions of injections have been supervised across Europe with no reports of overdose fatalities inside the facilities.[41] Data collected between March 2004 and February 2008 at Insite in North America showed that the 766,486 injections at the facility resulted in 1,004 non-fatal overdoses, but no fatal overdoses. Models estimated that during this time period there could have been over 50 deaths had those non-fatal overdoses occurred outside the facility.[42]

The scientific assessment of harm reduction approaches like this are complicated by real-world realities of drug use: people who use drugs, and particularly PWID, are at high risk of death from overdose, and prevention of fatal events inside an OPC is not necessarily evidence of a reduction in overall mortality among OPC clients, let alone among other people who use drugs in the area. Reductions in overdose mortality at the broader population level have been reported in Europe, but it should be noted that most such reports are derived from the facilities themselves and don't appear to be the result of rigorous or comparative studies. For example, the International Network of Drug Consumption Rooms reports on its website that, in Spain, overdose deaths were cut almost in half within a decade of the opening of an OPC, from 1,833 in 1991 to 773 by 2008.[43]

A more rigorous example of how to assess the effect of OPCs on mortality rates comes from a population-based study at Vancouver's Insite that measured the impact of its establishment on overdose mortality inside and outside of the actual facility. According to a geospatial analysis of death records, operations in the Insite facility were associated with a 35 percent population-level decrease in the fatal overdose rate within a 500 meter radius perimeter around the Insite facility, compared to a 9 percent decrease in the rest of the city.[44] Using these figures as a baseline, U.S. investigators generated models to project the number of fatal opioid overdoses in other locations and claimed that an optimally placed OPC in New York City could prevent 19-37 opioid overdose fatalities per year, representing a 6-12 percent decrease in opioid overdose mortality for that neighborhood.[45]

In contrast to the above positive outcomes, other studies have found minimal or no impact of OPCs on overdose measures. Still, it should be mentioned that the evidence to date shows no increase in drug use or crime in the areas surrounding OPCs. A recent cross-sectional analysis of non-fatal, self-reported overdose in the past 6 months (between November 2018 and March 2020) by a cohort of 701 PWID in Toronto, Canada found no statistically significant association between OPC use frequency and recent non-fatal overdose.[46] Meanwhile, Drug Free Australia (a drug policy advocacy group focused on law enforcement, effective prevention, and demand reduction initiatives) reanalyzed the Australian study and calculated that the MSIC's 55,000 opioid injections per year yielded only 4 lives saved across its entire 9 years of operation, at a total cost in excess of $23 million, not including setup costs.[47]

Conflicting results such as these are not surprising when considering the complex and dynamic nature of opioid addiction. Rather, they are likely to reflect the challenge of interpreting sets of data that are not derived from randomized controlled trials. This is understandable, given the practical challenges of randomizing OPC participation or OPC sites, which forces greater reliance on natural experiments.[48] Such sites are also not currently sanctioned to operate in the United States, which further inhibits research around their potential benefits.

Moving beyond the focus of drug overdose deaths, the results of two prospective cohort studies of PWID in Vancouver showed that frequent OPC use was inversely associated with risk of all-cause mortality.[49] These findings are important because of the disproportionately high burden of premature mortality among this cohort, and support efforts to enhance access to OPC as a strategy to improve overall health and reduce mortality among PWID.[49]

EFFECTS OF OPC ON OTHER HEALTH OUTCOMES

While the effects of OPCs on hospitalization rates are not yet clear.[50] best evidence from cohort and modeling studies suggests that OPCs are associated not only with lower overdose mortality (approximately 88 fewer overdose deaths per 100,000 person-years, according to the most positive estimates),[44] but also 67 percent fewer ambulance calls for treating overdoses, and a decrease in HIV infections.[50]

Many of the harms associated with IDU stem from scarcity of sterile injection equipment[51,52] and the fear that PWID have of legal repercussions as a result of their drug use.[53] Anxiety about social rejection and arrest deter use of health and preventative services and force PWID into hidden locations that are poorly suited for hygienic drug use.[54,55] Yet, there is sharp

disagreement among simulation studies as to how many HIV infections Insite prevents by supervising drug consumption, as opposed to its SSP-like function of providing sterile equipment for use outside of the facility. Estimates range widely from 2-5 infections prevented per year[56,57] to up to 22-35 per year.[58,59] The difference between these two estimates is salient. Assuming the discounted total cost of medical care per new HIV infection could be in the order of $200,000, an approximately 10-fold difference in the number of prevented HIV infections could mean the difference between Insite yielding a positive or negative return on investment when assessed in terms of HIV transmission outcomes.[60]

