Safe Consumption Spaces and Drug User Preferences

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Abstract

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To combat the opioid epidemic, some cities in the United States are beginning to lay the ground work to open Safe Consumption Spaces (SCSs). SCSs are facilities for people to consume their drugs under the supervision of a medical professional in a clean environment with sanitary equipment. Many SCSs also provide social and medical services as well as access to drug treatment. As Seattle prepares to open its own Safe Consumption Space (SCS), this research explores drug user interest and preferences for a SCS at a local needle exchange. Needle exchange participants were surveyed to determine if they are interested in using a SCS. Following the survey, four focus groups were held to determine other preferences for the space, including days and hours of operation, additional health and social services, aspects of the physical space, and rules. Thematic analysis of the focus groups determined that participants are looking for a community space where they can consume their drugs safely, semi-privately and without judgement from service providers and peers. This is a different model than the medical model offered at SCS currently. Further research is needed to determine women's and smokers' needs in SCS.

I. Introduction

A. Problem

An opioid epidemic is sweeping across the United States, with overdose deaths nearly tripling between 1999 and 2014.[1] In Washington State, 1,094 people died by opioid overdose in 2015, a 10 percent increase over the previous year.[1] Beyond the lives lost to overdose and the impact this has on families and communities, the financial burden on the economy is immense. The total economic cost was estimated to be $78.5 billion in 2013, including health care, substance abuse treatment, and criminal justice costs.[2] Public drug use and overdose also pose public nuisance and safety risks to community members through improper needle disposal and the potential to spread blood borne pathogens.

In March 2016, King County Executive Dow Constantine, Seattle Mayor Ed Murray, Renton Mayor Denis Law, and Auburn Mayor Nancy Backus responded to the epidemic by convening the Heroin and Prescription Opiate Addiction Task Force (HPOATF). The task force was charged with developing both short and long-term strategies to prevent opioid use disorder, prevent overdose, and improve access to treatment and other supportive services for drug users. The HPOATF published their guidelines in September of that same year. In their report, they called for the installation of two Community Health Engagement Locations (CHELs); one in Seattle and one elsewhere in King County.

CHELs are a type of SCS. SCSs are locations in which drug users can consume their drugs safely in a sanitary environment, with sterile equipment, and under the supervision of a medical professional equipped with overdose-reversing Naloxone. SCSs are additionally referred to as Safe Consumption Sites, Safe Injection Facilities, Drug Consumption Rooms, Supervised Consumption Sites or Overdose Prevention Centers. For this research, the acronym SCS will be

used to refer to a Safe Consumption Space. The medical professionals who work at SCSs provide support to drug users on how to reduce the harm of their drug use, including modifying how they inject themselves and properly caring for their wounds. SCS participants can take the time to properly clean the injection area and carefully inject without the looming threat of being discovered by law enforcement. By using drugs in a designated space, clients are also less likely to use in public, reducing the amount of needle and other drug-related litter in public.[3] Many SCSs have added programs to connect participants to drug treatment, health care, and other social services, like housing. SCSs can reach and maintain contact with drug users who are not ready or willing to quit drug use and connect those who have refused such services in the past to services when they are ready.

The HPOATF recommended the creation of CHELs in King County that would provide more wraparound services than the typical model of SCS that has been implemented elsewhere. The task force called for the CHELS in King County to provide drug treatment services, medical and behavioral healthcare services, social services (like case management), housing assistance, employment assistance, legal services, as well as access to law enforcement. Seattle City Council allocated $1.3 million for its CHEL site in its 2018 budget.[4]

As King County prepares to open the CHELs, it is important to consider drug user interest in accessing a CHEL, as well as what features drug users would like to see in such a space. One recent study found that overall utilization of a SCS could be predicted by looking at reported "willingness measures" collected from drug users.[5] Cities including San Francisco, Toronto, and Ottawa, have conducted feasibility studies to measure drug users' interest in SCSs and their preferences for such spaces. [6, 7] For example, one study in San Francisco asked drug users about potential rules and regulations for the SCS and if they would be amenable to showing

identification to access the SCS,[6] while researchers asked drug users in Toronto and Ottawa if a SCS should operate as a standalone service, be mobile or be paired with existing programs, like needle exchanges, clinics, or hospitals.[7] One study in London, Ontario, Canada, looked at drug user preferences for SCS design, including their willingness to use an integrated service, willingness to walk or bus to a SCS, preferred set-up for injecting space, hours of operation, involvement of drug users in service operation, as well as important amenities for SCSs.[8]

King County should similarly design its CHELs to include features identified by the drug using community. Assuming drug users will simply use the space because it exists may lead to the failure of the CHEL or less than optimal utilization if it is not designed with the preference of drug users in mind. For this research, I partnered with a needle exchange in Seattle's University District that promotes the philosophy of harm reduction and safer drug use. The purpose of my study was to understand drug users' preferences for SCSs in Seattle, a subject which has not previously been researched. The research questions were: Are drug users who access this needle exchange in Seattle interested in using a SCS? And, if so, what are drug users' preferences for a SCS in Seattle?

