Evaluation of the Supervised Injection Site

Year One Summary

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British Columbia
Centre *for* Excellence
in HIV/AIDS

Providence
HEALTH CARE
St. Paul's Hospital

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Introduction

North America s first government sanctioned Supervised Injection Facility (SIF) was opened in Vancouver on September 22, 2003. The Federal government approval for the three-year pilot study was granted on the condition that the health and social impacts of Insite undergo a rigorous external scientific evaluation. The BC Centre for Excellence in HIV/AIDS is coordinating the evaluation component and is responsible for measuring the impact of the SIF. A more detailed review of the evaluation methods will be published in the Harm Reduction Journal in September 2004.

There are four main components of the evaluation:

A. Insite database — a comprehensive database that records attendance figures, drug use patterns, supporting activities, and referrals given at Insite.

B. SEOSI cohort — a random selection of Insite users who are recruited into a large prospective cohort that will provide information through in-depth interviews and blood testing every six months.

C. External cohorts — two large cohorts of injection drug users who live in the community and will serve as comparison groups.

D. Ethnographic studies and qualitative analysis — a series of observational studies will be conducted that will measure activities among drug users and the impact of Insite on the community. As well, qualitative investigations will be conducted to further investigate both process and outcome dimensions of this evaluation.

A. Insite Database

A comprehensive electronic database has been operational at Insite since March 2004. Prior to the opening of the SIF, a major concern with the evaluation related to the willingness of the target community to use the facility. In order to attract the target population without raising fears about confidentiality, and to make the service as low threshold as possible, all clients of the SIF can remain anonymous. Given concerns regarding reduced willingness to use the SIF, if client registration was required, the SIF operated as a completely low threshold service in the first 6

months of operation, during which few demands were placed on clients in order to maximize service access. During this time paper records of client registration were maintained. After 6 months of operation, and after trust was developed between the SIF operators and the target community, SIF service use was tracked at an individual level using a database that tracks client activities within Insite. The phasing in of a digital tracking system was successful, although service uptake was so substantial and immediate after the site opened, this cautious approach may not have been necessary.

The following data is derived from the period of March 10, 2004 and onwards, and coincides with the implementation of the electronic database. The attendance figures are shown in Figure 1 and have been slowly increasing since March, with an average of 588 visits per day in August 2004. Although the attendance is relatively steady throughout the month, there is a noticeable increase in visits around the distribution of welfare cheques that occur during the last week of each month. The busiest day to date occurred on July 28, 2004 when 845 visits were registered.

Figure 1: Daily attendance at Insite

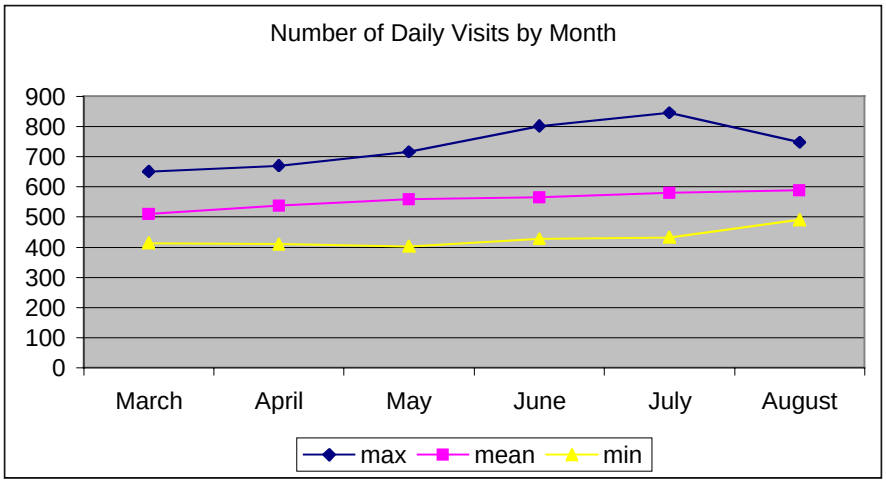


Table 1 shows the total number of injections that are recorded each month at Insite along with the number of different individuals attending. The average number of visits per person is approximately 11, however there is a wide variation in the patterns of attendance. For example in the month of July 2004, 27% of people who attended came only once during the month, and 40% made 10 or more visits to Insite. During this six month period 3036 different individuals attended Insite.