The results of the ongoing Cohort for Evaluating Structural and Individual Factors Among Drug-Users (COSINUS) study are expected soon and could help address this question. COSINUS is a prospective multi-site cohort study that started in June 2016 and followed 680 PWID enrollees in four different French cities (Bordeaux, Marseilles, Paris, and Strasbourg) for up to a year. Face-to-face structured interviews were administered by trained staff to all eligible participants at baseline and in three follow-up visits at 3, 6, and 12 months. The study is assessing the impact of individual and structural factors, including OPC attendance and exposure to other harm reduction services, on behaviors that increase HIV/HCV transmission risk and other outcomes.[61] COSINUS is part of the Preventing Injecting by Modifying Existing Responses (PRIMER) study, a multi-country mixed methods study funded in part by the National Institute on Drug Abuse (NIDA) and designed to identify the preventive potential of existing interventions and inform broader efforts to prevent injecting and related harms.[62]

In addition, it is important to point out the potential impact of different and changing drug supplies on the health impacts associated with OPC implementation. For example, a study published in 2019 using Insite-generated data found that the risk and severity of overdoses at the facility have increased since the emergence of illicit fentanyl.[63] In this analysis, overdose events went from 2.7/1000 visits to 13/1000 visits during the study period, meaning that clients were 4.8 times more likely to overdose in the most recent study period relative to the baseline period. This result is consistent with another recent study among clients of the same facility, which found that about 80 percent of the drugs checked (which accounts for only about 1 percent of participating clients) contained fentanyl.[64] Since fentanyl is increasingly being found combined with other opioid and non-opioid illicit drugs as a contributor to overdose deaths,[65] drug checking at OPCs might constitute a key intervention that could contribute to preventing overdoses in the context of the current overdose emergency. Moreover, providing fentanyl test strips for drug checking is a service that appears to have high acceptability among users.[66,67]

EFFECTS OF OPC ON ADDICTION SERVICE AND TREATMENT REFERRALS

The establishment of OPCs has triggered concerns that the program may facilitate ongoing drug use and delay entry into addiction treatment. However, early Insite utilization data indicates consistent increases in the number of PWID seeking medical help to cease using drugs.[15,68-70] For example, as part of a Scientific Evaluation of Supervised Injecting (SEOSI),[71] Health Canada analyzed questionnaire data derived from a cohort of persons who either used one of four OPCs at least weekly, or had any contact with the facility's addictions counselor; both factors were independently associated with more rapid entry into a detoxification program.[72] In a prospective study, the same group examined the rate of detoxification service use among OPC participants in

the year before versus the year after the OPC had opened, and found a statistically significant increase in the uptake of detoxification services the year after the OPC opened.[73]

A similar study followed a random sample of Vancouver's OPCs and found that both regular OPC use at baseline or having contact with an OPC addiction counselor were associated with cessation of injecting for a minimum of 6 months.[74] Another study based on behavioral surveillance of Sydney's MSIC client cohort, between May 2001 and October 2002, found frequent MSIC attendance was one of the strongest factors associated with drug treatment referral uptake (defined as presentation for assessment at the relevant agency).[75]

Between March 10, 2004, and April 30, 2005, the Insite group conducted an evaluation based on a comprehensive on-site database that was designed to track attendance and daily activities within the facility. This evaluation involved a large prospective cohort of Insite participants and a comparison cohort of PWID who were not using the OPC and found convincing evidence that the Insite OPC serves as a referral center for many community resources:[76] more than 800 referrals were made per quarter, and about 40 percent of referrals were for various forms of addiction treatment (Table 1).

