



Syringe Exchange Program Evaluation

2018-2019

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Glossary

SSP: Syringe service provider (Used interchangeably with SEP)

SEP: Syringe exchange program (Used interchangeably with SSP)

HCV: Hepatitis C virus

HIV: Human Immunodeficiency Virus

CDC: Centers for Disease Control and Prevention

PWID: Person/people who inject(s) drugs

UHRC: Utah Harm Reduction Coalition

OVR: One Voice Recovery

UAF: Utah AIDS Foundation

PTCP: Prevention, Treatment and Care Program

REDCap: Real-time Electronic Data Capture

UDOH: Utah Department of Health

Background

In the year 2000, the U.S. began to experience an increase in the use of illegal opioids such as heroin. Many heroin users began with prescription opioids for pain. When these patients could no longer obtain prescriptions legally, they turned to illegal substances. Heroin is much cheaper and easier to obtain than legal opioids, which contributed to the rise in popularity of the drug. Heroin and other illegal opioids are often injected directly into the bloodstream, which leads to an increase in unsafe injection practices, and in turn, an increased risk for infection of blood-borne diseases such as HCV and HIV.

One means of preventing transmission of blood-borne diseases among PWIDs is by reducing the sharing of syringes and other drug injection equipment. SEPs are community-based programs that provide access to sterile syringes free of cost as well as collecting used syringes to facilitate safe disposal. Studies have shown SEPs to be effective at reducing blood-borne disease transmission such as HIV and HCV among PWIDs. There is no evidence to suggest that SEPs promote or increase drug usage or the number of syringes in communities in which SEPs are active.

SEPs can also support the overall health of PWID by providing connections to substance abuse treatment, medical care, disease testing, overdose prevention, and other social services. SEPs are based on respect and place value on prioritizing the rights and dignity of PWIDs.

Expanding the reach of SEPs is part of a comprehensive approach to addressing the spread of HIV and HCV among PWID and supports the goals of the [National HIV/AIDS Strategy](#) and [Viral Hepatitis Action Plan](#) to reduce the number of new HIV and viral hepatitis infections. Additionally, SEPs are an important tool in helping connect people to opiate overdose prevention services and substance use disorder (SUD) treatment.

Drug poisoning deaths are a preventable public health problem. The number of drug poisoning deaths per year in Utah and the U.S. have been on a steady rise from 1999 to 2015 as described in "[Health Indicator Report of Drug Overdose and Poisoning Incidents.](#)" Deaths from drug poisoning have outpaced deaths due to firearms, falls, and motor vehicle crashes in Utah. ***In 2015, Utah ranked 9th in the U.S. for drug poisoning deaths with a rate of 23.4 deaths per 100,000***

population. Nearly 84% (83.8%) of these deaths are accidental or of undetermined intent; 77.6% of these deaths involve opioids.

The U.S. government recognizes the need to implement programs aimed at stopping the spread of disease and reducing overdose deaths across the country.

The U.S. Department of Health and Human Services (HHS) is committed to working with grantees and partners to reduce the spread of HIV and viral hepatitis in the U.S. In March 2016, HHS issued guidance for HHS-funded programs regarding the use of federal funds to implement or expand SEPs. The guidance is the result of the bipartisan budget agreement signed into law in December 2015, which revised a previous Congressional ban on the use of federal funds for such programs. Communities that demonstrate a need may now use federal funds for the operational components of SEPs.

The HHS guidance describes how health departments can request federal funds to start or expand SEP; it also outlines how these funds can be used. The guidance requires that state, local, tribal, and territorial health departments consult with the CDC and provide evidence that its jurisdiction is (1) experiencing, or (2) at risk for significant increases in viral hepatitis infections or an HIV outbreak due to injection drug use.

On behalf of the state of Utah, the UDOH submitted a “Determination of Need” (DON) to the CDC, identifying Utah as being at risk for significant increases in viral hepatitis infections or an HIV outbreak due to injection drug use. The DON was reviewed and approved by the CDC in June 2016.

Syringe Exchange Law in Utah

On March 25, 2016, House Bill 308 was signed into law, which legalized the development of a syringe exchange program in Utah. The law states that agencies “may operate a syringe exchange program in the state to prevent the transmission of disease and reduce morbidity and mortality among individuals who inject drugs and those individuals’ contacts.” On November 7, 2016 the Administrative Rule was published to provide guidelines for agencies wishing to be an SSP. The rule outlines the following requirements for all entities enrolled as an SSP:

- Entities must provide a medical grade sharps container for proper disposal of used syringes
- Entities must exchange one or more syringes sealed in sterile packages free of charge to individuals participating
- Entities must provide information (written and verbal) on:
 - Methods to prevent HIV, hepatitis B, and HCV
 - Information and referral for HIV and HCV testing
 - Instruction on how and where to obtain an opiate antagonist (naloxone/Narcan)

Entities interested in starting an SEP can be a government entity including UDOH and local health departments or a nongovernment entity including nonprofit organizations and for-profit organizations.

Syringe Exchange Models

SEPs can vary greatly depending on the population served, state/local laws, or preference of the SSP; however all typically follow one of the several types of transactional models described below:

The most basic model is a strict **“One-for-One” exchange**. Under this model, clients receive one syringe for every used syringe returned. This does not allow clients to receive any other equipment if the client does not bring in any used syringes.

The **“One-for-One Plus” exchange** is an adapted version of the strict One-for-One model. The number of extra new syringes a client may receive is predetermined based on how many are returned. The number of syringes may be rounded up to the next unit of 10. For example, if 12 used syringes are returned, 20 new syringes are provided.

A “**One-for-One Plus Enhanced**” exchange is the same as a One-for-One Plus exchange with the added ability to give clients “credit” for syringes disposed in a community drop box or other collection location. Clients are allowed to self-report these disposals.

Finally, a “**Needs-Based**” exchange allows entities to assess individual clients’ needs and adjust the exchange rate according to frequency of injection and length of time between services. Clients are able to negotiate and receive supplies regardless of the number of syringes returned.

Syringe Exchange Activities in Utah

Since July 1, 2017, legal syringe exchange conducted by three SSPs has been tracked by the Utah Department of Health providing data on each SEP encounter beyond what is required by law. An “encounter” is a single visit by a client to the SEP to receive services.