Table 1: Total number of injections per month

Frequency of Injections	March	April	May	June	July	August
Number of Injections	9620	13377	14299	14004	14374	14288
Number of persons	1027	1205	1215	1220	1236	1312
Number of injections/person	9.4	11.1	11.8	11.5	11.6	10.9

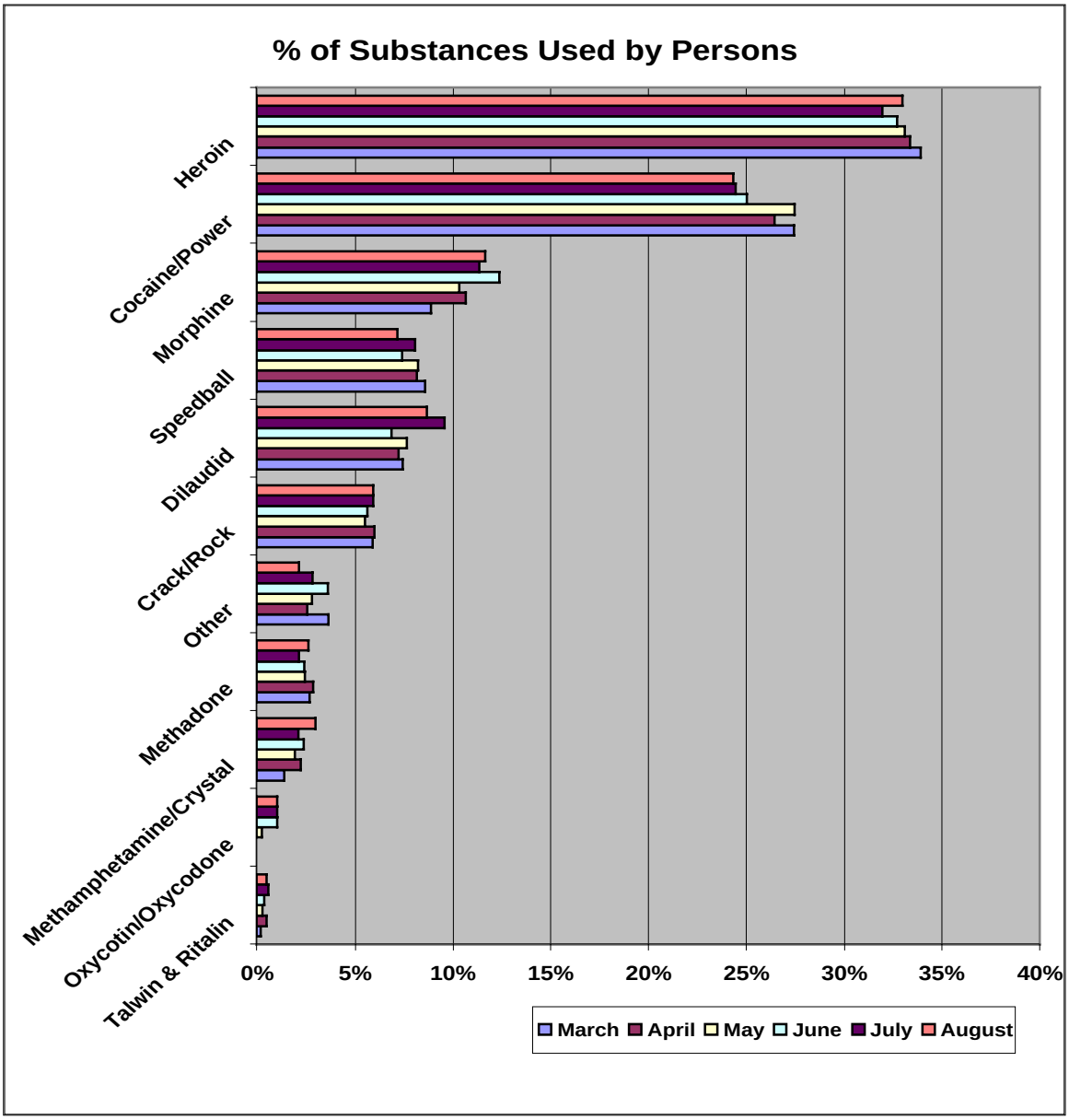
As shown in Table 2, the majority of visits to Insite are made for the purpose of using the injection room. The proportion of total visits accounted for by visits to the injecting room decreased from 90.6% of all the visits in March to 83.1% of visits in August 2004. This trend has been mainly due to the increase in the number of visits made for the purpose of acquiring injection equipment. Visits to Insite exclusively for nursing care or counseling have been uncommon to date.