B. Literature Review

Harm reduction refers to strategies and practices that reduce the negative consequences and harms associated with drug use in people unable or unwilling to stop using. For this research, I partnered with a needle exchange program that has a harm reduction philosophy. The organization distributes three million needles a year, as well as other equipment used to consume drugs, like pipes, cookers, and tourniquets, as well as wound care supplies, like alcohol wipes, gloves, bandages, and gauze.[9] As an extension of their services to drug users, the organization has proposed to open a SCS next to their needle exchange. This SCS would be housed in a

storage container intended to provide privacy and shelter to drug users. After using, the participant would then be moved to another space to be monitored for overdose and other adverse reactions for up to 30 minutes.

The first legal SCS was established in Berne, Switzerland, in 1986.[10] Since then, more than 90 SCSs have been set up in Canada, Switzerland, the Netherlands, Germany, Spain, Luxembourg, Norway, Australia, and Denmark.[11] One of the most researched and documented SCSs is called Insite and opened in Vancouver, Canada, in 2003. More than 30 peer-reviewed studies have evaluated Insite's impact. Conclusions include:

1. Insite attracts a variety of injection drug users, and staff successfully intervene in overdose events on site and actively refer drug users to addiction treatment and other services.[12]
2. Insite attracts drug users who previously used in public and are at a particularly high risk of health problems, like HIV and HCV.[13]
3. Insite prevents the spread of disease by providing clean injecting equipment, and the availability of a supervised and sterile environment to self-inject.[14]
4. Insite has reduced the high-risk behaviors of drug users and increased public order in Vancouver's Eastside.[15]
5. Insite encourages drug users to enter detox and offers the service at their location. Drug users who enroll in detox are then more likely to remain in subsequent treatment programs and reduce how often they frequent Insite.[16]

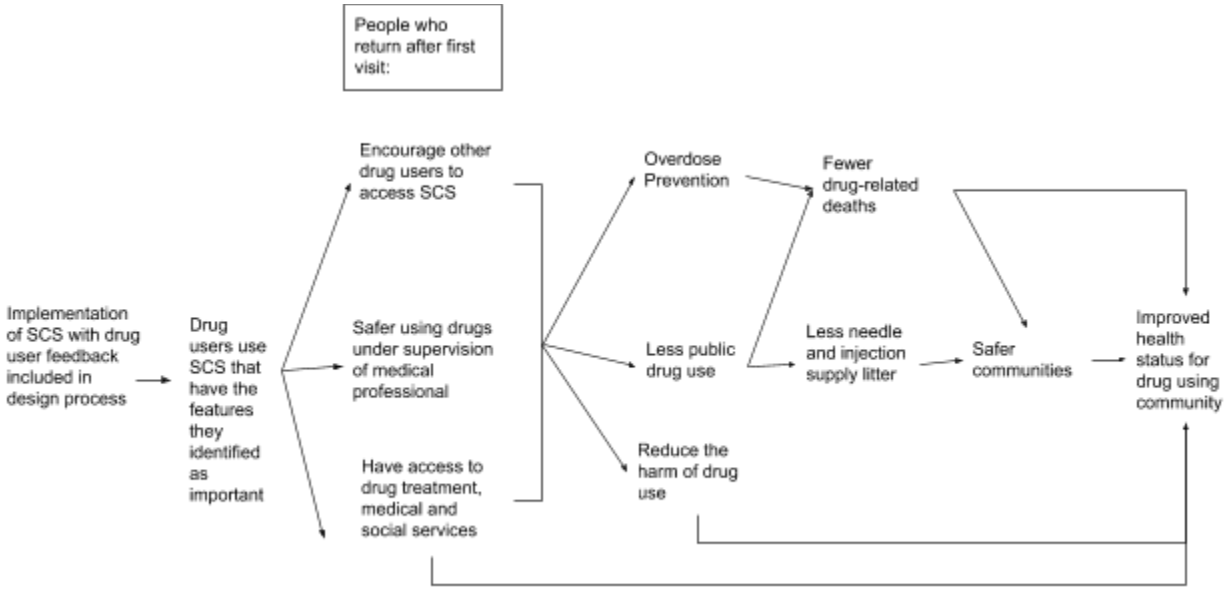
Currently, there are no legal SCSs in operation in the United States, and Seattle is poised to be one of the first U.S. cities to offer SCSs.[17] Other U.S. cities are taking steps to open their own SCSs: San Francisco has conducted a cost-benefit analysis for a potential SCS that showed

a total annual net savings of $3.5 million,[18] New York City Council allocated $100,000 for an impact study on the effect of instituting SCSs there,[19] and the New York State legislature is considering a bill that would legalize SCSs in the state.[20] An agency located in an undisclosed urban area in the U.S. also opened an unsanctioned SCS in September 2014 and the success of that SCS has provided quantitative evidence for many of the benefits that SCSs claim to offer both to drug users and the surrounding community.[21]

C. Conceptual Model

The following model outlines the theory of change of a SCS and how drug user feedback on design and administration of a SCS program impacts the usage of the SCS:

Figure 1: Theory of change of a SCS when informed by participant feedback



As shown in Figure 1, drug users can also provide valuable input about community medical concerns or other feedback to medical professionals working to establish a SCS. Drug user involvement is so critical to program design, development and implementation that more than half (58 percent) of drug users in San Francisco said drug users' involvement in running the SCS was an important consideration to them when considering accessing a SCS.[6] Understanding

what qualities drug users are looking for in a SCS could increase the number of people who use the SCS and who return after their first visit.[6] With each positive experience, clients will return to the SCS and will encourage others in their community to do the same. Positive experiences were found to predict future use in the interviews conducted by researchers analyzing a SCS in Denmark.[22]

With access to a safe place to use drugs under the supervision of a medical professional, drug users who continue to use a SCS to safely consume their drugs will also be able to access drug treatment, medical care and social services, building an important bridge to services for those who have refused, or been rejected by, such services in the past. Participants at the SCS would be administered Naloxone in the case of an overdose, thus preventing drug-related deaths. Medical professionals would also provide support to drug users on how to reduce the harm of their drug use. Participants would also be able to take the time to properly clean the injection area and carefully inject. By using in a SCS, clients would be less likely to use in public, reducing the amount of needle and other drug-related litter in public and preventing public overdoses.[23] Connecting people to drug treatment may lead to recovery, which in turn would reduce the use of drugs and associated harms in the future.

II. Methods

A. Partner Organization and Timeline

The organizational partner for this research operates a needle exchange program in an alley way behind a church in Seattle's University District. The administrative offices are in the church building. The needle exchange has operated in the University District for over two decades. As a respected organization operated by and serving drug users, it has established strong relationships with this population. Drug users trust the organization, and the organization

wants to create a space in which participants will consume their drugs. It also recognizes that drug users have important and relevant knowledge to share about injection experience that otherwise might not be known to people who do not inject drugs.

The University of Washington IRB granted exempt status for this research in August 2017. The annual survey was conducted in September 2017. A revision to the IRB application was submitted in February 2018. Focus groups were then held in March 2018. Transcription and analysis were conducted in March and April 2018, respectively.

B. Annual Survey

The organizational partner conducts an annual participant survey to gather data on their participants. The survey is conducted in the alley during the needle exchange operating hours when drug users are accessing services. Survey participants are recruited by designated volunteers who have been trained to conduct the survey. The requirement for participating in the survey is to be a participant at the organization. Participants who took the annual survey in 2017 were asked an additional question for this research regarding SCSs: "Would you be interested in using a safe drug consumption room?" The options were yes, no, and unsure. Responses to this question are broken down by select demographics in Appendix A.

C. Focus Groups

The original study design included conducting seven focus groups with four participants each for a total of 28 participants. This decision was based on a brief review of the literature, including three studies that relied on focus groups with people who use drugs – a population often hard to reach and underrepresented in research – from around the world: ten focus groups with 99 total participants in the Kyrgyz Republic,[24] five focus groups with 18 total participants in

Cambodia,[25] and five focus groups with 21 total participants in Ukraine.[26] Ultimately, four focus groups were held.

Further review of the literature related to focus groups indicated fewer focus groups could be conducted while still achieving valid and reliable results. According to Stewart, most studies based on focus groups do not use more than four focus groups.[27] Other researchers have determined 4.3 focus groups are needed on average to reach 90 percent saturation.[28] Finally, according to Tausch and Menold, four is the minimum number of focus groups recommended.[29] Four was the ideal number of participants recruited to compensate for any participants who were less talkative or who decided to leave once they read the informed consent form, thus four participants were recruited for each focus group.

With results from the annual survey indicating overwhelming interest in the SCS, focus groups were used to elicit information about the common attributes among drug users and what they would like to see in the SCS. The focus group guide [Appendix B] was composed by the principal investigator (PI) with input from the staff of the partner organization. A draft of the focus group guide was pre-tested among three men from the population and revised based on their responses. Once the guide was finalized and IRB approval was obtained, focus group participants were recruited during the needle exchange operating hours when drug users were accessing services in February 2018. Staff and volunteers were used to recruit participants alongside the PI because of their established rapport with the community and, for some, a shared identity as a drug user. Participants over 18 years of age, who self-identified as active drug users and were coherent enough to respond to questions were asked to participate in these focus groups. Special effort was made to ensure diverse representation of drug users in focus groups, including women and people of color, as well as a variety of ages, drugs of choice, and method

of consumption. For example, roughly 30 percent of participants who said they would use a SCS identified as female on the survey. A goal was therefore for a third of focus group participants to be female as well. The matrix at the beginning of the focus group question guide was used to document diversity within focus groups [Appendix B].

During recruitment, participants were asked if they would be willing to sit down and talk for half an hour about SCSs. Those who agreed were invited into the church building, and the focus groups were held in the administrative offices. Interviewing and informed consent process were conducted by the PI in the offices. Since the Executive Director is a well-respected member of the drug using community, the original plan was for him to be present for the focus groups to facilitate conversation. However, he was unable to attend the focus groups and the PI conducted them alone. Before beginning, participants were informed about the focus group process, including confidentiality of the space and how the information collected would be used. Group members were then asked for permission to audio record the focus group session. After collecting signed consent forms [Appendix C], participants were asked if they had any questions before starting the recording and beginning the focus group session.