Table 1. Referrals made from the OPC stratified by quarter[76]

Referral programs	2004			2005
	Second quarter	Third quarter	Fourth quarter	First quarter
1. Addiction counselling	121 (28%)	126 (33%)	251 (45%)	314 (39%)
2. Community clinics	97 (22%)	53 (14%)	77 (14%)	108 (14%)
3. Hospital emergency	62 (14%)	42 (11%)	60 (11%)	68 (9%)
4. Detoxification bed	56 (13%)	58 (15%)	52 (10%)	71 (9%)
5. Community services	41 (10%)	36 (9%)	32 (6%)	99 (13%)
6. Housing	27 (6%)	36 (10%)	44 (8%)	101 (12%)
7. Methadone	13 (3%)	16 (4%)	24 (4%)	31 (4%)
8. Recovery house	17 (4%)	12 (3%)	14 (3%)	9 (1%)
Total	434	379	554	804

EFFECTS OF OPC ON DRUG USE BEHAVIORS

There have been persistent concerns raised that OPCs could increase illicit drug use or alter drug use-related behaviors in ways that could worsen morbidity and mortality outcomes among PWID. However, such concerns do not appear to be supported by the available evidence. Indeed, the establishment of OPCs has not significantly altered community drug use patterns, including rates of injection initiation, relapse, or cessation.[69,77]

In terms of drug use-related behavioral change, one study found that Vancouver PWID who reported that some, most, or all of their injections took place at the Insite OPC were 70 percent less likely than other PWID to have borrowed or lent a syringe in the past 6 months.[78] Several studies have found that, while Insite is utilized by people who frequently inject drugs, its operation has not been associated with an increase in the rates of initiation into injection drug use.[68-70] In fact, after the opening of Insite, researchers were able to document significant reductions in public injection drug use, publicly discarded syringes, and syringe sharing rates among Insite clients.[15] An important limitation in this type of study is that the cross-sectional study design prevents the inference of causal relationships.[60]

Should OPCs prove to be facilitators of positive behavioral change, there is one study that may shed some light about possible mechanisms for improving health outcomes: a nation-wide investigation measured the impact of five Danish facilities on the health and well-being of its clients through extensive interviews of both clients and staff members. That study found that OPC clients experienced a sense of social acceptance while inside the OPC, where staff members conveyed a welcoming, non-judgmental attitude. Beyond the primary goal of preventing overdoses, members of the staff took pride in their ability to build bridges for their clients by guiding them towards drug treatment programs and services in the social and the health sectors.[79]

EFFECTS OF OPC ON CRIME

The opening of Insite was not associated with any increase in drug dealing or drug related crimes in the area where the facility is located,[15] a result that is consistent with the lack of any measurable impact on rates of crimes such as burglary, theft, and robbery 6 years after the opening of the OPC in Sidney, Australia.[80]

It is, however, extremely difficult to disentangle crime trends from other changes that occur over time. For example, a 2013 study concluded that trends in property crime incidents and illicit drug crime incidents were the same in the immediate vicinity of the MSIC OPC and the rest of Sydney after the opening of the MSIC.[81] However, the analysis did not preclude the possibility that differential police activity around the MSIC may have impacted these findings.

A more recent analysis of crime trends in Vancouver assessed weekly counts of reported violent and property crimes in four police districts (one of which housed the OPC) between the first week in January 2002 and the last week in December 2004. Since the city's OPC had opened in September 2003, this design allowed for a before and after assessment. This analysis of city-wide crime data found no evidence that the OPC had any impact on crime. Moreover, a more granular analysis pointed to a significant decrease in crimes in the district where the supervised injection facility is located.[82]

SOCIOECONOMIC IMPACT AND RETURN ON INVESTMENT

People who inject drugs are parents, children, friends, family, and neighbors. The social costs of their exclusion from society are significant, and measures taken to reduce the disease burden of addiction and draw PWID back into society have far wider benefits. For example, there is a large body of research evaluating SSP, including return on investment studies.[83,84] According to the Joint United Nations Programme on HIV/AIDS (UNAIDS), spending money on harm reduction programs for PWID not only saves lives, but it is also a good investment.[85] In

addition, there is evidence to suggest that packages of combined harm reduction approaches, particularly with respect to HIV-related outcomes, are highly likely to be more effective and cost-efficient than partial approaches.[86]

More recently, rigorous studies have begun to provide preliminary evidence for the cost effectiveness of investments in OPCs as well. For example, Vancouver's OPC has been associated with improved health and cost savings, even using conservative estimates of efficacy. Focusing on the sole effect of decreased needle sharing to the exclusion of impacts from overdose reversal, treatment linkage and other impacts of the OPC, one study found the facility to be associated with a net savings of almost $14 million and 920 life-years gained over 10 years.[87] Conservative calculations performed in 2012 estimated that, on average, Vancouver's Insite prevents 35 new cases of HIV and almost 3 deaths each year. This provides a societal benefit in excess of $6 million per year after considering the program's costs, translating into an average benefit-cost ratio of 5.12:1. Importantly, in areas surrounding existing OPCs, there has been no evidence of increased community drug use, initiation of injection drug use, or drug-related crime.[58]