All three SSPs in Utah operate a “**One-for-One Plus Enhanced**” exchange model, meaning clients are given the number of syringes returned rounded to the nearest 10—giving credit for syringes disposed in public collection boxes. Clients are not given syringes without disposing at least one used syringe. Clients also receive other equipment required for safe injection. While each SSP operates with the same exchange model, they differ in delivery models to best serve priority populations and are described below:

- **UHRC** primarily operates a venue-based model. Operating out of a mobile repurposed ambulance, staff set up at a regularly scheduled location and time where clients may go to receive services. UHRC also operates a fixed-site model at the Fourth Street Clinic. A fixed site is an established “brick and mortar” location with regularly scheduled hours. This allows UHRC to serve a large number of clients and represents a majority of the sample participants in this survey.
- **OVR** primarily operates a delivery model. Most clients are met in their homes or at an agreed upon location. While travel time limits the number of clients served, more time is spent with each client and they are able to reach clients who have no transportation or other limitations.
- **UAF** primarily operates a fixed-site exchange at their building where other services are also provided. A minority of UAF clients are PWIDs and represent a proportional number of participants in this survey sample.

In addition to providing sterile syringes, clients are offered HCV/HIV rapid tests and a variety of referrals for services such as (but not limited to) STD testing and/or treatment, substance abuse treatment, and mental health services. Data are collected through an online database called Real Time Electronic Data Capture (REDCap). The UDOH uses these data to generate monthly reports to be distributed to SSPs and any interested party. On August 1, 2018 a new REDCap database was launched that included comprehensive data on all clients and encounters. Upon enrollment, clients receive a unique client ID that is used for every future encounter. Client name and other personal information are stored in a separate database to protect client identity. The following represents a year of data using the new REDCap database.

Utah Syringe Exchange at a Glance

From July 2018–June 2019...

9623

Personal client interactions



1801

Unique clients served



1251

New clients enrolled



For every
4 syringes
given,



3 are
returned at
exchange



Over 500 pounds
of sharps

collected from public sharps disposal containers



442
HCV Tests

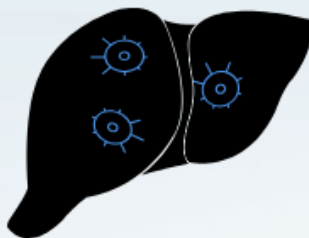
Rapid Antibody Tests



685
HIV Tests

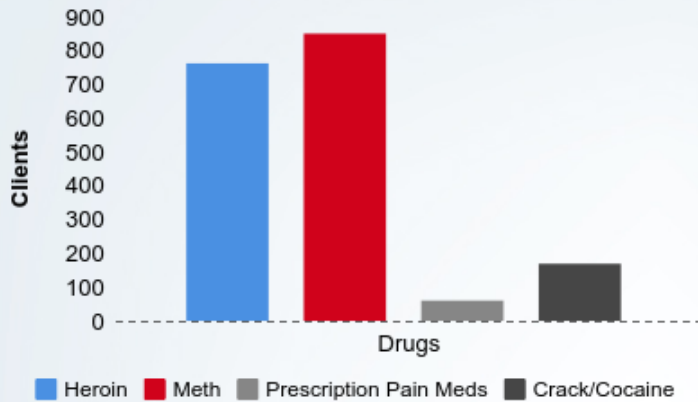
Rapid Antibody Tests

27.1%
were positive



0.5%
were positive

Number of Clients Reporting Recent Drug Use at Intake



81%

White Clients

Identified at intake



19%

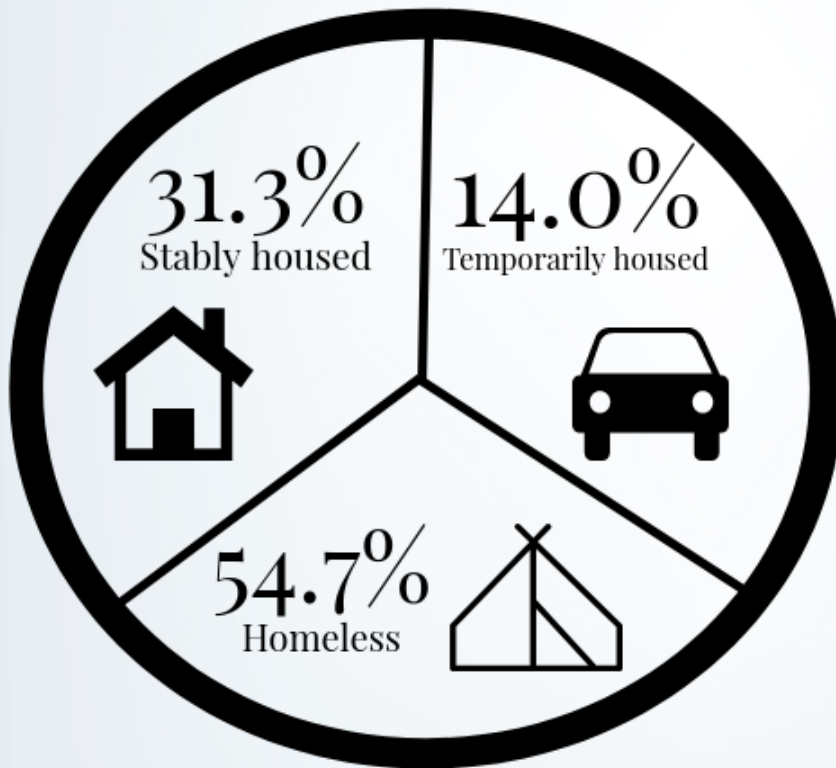
Non-white Clients

Identified at intake



37

Average Age of Clients



Evaluation

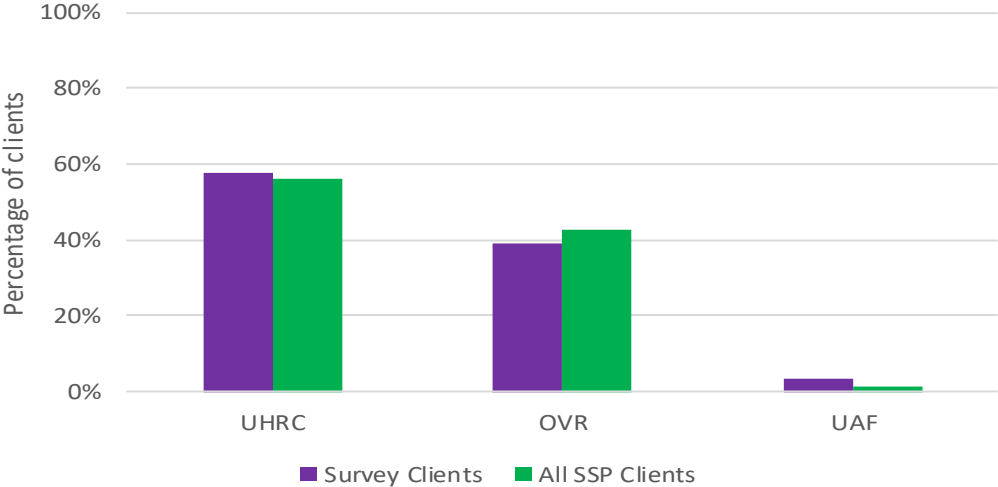
Between December 2018-June 2019, surveys were conducted on 113 established syringe exchange clients, who represent a random sample conducted in a variety of settings with all three agencies. Surveys were conducted both in-person and, in some cases, over the phone. Participants who completed the survey were given a \$10 gift card to Target, Walmart, or any Associated Foods store. Due to the transient nature of SEP participants, the participants who completed the survey were a convenient sample of SEP clients who were present and willing to participate on days the survey was offered. Client identification codes were collected to insure clients did not take the survey more than once. The survey, supplemented with initial client intake interviews and previous exchange data, aimed to evaluate the syringe exchange program as a whole and determine the success of the anticipated outcomes of the program including qualitative data to assess clients' perceptions and suggestions for improvement. The survey divides into three parts:

- Demographics—Basic demographics to show that the SSP was representatively sampled
- Program outcomes—To demonstrate the extent of success and outcomes of the SEP
- Program improvement—To gain feedback from clients to further improve the SEP and make suggestions to partner SSPs

Survey Demographics

Efforts were made during the data collection period to ensure that survey participants were representative of syringe exchange clients as a whole. The following figures compare percentage of survey participants to percentage of all SSP clients to illustrate that survey participants were not significantly different from all SSP clients. However, survey clients did seem to have been enrolled longer (average of eight months) and had more recorded encounters (average of 16.6 encounters). This was an expected result as only return clients were surveyed and were more likely to be seen on survey days. The percentage of survey clients is out of all survey participants (n=113) while the percentage of all SSP clients is out of all SSP clients (n=1801).

Client participation from each agency



Age

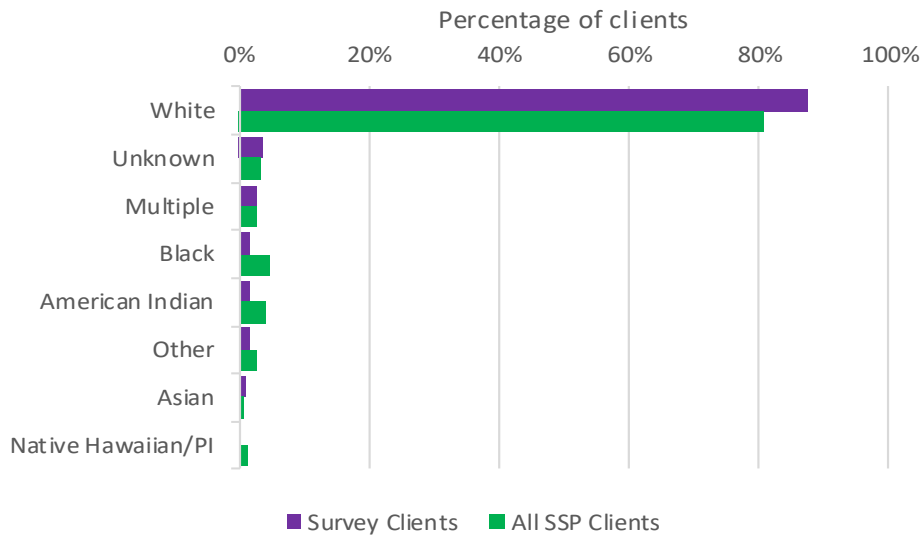


Living status

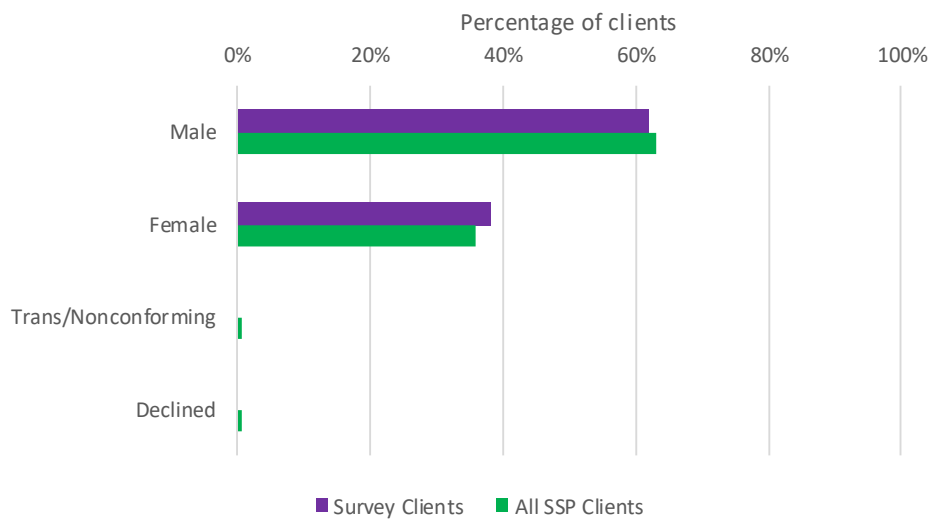


Unstable housing=homeless. Stable Permanent=own/rent. Temporary=shelter/family/friends