To begin, participants were first asked questions about their personal drug use habits, including drug of choice, method of consumption, where they currently use, and if they use alone or with others. Next, participants were asked if they were interested in using a SCS and what would attract them to or prevent them from using a SCS. Participants were then asked questions about the proposed SCS in the alley, including administrative and programmatic details, attributes of a proposed physical space, as well as rules and regulations. Administrative questions included what days and hours of availability participants would like to see in the SCS and the amount of paperwork that participants would be willing to complete when they first accessed the

SCS. Participants were also asked which services should be available through the SCS, including what services the supervising medical professional could provide in the SCS and what referrals participants would like to access through a social worker. Questions about the physical aspects of the SCS included lighting, seating, and privacy concerns. Questions about participant rights and responsibilities centered around who would be able to inject the drug user, who else would be allowed inside the SCS as the participant injected, time limits, consequences for breaking rules, and how to address police presence. Focus groups ended by asking participants what they needed to feel safe, loved and respected while accessing the SCS.

D. Data Analysis:

1. Annual Survey

The annual survey had an additional question added in 2017: "Would you be interested in using a safe drug consumption room?". The question was worded this way, unlike the overarching research question asking if participants are interested, to more clearly explain the purpose of a SCS and to clarify that this services was not yet available. Participants responded to this question with "Yes," "No," or "Maybe." Responses to this question were further informed by the answers to other questions on the annual survey and compared across attributes of participant experiences to determine if there were subpopulations of drug users that are most interested in SCSs. These attributes included: experienced an overdose in the past year, witnessed an overdose in the past year, current housing situation, gender, current injection drug use, public injection in the past month, and current smoking drug use. A Chi Square test was calculated in Excel to determine if there was a relationship between drug user characteristics and interest in the SCS. Fisher's exact test was considered as a way to analyze the data since it is used when cell sizes include less than five observations. However, Fisher's *p* values may be

overly conservative compared to Chi Square results and is controversial because it conditions on the margins.[30] Thus, the Chi Square test was determined to be sufficient to compare attributes across response to the SCS question.

2. Focus Groups

Focus groups were transcribed by the PI. A preliminary code book was composed based on the focus group guide. Transcripts were coded in the software ATLAS.ti. Additional codes were added during deductive coding. A thematic analysis was conducted. Ultimately, 69 codes were used across four transcripts.

III. Results

A. Survey Question

The first purpose of this research was to determine if drug users who accessed this needle exchange were interested in using a SCS. To answer the research question, the PI examined the survey responses. A total of 217 participants responded to the additional question on the annual survey, "Would you be interested in using a safe drug consumption room?" Overall, 177 (81.5%) participants surveyed stated they would be interested in using a SCS.

Table 1: Interest in SCS

Would not use SCS	Unsure	Would use SCS
n = 28	n = 12	n = 177

Resulting data from the survey responses is further outlined in Appendix A. Results were analyzed by the demographic profiles and other characteristics of participants; whether a participant had experienced an overdose in past year, witnessed an overdose in past year, current housing situation, gender, current injection drug use, public injection in past month and current smoking drug use. A chi-square test of independence was performed to examine the relation

between interest in using an SCS and these other demographics and characteristics. Results included:

1. More than 93% of participants who experienced an overdose in the last year and 83.6% of participants who witnessed an overdose in the last year stated interest in using a SCS. There was no difference in interest in using a SCS between those who experienced or witnessed an overdose in the last year and those who had not ($p = 0.149$ and $p = 0.579$ respectively).
2. More than 72% of those stably housed and 86.2% of those unstably housed stated they would be interested in using a SCS. The relation between this variable and interest in using a SCS was significant ($p = 0.004$). Unstably housed participants were more likely to be interested in using a SCS.
3. Men and women reported similar rates of interest in using a SCS (81.3% and 84.3%, respectively). There was no difference in interest in using a SCS between men and women ($p = 0.791$).
4. More than 85% of injection drug users and nearly 93% of participants who reported publicly injecting said they were interested in using a SCS. The relation between these variables and interest in using a SCS was significant ($p = 0.030$ and $p = < 0.001$ respectively).
5. A total of 85.3% of participants who consume their drugs by smoking reported interest in using a SCS, indicating there is a need for both injection and smoking services at the SCS. There was no difference in interest in using a SCS between those who reported smoking drugs and those who did not ($p = .25$).

Based on the results of the annual survey question, because most participants indicated that they would use the SCS operated by this organization if it was developed, it was determined that holding focus groups would be valuable to inform the development of the SCS using input from drug users.

B. Focus groups

1. Composition

To determine what needle exchange participants' preferences were for a SCS, four focus groups were held. To protect the identities of focus group participants, attributes (gender, race, age, etc.) have been aggregated. Half of all participants were people of color. A quarter of all participants were women. Seven participants were between the ages of 18 and 29 and nine were 30 or older. The composition of each group in outlined in the following table:

Table 3: Focus Group Composition

	Gender	**Race**	**Age**	**Drugs Used**	**Method of Consumption**
Focus Group 1	4 males	2 black 2 white	1 - 18-29 3 - ≥30	Meth Heroin Pills Hallucinogens	Smoking and injecting
Focus Group 2	3 females 1 male	2 black 2 white	2 - 18-29 2 - ≥30	Meth Heroin Cocaine Pills	Smoking and injecting (one trying to get sober)
Focus Group 3	4 males	2 black 2 white	2 - 18-29 2 - ≥30	Meth Heroin Cocaine	Smoking and injecting