Table 2: Purpose of visit to Insite

Visit Purpose	March		April		May		June		July		August	
1.Use Injection Room	10213	90.6%	14273	88.6%	15127	87.5%	14778	87.1%	15177	84.5%	15154	83.1%
2.Injecting Equipment	489	4.3%	881	5.5%	1136	6.6%	939	5.5%	1194	6.6%	1500	8.2%
3.See A & D Counsellor	55	0.5%	97	0.6%	138	0.8%	91	0.5%	138	0.8%	106	0.6%
4.See Nurse	155	1.4%	228	1.4%	307	1.8%	286	1.7%	286	1.6%	312	1.7%
5.See RPIC	23	0.2%	67	0.4%	66	0.4%	84	0.5%	68	0.4%	72	0.4%
6.See Staff or Peer	80	0.7%	314	1.9%	364	2.1%	523	3.1%	605	3.4%	480	2.6%
7.Other	254	2.3%	252	1.6%	155	0.9%	266	1.6%	492	2.7%	602	3.3%
Total:	11269		16112		17293		16967		17960		18226	

The range of substances injected at Insite is shown in Figure 2. Opiates, including Heroin, Morphine, Dilaudid, and Oxycodone make up approximately 50% of the injections, while cocaine injections consistently accounts for approximately 25% of injections each month. The injection of diverted Methadone, Crystal methamphetamine, and Talwin / Ritalin are uncommon.

Figure 2: Types of substances used at the SIS



There are a number of opportunities to offer referrals to clients at Insite as shown in Table 3. It should be noted that the database only captures the interventions done by the professional counseling staff and this currently consists of just one full time counselor on site. There are many daily interactions by the nonprofessional staff that are not captured at this time. The most common referral has been to addiction counseling services where 262 referrals have been made in the past 6 months. Referrals to withdrawal management, that includes the detox programs, have been made 78 times during this period.

Table 3: Referrals made from Insite

Referral Programs	March		April		May		June		July		August	
1. Addiction Counselling	24	53.3%	45	48.9%	69	51.1%	55	47.0%	36	43.9%	33	43.4%
2. Withdrawal Management	7	15.6%	14	15.2%	16	11.9%	14	12.0%	16	19.5%	11	14.5%
3. Hospital Emergency	2	4.4%	19	20.7%	13	9.6%	18	15.4%	7	8.5%	17	22.4%
4. Community Services	4	8.9%	3	3.3%	7	5.2%	15	12.8%	7	8.5%	7	9.2%
5. Recovery (Men)	3	6.7%	2	2.2%	6	4.4%	4	3.4%	2	2.4%	2	2.6%
6. Housing (Men)	1	2.2%	5	5.4%	7	5.2%	1	0.9%	2	2.4%	1	1.3%
7. Methadone	0	0.0%	0	0.0%	3	2.2%	6	5.1%	6	7.3%	2	2.6%
8. Housing (Women)	2	4.4%	1	1.1%	4	3.0%	1	0.9%	4	4.9%	1	1.3%
9. Mental Health Services	1	2.2%	3	3.3%	3	2.2%	0	0.0%	0	0.0%	0	0.0%
10. Recovery (Women)	1	2.2%	0	0.0%	2	1.5%	0	0.0%	0	0.0%	0	0.0%
11. Other	0	0.0%	0	0.0%	5	3.7%	3	2.6%	2	2.4%	2	2.6%
Total:	45		92		135		117		82		76	

The prevention of fatal overdoses is a major objective of the SIF. Monitoring and managing overdoses at Insite has been ongoing since it opened and no deaths have occurred. From March 10, 2004 to the end of August 2004, 107 overdoses occurred among 72 clients. Nine overdoses occurred during the first visit to Insite. There were a range of signs and symptoms that were interpreted as an overdose with the most common being slow breathing, failure to respond to commands, and being slumped in the chair. The most common interventions were the administration of oxygen, calling 911, and giving Narcan. Only in one case was CPR required and only 3 cases had an airway inserted.

B. SEOSI Cohort

The SIF evaluation includes the establishment of a prospective cohort made up of a random selection of individuals who use the SIF. The selection is made based on a random listing of times during which cards are distributed and clients presented to the research office for enrollment into the study. This will ensure a representative sample of the SIF users with a propensity to enroll those who are the most frequent attenders. The participants in the SEOSI cohort will be followed every six months for the 3 year study period independent of whether they continue to use the SIF or not. The goal is to enroll over 1000 individuals in the SEOSI cohort. We have enrolled 677 up to the end of June 2004 and plan to keep the cohort open for enrollment during the next year. The demographic characteristics of the cohort are shown in Table 5, and

generally reflect what is known about the make up of the community based on other research studies in this neighborhood. For example, there is high representation of individuals of Aboriginal ancestry, education level among clients is generally low, and many individuals are living in unstable housing or are homeless (i.e., NFA).