Race

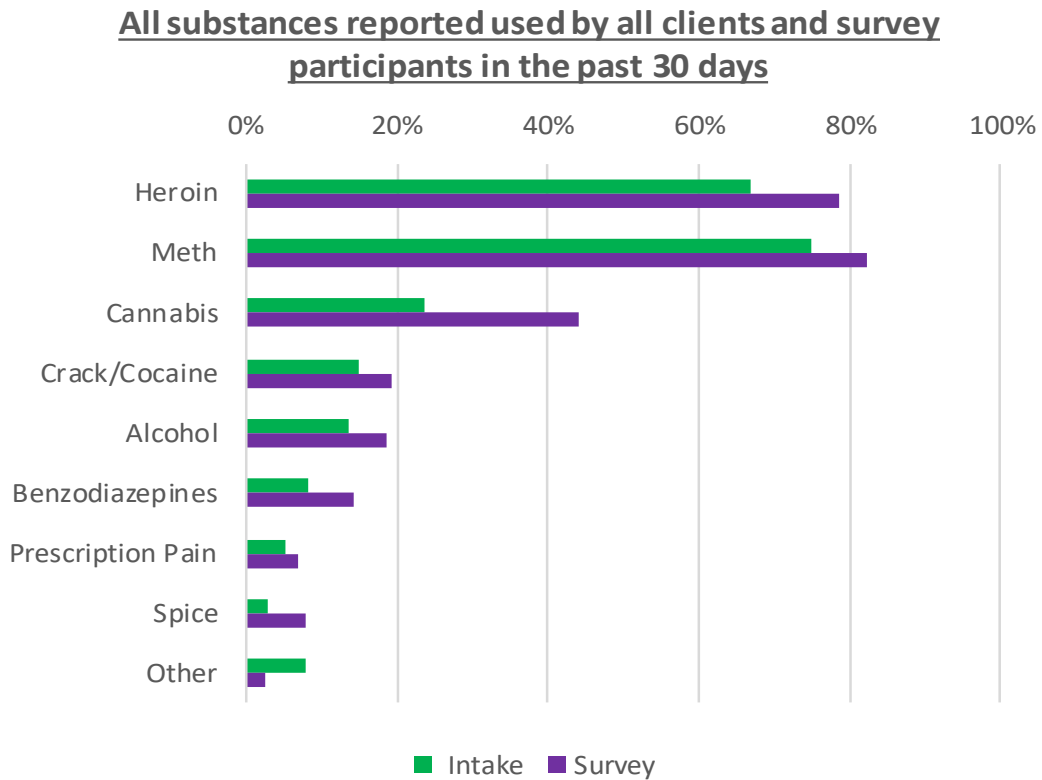


Gender





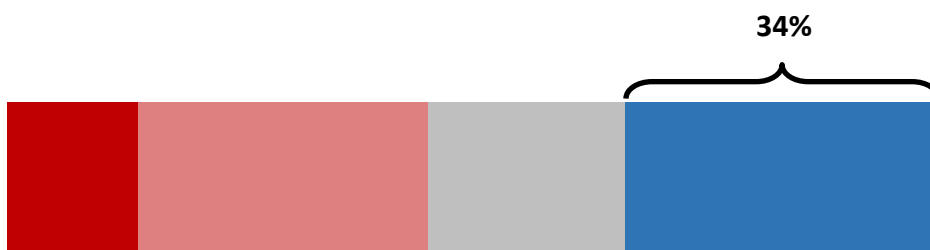
In the figure below, “Intake” refers to the substances reported used in the last 30 days at the participant’s first visit interview. The same question was asked again in the survey and the responses were compared.



SSP Outcomes

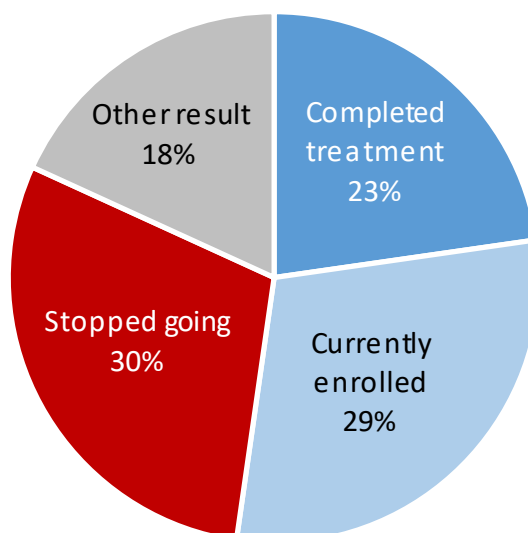
Below are the questions with survey participants' responses.
Context is provided for results in the "Lessons Learned" section of the report.

"Have you ever received substance abuse treatment of any kind?"

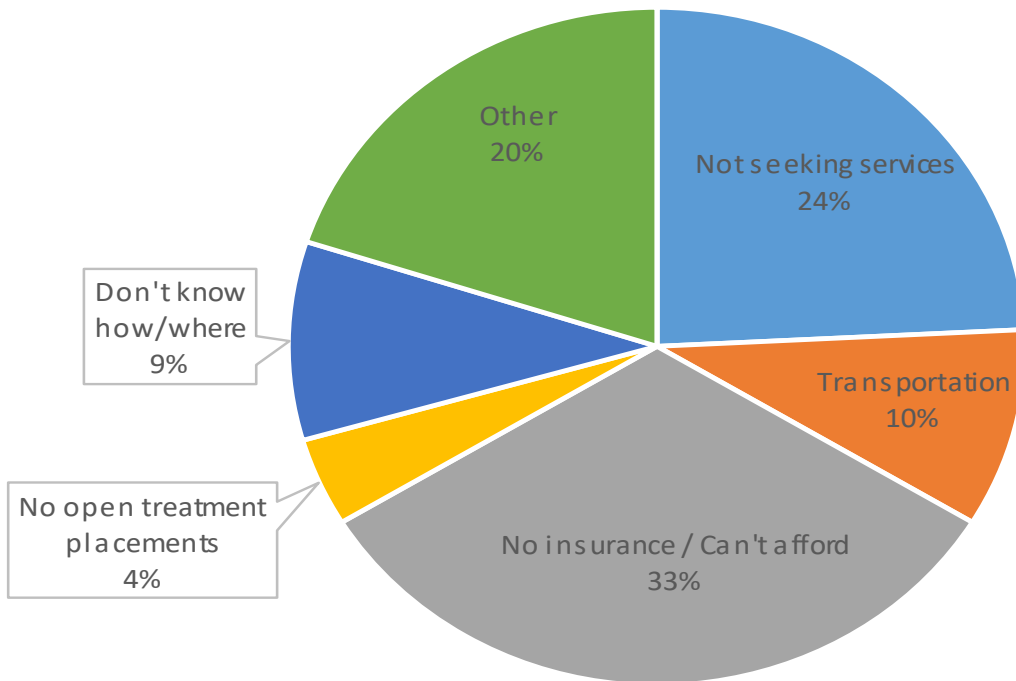


■ No, no plans to enroll ■ No, but thinking about enrolling ■ No, but looking into enrolling ■ Yes

"If yes, what was the result of your treatment?"

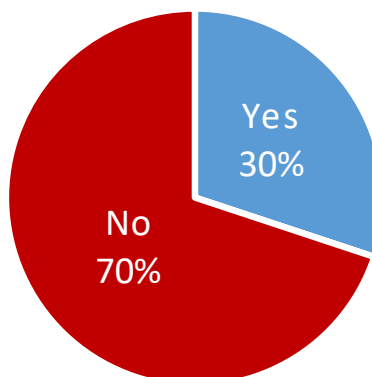


"If no, what has prevented you from receiving treatment?"