				Marijuana	
Focus Group 4	1 female 3 males	2 black 1 white 1 Native American	2 - 18-29 2 - ≥30	Meth Heroin	Smoking and injecting (one trying to quit injecting)

2. Resulting data and themes from focus groups

The primary theme of the focus groups was that SCSs should be community spaces that provide privacy and anonymity so that drug users feel comfortable consuming their drugs in a non-stigmatized and judgment-free manner. Drug users have experienced negative interactions with police, as well as medical professionals and other service providers regarding their drug use. They also reported stigma between drug users (i.e., meth vs. heroin, smoking vs. injecting). Drug users want SCS to be places where they feel safe, respected and anonymous. As one participant said:

> **"**I'm not ashamed. I'm not proud of it either, but I'm not going to deny it. I'm not going to be hypocritical. Don't glamorize it, but don't hide it. And don't put other people down for doing the same thing you do."

a) Personal drug use and SCSs

Focus group participants reported heroin or crystal methamphetamine use. Other drugs mentioned were cocaine, hallucinogens and "pills". When asked if and why they were interested in using a SCS, an overwhelming majority said they would use a SCS and many reasons were cited, including, personal safety and the experience of losing friends to overdose:

> "When you're sick, you're sick. I've been forced to shoot up in places outside that could've got my ass landed in jail. It would be really cool if there was a place to go to be safe and be able to get it done and over with, so you can go about your business."

> "I've lost 18 people. I'd like somewhere where they can be safe and there will be medical staff. I don't want to lose any more people. It happens all the time. You're eventually going to die, but I'm tired of seeing my friends die from [overdosing]."

Participants expressed concerns about whether alcohol, pills, or marijuana could or should be consumed in the SCS. There was no consensus about whether participants should be able to consume these substances in a SCS. Some thought legal substances, like alcohol and marijuana (legal for recreational use in the state of Washington), although not legal to consume them in public, should not be allowed in the SCS. One suggested:

"It's a consumption site. If you're gonna consume, you should be monitored."

While most participants agreed that time limits for participants accessing the SCS should exist, others thought imposing a time limit would be a deterrent for some participants. Thirty minutes was an agreed upon length of time, but with the understanding that exceptions might need to be made from time to time. People who smoke their drugs might be able to finish consuming their drugs sooner than people who inject, especially if people are using communally. Participants commented on time limits:

> "There shouldn't be time limits, but there are going to be people who make it so there has to be time limits."

> "If you're gonna rush people, it defeats the purpose. If you're going to rush me, I'd rather go find a bathroom where I can chill and be on my own time. I gotta hurry up and put my piece on the foil. If I'm being rushed, I'd rather go somewhere where I don't have to be rushed."

Beyond its intended purpose of monitoring vital signs to prevent overdose, participants wanted a "chill out" space adjacent to the SCS to listen to music, watch TV, do arts and crafts, and participate in "drug distraction activities." They also wanted food and drinks available in that space.

b) Physical space

The proposed space for the SCS at the partner organization used to facilitate discussion in these focus groups is a small storage container, approximately 70 square feet, with a single door

and windows on all sides, with no heating, air conditioning or plumbing. Participants felt that the space was very small and that there would probably only be enough space for 5 to 10 participants. Many participants said they would want seating like what is available at public libraries: big comfortable chairs, chairs with a small side table that folds over the user's lap, and carrels. One focus group participant mentioned that depending on what drugs were consumed, participants might need something solid on which to support themselves. While participants wanted privacy curtains, they noted that while curtains provide some privacy, they do not provide physical support. There was also some debate about whether bright or dim lighting was preferable, with smokers asking for dimmer lighting and injectors asking for brighter lighting. Participants said they wanted to be able to control the light by moving it around, like a book light. Injectors expressed needing a surface to be able to lay out all their injection supplies while smokers did not express such a need. There was also concern that the space (an uninsulated metal structure) would get very hot or very cold depending on the season.

c) Operations

Ideally, the participants wanted the space to be open 24 hours. Otherwise, participants preferred morning and evening hours because the public bathrooms they use normally aren't open early enough and are usually busy around 4-6pm. Nightly hours were not as important as participants felt they could find other places to use after dark. One participant said:

> "I think it should open at 6 am. As a regular heroin user, my body wakes me up at that time to get well or else I get sick. It sucks, but it's the reality of being addicted to opiates. You need it when you need it."

Other participants wanted the SCS to be open every day:

> "Seven days a week and holidays. To me personally, holidays are just a day I can't get things done. When I wish to use, it's not taking a holiday off."

Participants identified the need for certain rules and policies, including no buying or selling of drugs and no fighting. Participants said mirrors should be given to users if they requested them for consumption purposes but should be taken away later to ensure the participants did not loiter in the space by using them for non-consumption purposes, such as personal hygiene. Participants were divided on whether music should be allowed in the SCS. Some thought it might start a party or cause people to go over time. Others said they needed music to focus.