Table 4: Demographic characteristics of the SEOSI cohort

Characteristics	N = 677 (%)
Mean age	39 (10 - 64)
Gender	
Male	472 (70)
Female	205 (30)
Ethnicity	
White	468 (69)
First Nations	146 (21)
Other	63 (10)
Single	453 (67)
Education (high school grad)	357 (53)
Living in the DTES	461 (68)
Living within 3 blocks of the SIS	237 (35)
Type of Residence	
Hotel	235 (35)
Apartment	131 (19)
NFA / Street	153 (22)
Other	158 (24)

The primary objectives of the prospective cohort are to follow a number of social and clinical outcomes. These will include housing, public drug use, criminal involvement, patterns of drug use, occurrence of unsafe injection practices, and the uptake of drug treatment. In addition we will measure the transmission of HIV and Hepatitis C and uptake of antiretroviral treatment. The preliminary testing showed an HIV prevalence of 17% and a Hepatitis C prevalence of 87%. The first follow-up interviews with participants began on July 1, 2004.

The SEOSI cohort also captures information on client satisfaction with Insite. Preliminary findings indicate that SEOSI cohort participants are highly satisfied with Insite, its services and staff. For example, 63% of participants rated the overall quality of Insite as excellent , while an additional 32% rated Insite as good . Satisfaction with Insite s physical facilities and equipment was also high, with 79% of participants reporting that they were always satisfied with the

physical site and equipment. The staff was also rated highly by SEOSI participants, with 82% reporting that the staff always performed their services dependably, and 88% of participants reporting that the staff are always respectful and courteous .

C. External Cohorts

The primary endpoints of interest in the SIF evaluation involve the prospective evaluation of blood-borne disease incidence, HIV and overdose risk behavior, and health service use among injection drug users in the community. The Vancouver SIF evaluation is somewhat unique because of the availability of a number of pre-existing data sources. These data sources include the community health and safety evaluation (CHASE) cohort, which is a community recruited virtual cohort of Downtown Eastside residents that prospectively and retrospectively examines health service use in the community by linking to administrative health record databases. In addition, the Vancouver Injection Drug Users Study (VIDUS) is an ongoing prospective cohort study of injection drug users that involves semi-annual serology of HIV and HCV as well as a semi-annual questionnaire. VIDUS and CHASE allow for the description of IDUs in the community who are using Insite and a comparison between those that are and are not using the service. In the current SEOSI cohort 144 (21%) are also enrolled in VIDUS and 211 (30%) are also enrolled in CHASE.

D. Ethnographic studies and Qualitative Analyses

The impact of Insite on neighborhood businesses will be evaluated throughout the study period. At baseline we randomly surveyed 117 business people in the area to assess attitudes and support for the SIF. The surveys were conducted with owners and managers of the companies. Overall, 54 (46%) were in favor of the SIF, 23 (20%) were undecided, and 40 (34%) were opposed. Support varied by distance to Insite, business type, and the language of the completed survey. Findings indicated that businesses further away from Insite showed less support, as did shops with high traffic levels such as grocery/corner stores, and finally businesses located within Chinatown. Any changes in attitudes by the business community will be measured prospectively.

Throughout the evaluation, regular ethnographic activities will be conducted with the aim of monitoring community impacts of the SIF. Discarded syringes, public injection drug use, and

injection-related litter have been identified as measures of public drug use. Both syringes and injection-related litter were selected for measurement since the city has multiple sources of syringe distribution and return. Our initial analysis of community impacts will be published in the Canadian Medical Association Journal in September 2004. Finally, qualitative interviews will be conducted with individuals who do and do not use the SIF. Interviews will focus on a variety of process and outcomes associated with the SIF.

Summary

After one year of operation, Insite has provided a secure environment for over 3,000 people who inject illicit drugs in Vancouver. Attendance has been consistently high, and now averages nearly 600 injections per day. Although heroin and other opiates are the most common drugs used at Insite, there are a substantial number of individuals using stimulant drugs. The facility has been very well managed and the staff is highly rated by the clients. Although there have been over 100 observed overdoses, there have been no fatalities and only one episode where CPR was required. This is very likely due to rapid staff interventions including oxygen therapy and in some cases Narcan. The SEOSI cohort is collecting in-depth prospective information on a randomly selected group of Insite clients and baseline demographics show that women, people of Aboriginal origin and those with unstable housing are availing themselves of the service in high numbers. There have been a large number of referrals made to addiction counseling and withdrawal management services by the counselors at Insite. Efforts to document the health outcomes associated with the site are ongoing and will be disseminated throughout the 3-year evaluation period and beyond.