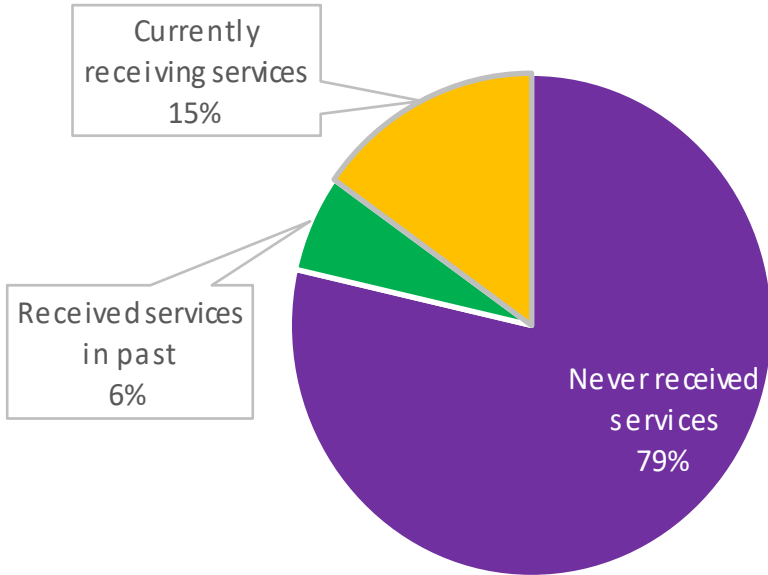


"Other" includes various answers that were highly specific to individuals' life situations

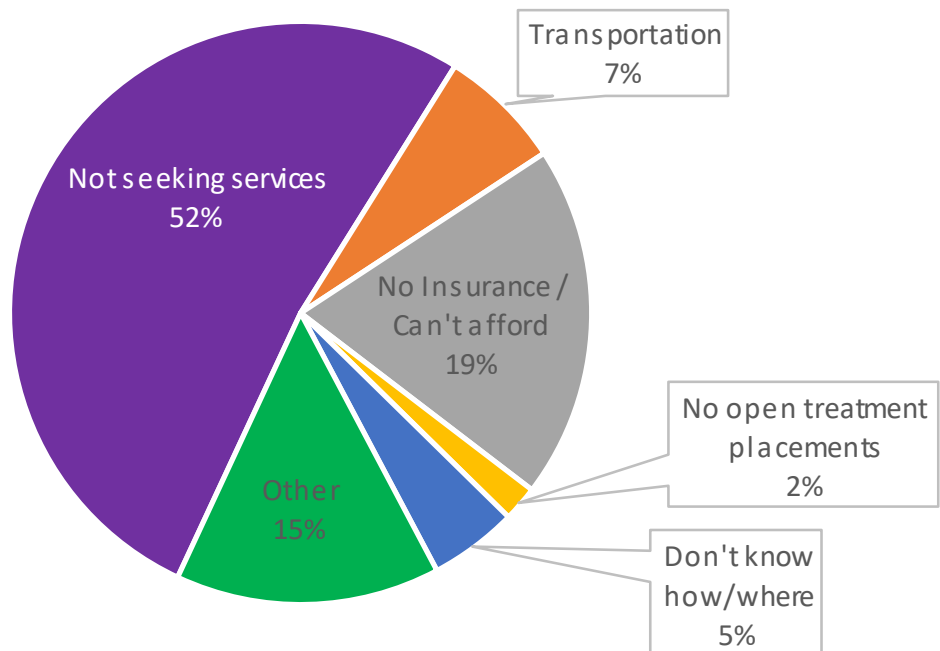
"Have you ever received STD testing and/or treatment since enrolling in syringe exchange?"



"Have you ever received mental health services?"

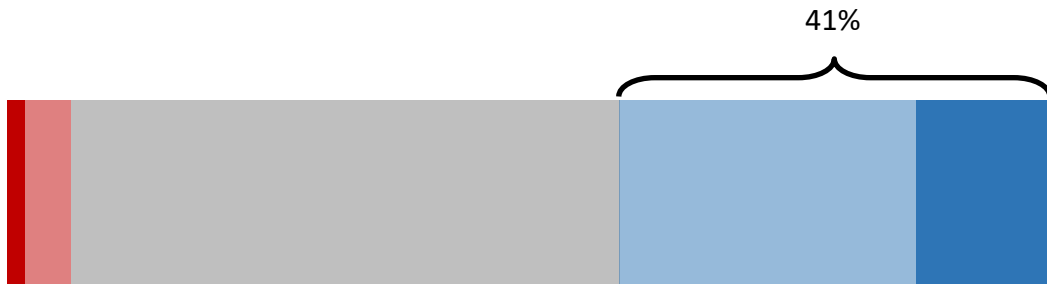


"If no, what has prevented you from receiving mental health services?"



Participants were asked to rate their drug use frequency.
By nature of syringe exchange, all survey respondents are currently using drugs.
Any client that has stopped using drugs completely would not actively participate in syringe exchange.

"How does your drug use compare to when you first enrolled?"



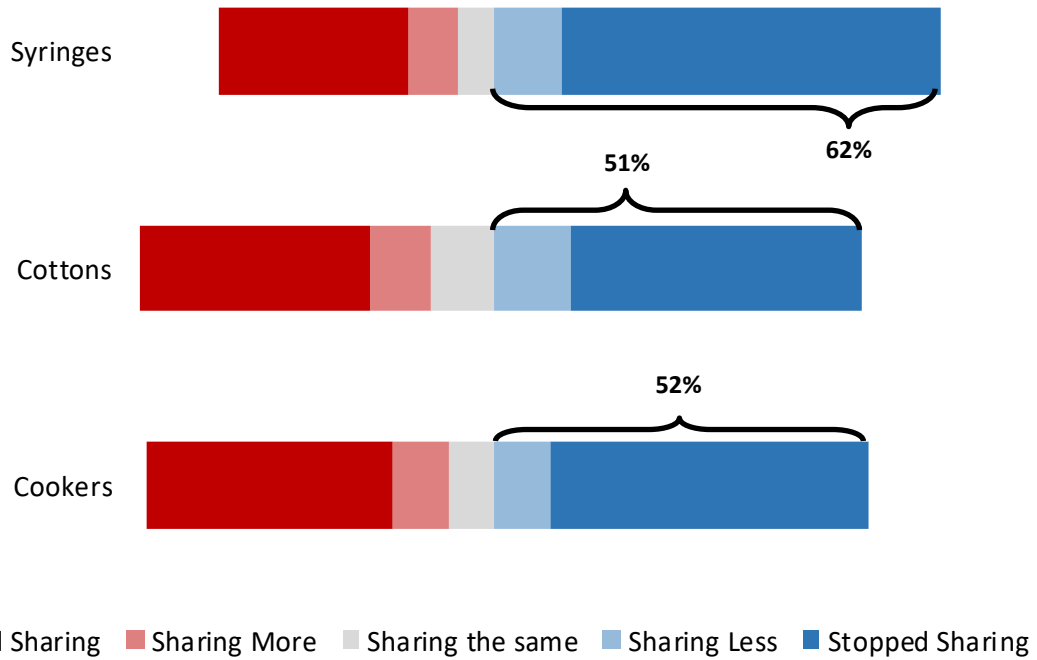
■ Much more frequently ■ More Frequently ■ About the same ■ Less frequently ■ Much less frequently