Waiting in line to access a SCS may be a barrier for some participants. One participant suggested giving people appointments to avoid waiting, while another said that if they had to wait they would probably find another place to consume their drugs:

> "I just know me personally and many other heroin addicts, if there's any kind of line… we're going [to use] right there [in public]."

d) Confidentiality

An important result from the focus groups was a lack of consensus on a registration process or any type of paper work required to participate in the SCS. While some participants said they would share some information with the partner organization, others indicated that they would not be willing to share any personal information with the organization. They also expressed that most drug users would not be willing to disclose personal information and that it would be a significant barrier to adoption of the SCS.

> "I'd have to know there's been some kind of HIPAA agreement. There's got to be some way to do it through HIPAA. There're medical reasons for a safe consumption site which would make it so law enforcement couldn't access it without a federal warrant or court order."

Beyond a confidential space, some drug users stated a need for a space where they could consume their drugs in private. Participants expressed wanting curtains or partitions to give them some privacy in the SCS:

> "Preferably, everybody has their piece of privacy. That's the one thing you don't have if you're homeless. Animals at the zoo get privacy!"

e) Peer support

While some participants wanted privacy, others were interested in using with other drug users, suggesting they might want to bring along a buddy to supervise them while they injected. Smokers tended to be more communal and expressed wanting to use with others while injectors were more likely to want privacy while they injected. However, injectors also said they might be interested in bringing a buddy or accompanying a friend to the SCS. With no consensus on this topic, the program would have to decide if participants must use alone or if multiple people could use together. About peer support, one participant said:

> "You have to have medical professional's supervision, but peer supervision would be important. It'd cut costs down. It would help people be comfortable with the paranoia factor. Like, if you go with me and I'm the one helping you shoot and someone is looking over my shoulder, that's fine. They be more apt to trust me than someone they don't know with a last name on a badge that is just filing things away on a clipboard you can't see."

Along the same lines of peer supervision while injecting, participants also suggested peer security in the alley. There was a clear need expressed to include drug users in the operation and management of the SCS program.

a) Other services

Participants expressed interest in having a supervising nurse or medical professional who was non-judgmental and that, beyond supervision and monitoring for overdose, would provide harm reduction techniques and dispels myths that surround drug use. Participants expressed interest in accessing treatment and case management at the SCS. One participant said:

> "Certain days and times, there should be treatment options. Some sort of case manager type person would be there to let you know what you need to know for treatment and how you can get there."

Other services focus group participants wanted available are: housing assessments, wound care, foot care, and clothing. Although some preferred to not have those services too visible, they said they would like to see pamphlets about available resources. Participants would like to see similar programs that organization already operates, like HEP/HIV testing and drug purity testing.

II. Discussion

A. Study limitations

One limitation of this study was the total number of focus groups (4). The original plan included seven focus groups with four participants each. However, there was a conflict of interest between the partner organization and the researcher's employer. The partnership between the organization and the PI was therefore terminated and focus groups were curtailed halfway through the study. Exploration of continuing focus groups at another organization that operates a needle exchange program was pursued because it was thought that the participants accessed both needle exchange programs. However, this organization had a much smaller participant base, making it very challenging to recruit the proper number of focus group participants at one time. While individual interviews remained an option, it was determined that the program does not serve the same population and that most participants accessing their services come from a different geographical area than the original partner organization. For these reasons, it was determined that focus groups from this organization would not supplement the research and were not pursued.

Sampling of participants was another challenge. While some days the needle exchange served many participants, other days were less busy and thus there were fewer participants from whom to recruit. Not all program participants were open to sitting down for a focus group. Only participants who had the time to sit down were part of the focus groups. which may have

impacted the results. Finally, few women were surveyed and while one focus group was made up primarily of women, there was no group that was 100% women, which may have impacted what they shared in the focus group. The original goal was to have 30% of focus group participants be women. However, only 25% were women. Additionally, there were no specific questions about what women may have uniquely wanted in a SCS. Further surveying and research with women may be necessary. Despite the use of purposive random sampling, enough individuals and groups were recruited in order to see themes emerge consistently.

This research was focused on drug users accessing a particular needle exchange program in Seattle. While drug users across the US likely face similar experiences, these results may not be generalizable to drug using populations in other US cities or even other parts of Seattle.

The literature on focus groups methods suggests that 90% saturation can be reached with 4 focus groups.[28] However, after conducting four focus groups and analyzing the results, the PI determined that new information was still mentioned with each new focus group and consensus was not reached on many topics, although key themes presented here were consistent. Continued research with this population, either through more focus groups or individual interviews, can inform program design for SCSs.

Finally, inter rater reliability was not used during focus group analysis. Due to the sensitive nature of the research question, the confidentiality of the participants, it was not feasible to have another coder besides the PI. With only one coder, the results may be subject to bias.

B. Study strengths

One strength of this study is that these results may be immediately reviewed by the partner organization to inform the design of their proposed SCS. Additionally, the survey and

focus group methods can be used by similar organizations that are interested in starting their own SCS. Another strength of this research is that it is centered on drug users' voices. Drug users hold a unique perspective of health and social service provision and are experts in their own lives and experiences. By tapping into that knowledge, services providers can learn from an often difficult to reach population. While continued research is needed with this population, this study also illuminated subgroups within this population with whom further research is needed, including women's and smokers' needs in a SCS. Designing the SCS with drug users in mind from the beginning can maximize the benefits to the drug using population and the communities in which they live.