A 2017 systematic review concluded there is consistent evidence to demonstrate that OPCs are cost-effective, based on their ability to mitigate overdose-related harms and unsafe drug use behaviors, as well as facilitate uptake of addiction treatment and other health services among persons who use drugs, without increasing drug-related crime.[38] However, this conclusion is tempered by the co-location of all included studies in Vancouver and methodological questions around the results reviewed.[38]

The question of how or whether the Insite model could be applied successfully or cost-effectively in U.S. cities remains unanswered, but researchers have attempted to ascertain the potential cost effectiveness of this approach in the United States. According to one model based on the Vancouver program Insite, it was estimated that it would cost $2.6 million annually to operate an OPC in San Francisco. The researchers calculated that each dollar spent on this center would generate $2.33 in savings, for total annual net savings of $3.5 million for a single 13-booth OPC. These results suggest that an OPC in San Francisco would not only be a cost-effective intervention but also a significant boost to the public health system.[88] Since community reluctance to accept an OPC location is another important factor to consider, it is important to mention the consistent observation that initial objections to OPCs from local stakeholders tend to disappear following their implementation, a phenomenon that was observed in multiple locations.[89]

As additional pilot programs are deployed, it may be desirable to test harm reduction interventions that are more flexible or adaptable to different circumstances and differing local conditions, so that services evolve in response to changes in drug market conditions over time and/or place. Worth mentioning in this context are the mobile injection sites (especially fitted-out vans with injection booths) that have been tested and run by non-governmental organizations on behalf of municipal authorities in Barcelona and Berlin, and more recent versions in Lisbonp[21] and Canada,[32] initially as a more palatable option for the adjacent communities relative to fixed supervised consumption sites.[90] The mobile/pop-up OPC model is relatively new, so no reliable outcome data are yet available, but a couple of published studies

have identified key questions about mobile relative to fixed consumption sites that warrant further research and evaluation, including limited client throughput, higher cost, impact of weather conditions, and their dependence on a supportive local context.[90,91]

LIMITATIONS

After more than 30 years of operation, OPC research has generated scores of studies, evaluations, and even some systematic reviews that assess their impact at both the individual and population levels. However, the extant literature presents methodological limitations which make it difficult to draw definitive conclusions. The majority of studies come from a few sites, with close to 80 percent of the peer reviewed literature based on the Insite facility in Vancouver or the MSIC in Sydney. The evidence base regarding the overall effects of OPC is limited not only in location but also in quality: no study involved a randomized control trial and the interpretation of quasi-experimental or simulation studies warrants caution.[92] In addition, while there appears to be little basis for concern about adverse effects, the evidence for OPCs being the direct cause of favorable outcomes is minimal.[93] Finally, earlier findings may be less applicable today due to rapid changes in the quality and potency of drugs which may very well increase the demand for supervision, putting additional strains on OPC capacity and quality of service, and potentially altering the cost-effectiveness calculations.

CONCLUSIONS

A 2014 meta-analysis of 75 studies concluded that OPCs have largely fulfilled their initial objectives;[39] the implementation of new OPCs in places with high rates of IDU and its associated harms appears to be supported by the existing evidence.[39] Methodological caveats notwithstanding, drug use supervision and overdose management have the potential to provide health benefits to at-risk PWID as well as economic advantages to the larger community. The preponderance of the evidence suggests these sites are able to provide sterile equipment, overdose reversal, and linkage to medical care for addiction, in the virtual absence of significant direct risks like increases in drug use, drug sales, or crime. OPCs may represent a novel way of addressing some of the many challenges presented by the overdose crisis, and they could contribute to reduced morbidity and mortality, and improved public health.

Based on the above considerations, there is a clear need for more rigorous research and evaluation of OPCs. Given the amount and quality of the existing data, it may be prudent to consider the American Medical Association's recommendation of developing and implementing OPC pilot programs in the United States designed, monitored, and evaluated to generate locality-relevant data to inform policymakers on the feasibility and effectiveness of OPCs in reducing harms and health care costs related to IDU.[94]

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