"I've been a heroin addict for many years. Since exchange it's been more positive and safer"

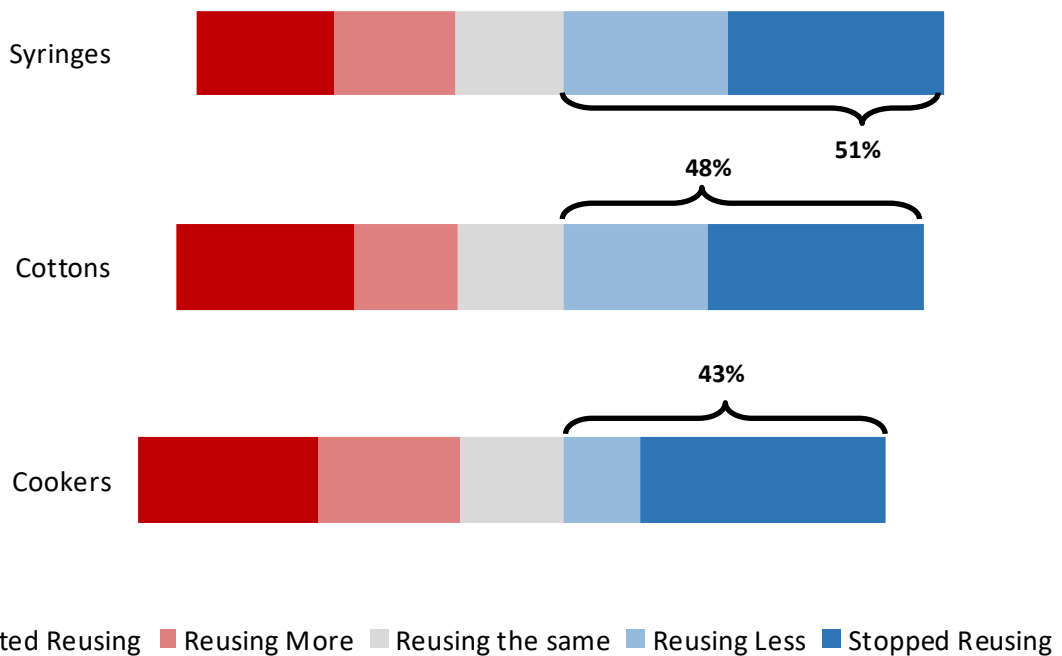
"I get fewer abscesses. I'm less risky."

As part of the intake process, all SSP clients are asked if they share/reuse any drug injection equipment and if so, how frequently. Survey participants were asked the same question and their responses were compared. The goal was to determine if SSP's reduced the frequency of sharing and/or reusing.

Impact of SSPs on persons reporting **SHARING** since intake



Impact of SSPs on persons reporting **REUSING** since intake



Program Feedback

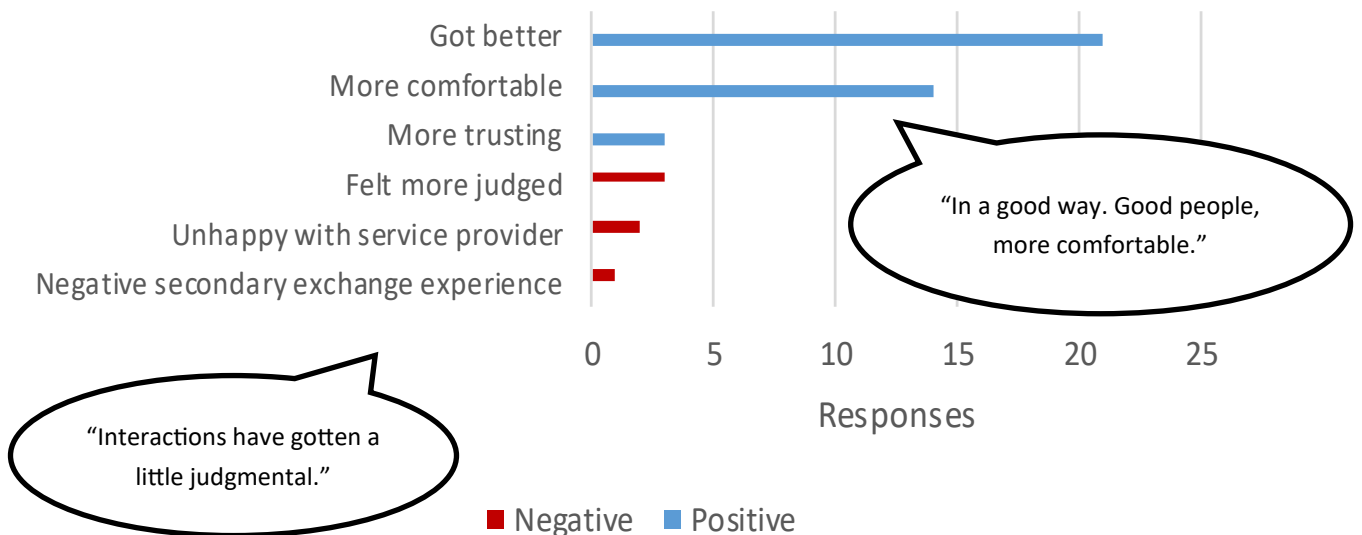
The following questions were asked to gain feedback from the participants to be used for program evaluation and improvement purposes. Responses were open ended and were sorted into similar categories.

Some questions were grouped into major themes assigned by UDOH.