C. How findings compare

As previously mentioned, there have not been other studies on the acceptability and design preferences of drug users for SCSs in Seattle. However, results from this research are in line with what Kral et al. found in their research with drug users in San Francisco. There, 85% of drug users reported they would be interested in using a SCS. In Seattle we found 82% of participants were interested in using a SCS. Kral et al. found less than half of those surveyed "would find it acceptable if they were required to show identification."[6] Our participants also named this as a barrier to adoption of SCS. Their participants reported "private cubicles or a combination of private cubicles and an open table" as the ideal consumption space and 82% supported a 30 minute time limit.[6] Our focus group participants also stated interest in private spaces for drug consumption as well as a communal area. Our participants expressed mixed reactions to a 30 minute time limit.

In Toronto and Ottawa, Bayoumi et al. found 75% of people who used drugs were interested in a SCS.[7] In their research, participants reported reasons for not using a supervised

consumption, such as fear of arrest and surveillance, paranoia, concern about other people who use drugs, and lack of privacy and confidentiality.[7] Many of these concerns were echoed in our focus groups.

Research conducted by Mitra et al. in London, Ontario, Canada also found an association between willingness to use SCSs and unstable housing, injection drug use and public injection.[8] Our research also found participants with these attributes to be more likely to be interested in using a SCS. Mitra et al. also found participants were interested in private cubicles, day times hours, and peer participation in service provision.[8] These themes were also present in the focus groups conducted for this research. Both Mitra et al and our research were lacking in sufficient input from women.

D. Implications of findings

As Seattle prepares to be one of the first cities in the United States to open a SCS, it has the potential to also be the first to open a SCS that specifically draws on the lived experiences and preferences of local drug users. The quantitative results from the survey concluded that 81.6% of participants surveyed were interested in using a SCS indicating a demand for this service in the drug using community, and notably, over 86% of participants interested in using a SCS are unstably housed. Focus group participants wanted a drop-in type service that offers snacks and drinks, porta potties, day storage and other services that are often denied to people experiencing homelessness. Current SCS operations around the world are based on a medical model. This research suggests Seattle's SCSs should employ a community-oriented, social services model that incorporates other services to provide wrap around care to the participants.

SCS are equally accepted by men and women and are also widely accepted by people who experienced or witnessed an overdose in the past year. Additionally, nearly 93% of survey

participants who injected in public in the past month said they would use a SCS. These results show that some of the people most at risk of overdose, people who report injection drug use, people who are unstably housed and people who report public injection, are interested in using a SCS. Making SCSs accessible, especially to the most vulnerable drug users, is of high importance. Focus group participants said that privacy and confidentiality was most important to them. It was determined that showing identification would be a major barrier for some participants. While some drug users may choose to use with friends, others want to be able to use away from others while still under the supervision of a medical professional who is non-judgmental.

Participants wanted SCSs available 24 hours, 7 days a week. Additionally, participants want a "chill out" space that would be monitored for overdose and to engage in other activities. The partner organization will have to make determinations about whether participants are able to consume legal substances like alcohol and marijuana in the SCS, if participants can use together, and if they should be subject to time limits. As the City of Seattle is beginning to implement their SCS program, it may want to interview more potential participants to learn about their preferences for the space.

III. Conclusion

Using a mixed methods approach, this research determined participants at a needle exchange in Seattle's University District were interested in using a SCS. Drug users identified privacy, confidentiality and peer-support as being central to what they wanted in a SCS. They said showing identification, wait time and limited hours would be barriers to accessing the SCS. The space, beyond providing medical supervision for people consuming drugs, should be like a community drop in space that also offers social services such as case management and wound

care. Drug users have a unique perspective that should be taken into consideration when implementing programming that is intended to serve this population. As the Seattle City Council moves forward with its plan to open CHELs, leaders would be wise to include drug users in program development.

IV. Appendices

A. Results of annual survey question

Self-reported interest in utilizing a Safe Consumption Space among 217 survey participants at the University District Needle Exchange Program, 2017

	Would not use SCS	Unsure	Would use SCS
	n = 28	n = 12	n = 177
Experienced an OD in past year (*p* = 0.149)			
No	26	12	148
	14.0%	6.5%	79.6%
Yes	2	0	29
	6.5%	0.0%	93.5%
Witnessed an OD in past year (*p* = 0.579)			
No	14	5	70
	15.7%	5.6%	78.7%
Yes	14	7	107
	10.9%	5.5%	83.6%
Current housing situation (*p* = 0.004)			
Stable housing	17	3	52
	23.6%	4.2%	72.2%
Unstable housing	11	9	125
	7.6%	6.2%	86.2%
Gender (*p* = 0.791)			
Female	8	3	59
	11.4%	4.3%	84.3%
Male	18	9	117
	12.5%	6.3%	81.3%
Current injection drug use (*p* = 0.03)			
No	14	3	45
	22.6%	4.8%	72.6%
Yes	14	8	128
	9.3%	5.3%	85.3%
Public injection in past month (*p* <0.001)			
No	12	3	50

	18.5%	4.6%	76.9%
Yes	2	4	79
	2.4%	4.7%	92.9%
Current smoking drug use (*p* = 0.25)			
No	9	1	38
	18.8%	2.1%	79.2%
Yes	19	10	137
	11.4%	6.0%	82.5%

B. Focus group guide

Safe Consumption Space Focus Group Guide Date:

- ❑ Brief explanation of focus group purpose and how data will be used
- ❑ Any identifiers (names, nicknames, etc.) will be omitted from the note taking.
- ❑ Collect consent forms
- ❑ Any questions?