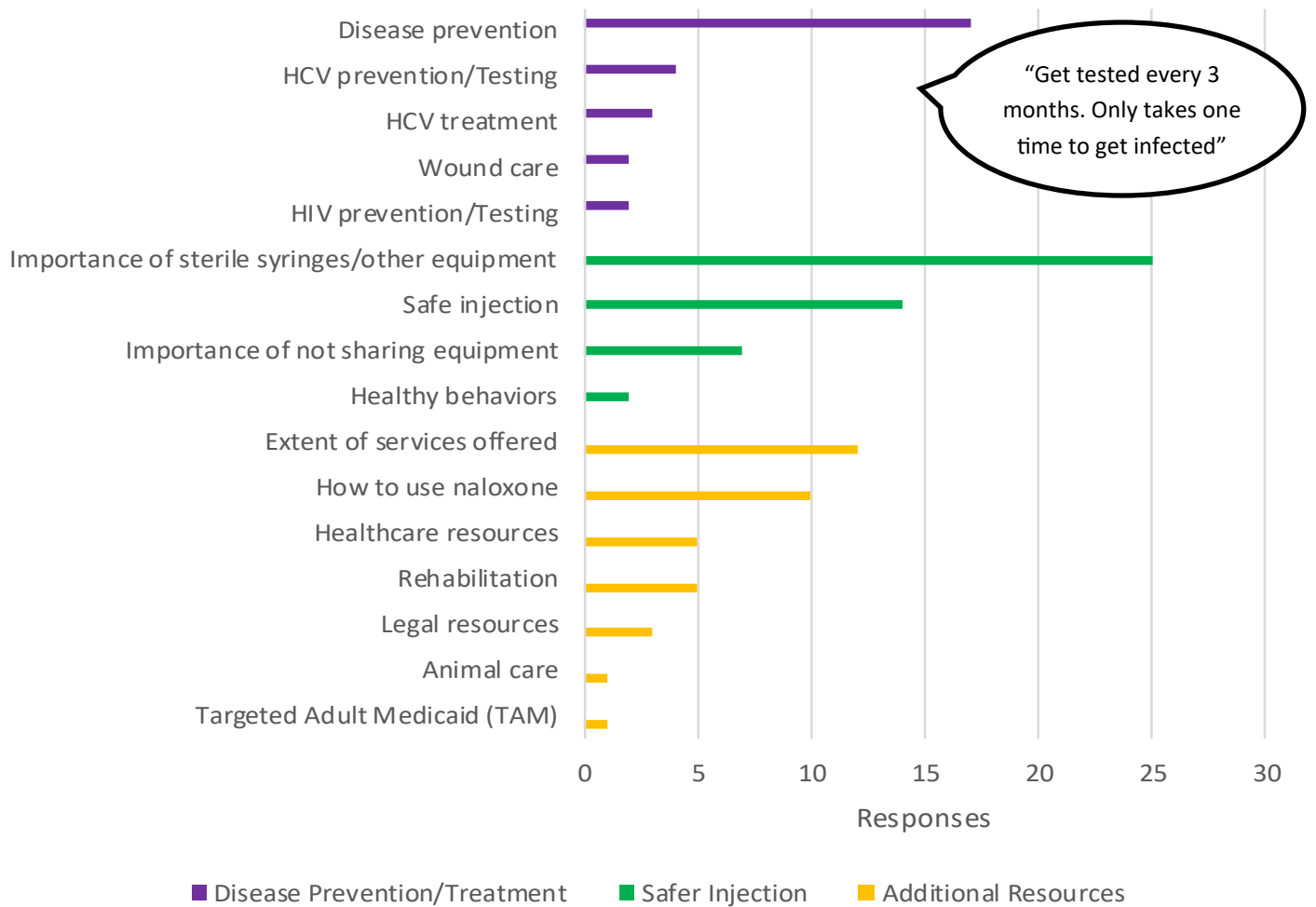
"How did you feel about your first visit to Syringe Exchange?"



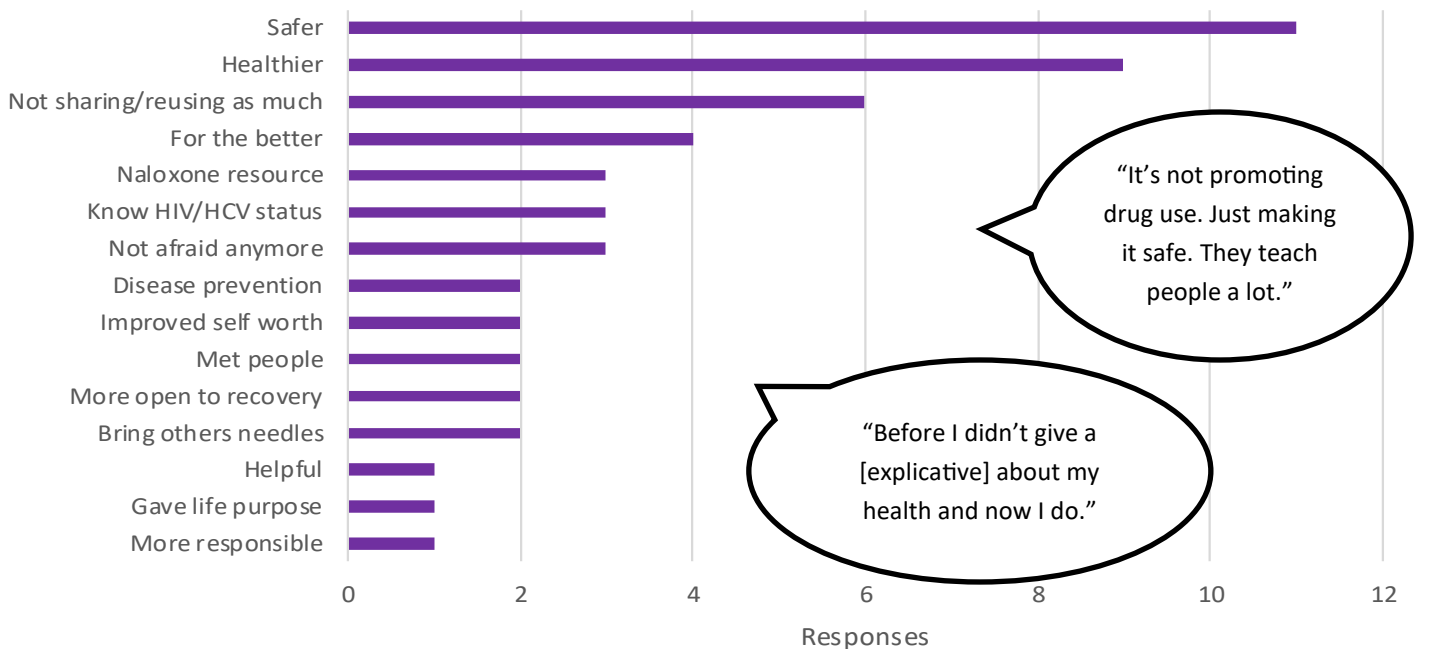
"How did your feelings change as you continued to visit?"