	Male or Female:	Race:	Age (18-29 or ≥30)	Drug(s) of Choice:	Method(s) of Consumption:
Participant 1:					
Participant 2:					
Participant 3:					
Participant 4:					
Participant 5:					
Participant 6:					

General questions:

- Where do you currently use?
- Please describe your ideal experience of using a safe consumption space.
- What would prevent you from using the safe consumption space?
- What would attract you to using safe consumption space?

Administrative:

- Days and hours of operation:
- Paperwork or intake willing to complete before accessing SCS:
- Services available
  - Primary care?

- Worried about overdose?
- Problems injecting?
- Vein care?
- Drug treatment?
- Housing?
- Case management?
- Linkage to healthcare (testing, treatment, etc.)?
- Other?

Aspects of Physical Space:

- Privacy: Curtains? Solid walled cubicles?
- Seating: Couches? Individual chairs?
- Lighting: Dim? Bright?

Rules of the space:

- Can anyone else (besides the nurse/social worker/staff member) be in the safe consumption space?
- Can you inject yourself, someone else, someone else injects for you, etc.?
- What are your expectations of staff?
    - What if someone hurts themselves, what kind of treatment do they expect?
    - What if the nurse feels like they need to call an ambulance?
- Time limits?
    - SCS vs. “chill out” space
- What are consequences for breaking the rules (ie time limits)?
- Maximum occupancy?
    - More than one at a time? Maybe 3-4?
- How do we send the message to participants that while we are a cop-free zone and will do our best to ensure they aren’t arrested, we can’t guarantee they won’t get arrested?
- What do we do in situations that aren’t drug-related, but police are in the alley? Or something unsafe is happening?
- What do participants need to feel safe, secure, respected, loved and accepted?

C. Consent Form

UNIVERSITY OF WASHINGTON
CONSENT FORM
Safe Consumption Spaces and Drug User Preferences

Researcher: Marjorie Wilson, MSW

Master of Public Health Candidate, Department of Health Services

Contact: 208-559-7415 or marjwils@uw.edu

Faculty advisors: Helen Teresa "Trez" Buckland, PhD, MEd

Clinical Assistant Professor, BNHS

Researchers' statement

We are asking you to be in a research study. The purpose of this consent form is to give you the information you will need to help you decide whether to be in the study or not. Please read the form carefully. You may ask questions about the purpose of the research, what we would ask you to do, the possible risks and benefits, your rights as a volunteer, and anything else about the research or this form that is not clear. When we have answered all your questions, you can decide if you want to be in the study or not. This process is called "informed consent." We will give you a copy of this form for your records.

PURPOSE OF THE STUDY

The [name of needle exchange program] is interested in starting a Safe Consumption Space (SCS) program that would allow drug users to safely consume their drugs in a semi-private setting under the supervision of a trained health care provider. [The needle exchange program] would like to know if participants would be interested in using this program and if so, what features and services they would like to see as part of this program.

STUDY PROCEDURES

You will be asked questions about your current drug use (drug of choice, preferred method of consuming your drugs, public drug use, etc.) and preferred physical attributes the proposed space (seating, lighting, etc.), administrative requirements of the space (rules and policies, privacy and confidentiality, etc.) and additional services you would like to access via the SCS program. Focus groups will last approximately 30 minutes and will be digitally audio recorded. You will be compensated with coffee and pastries.

RISKS, STRESS, OR DISCOMFORT

If you choose to participate, this focus group will involve discussing illegal drug use, which may cause some discomfort in some people. While a digital audio recording will be made of focus groups, identifiers (names) will not be collected and recording will be deleted after it is transcribed and any potential identifiers (references to each other in conversation) will be scrubbed.

BENEFITS OF THE STUDY

By including drug user voices in program development, participants will benefit from a better user experience when accessing the future SCS.

CONFIDENTIALITY OF RESEARCH INFORMATION

All of the information you provide will be confidential. However, if we learn that you intend to harm yourself or others, we must report that to the authorities.

OTHER INFORMATION

You may refuse to participate and you are free to withdraw from this study at any time without penalty or loss of benefits to which you are otherwise entitled. All of the information you provide will be confidential.

RESEARCH-RELATED INJURY

If you think you have been harmed from being in this research, contact the researcher at the number above.

Subject's statement

This study has been explained to me. I volunteer to take part in this research. I have had a chance to ask questions. If I have questions later about the research, or if I have been harmed by participating in this study, I can contact one of the researchers listed on the first page of this consent form. If I have questions about my rights as a research subject, I can call the Human Subjects Division at (206) 543-0098 or call collect at (206) 221-5940. I will receive a copy of this consent form.

Printed name of subject **Signature of subject** **Date**

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