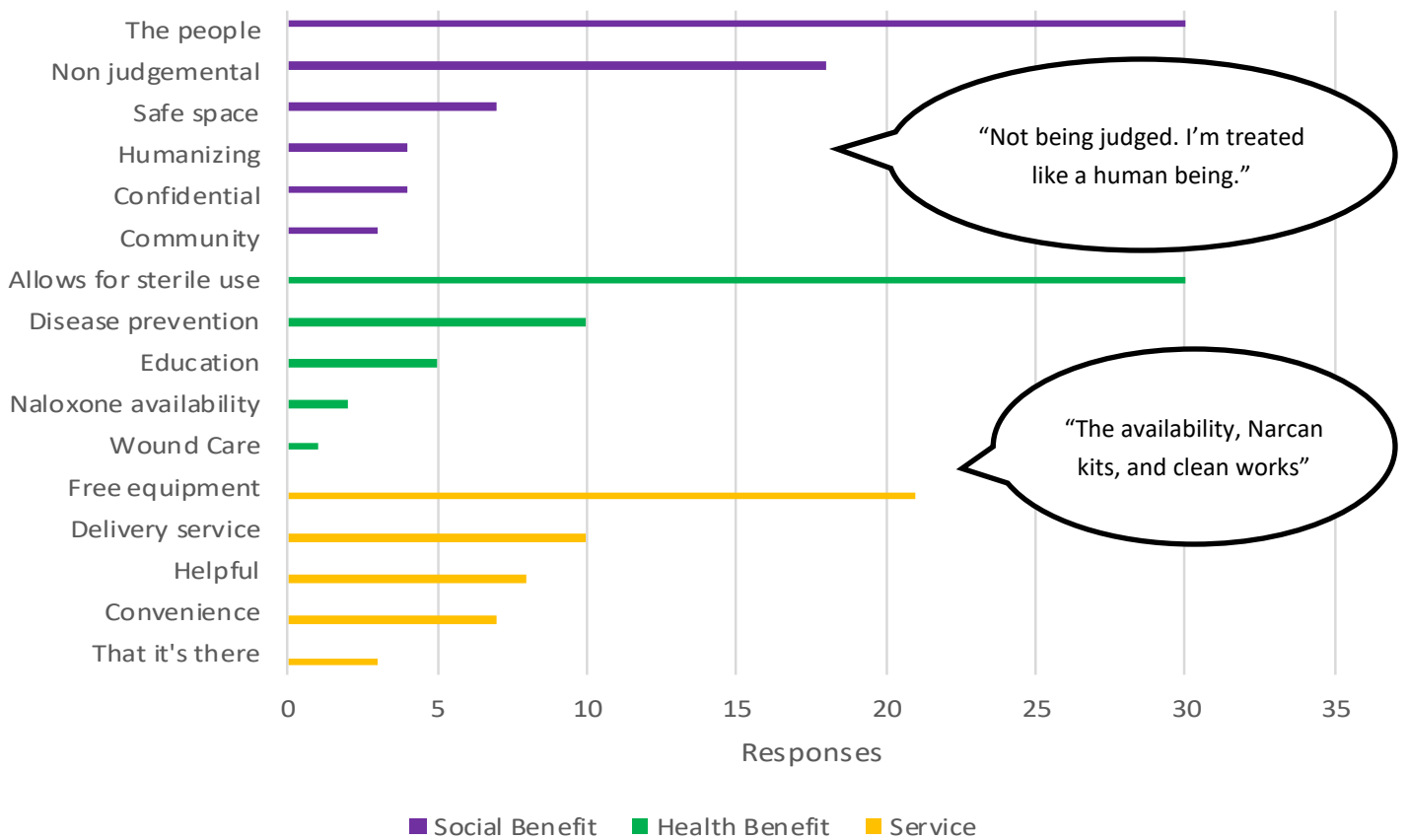
"What additional information have you learned from Syringe Exchange?"



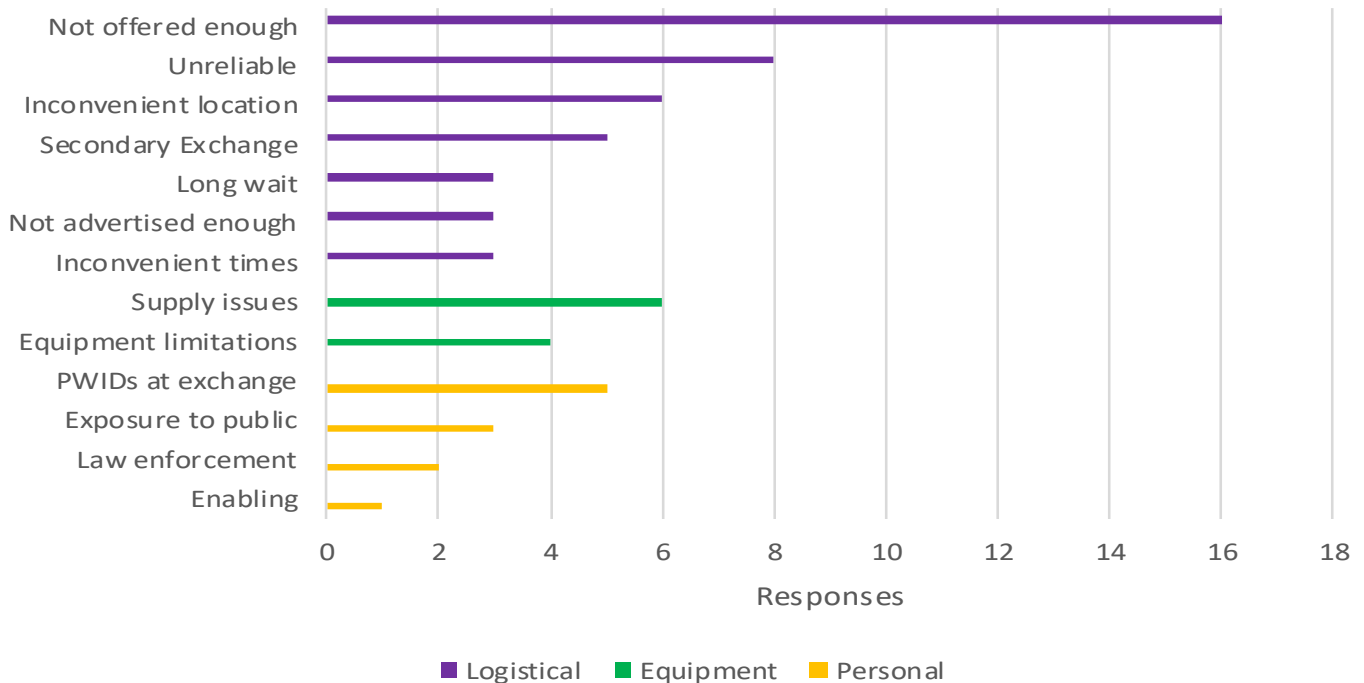
"Has the program affected your life in any other ways?"



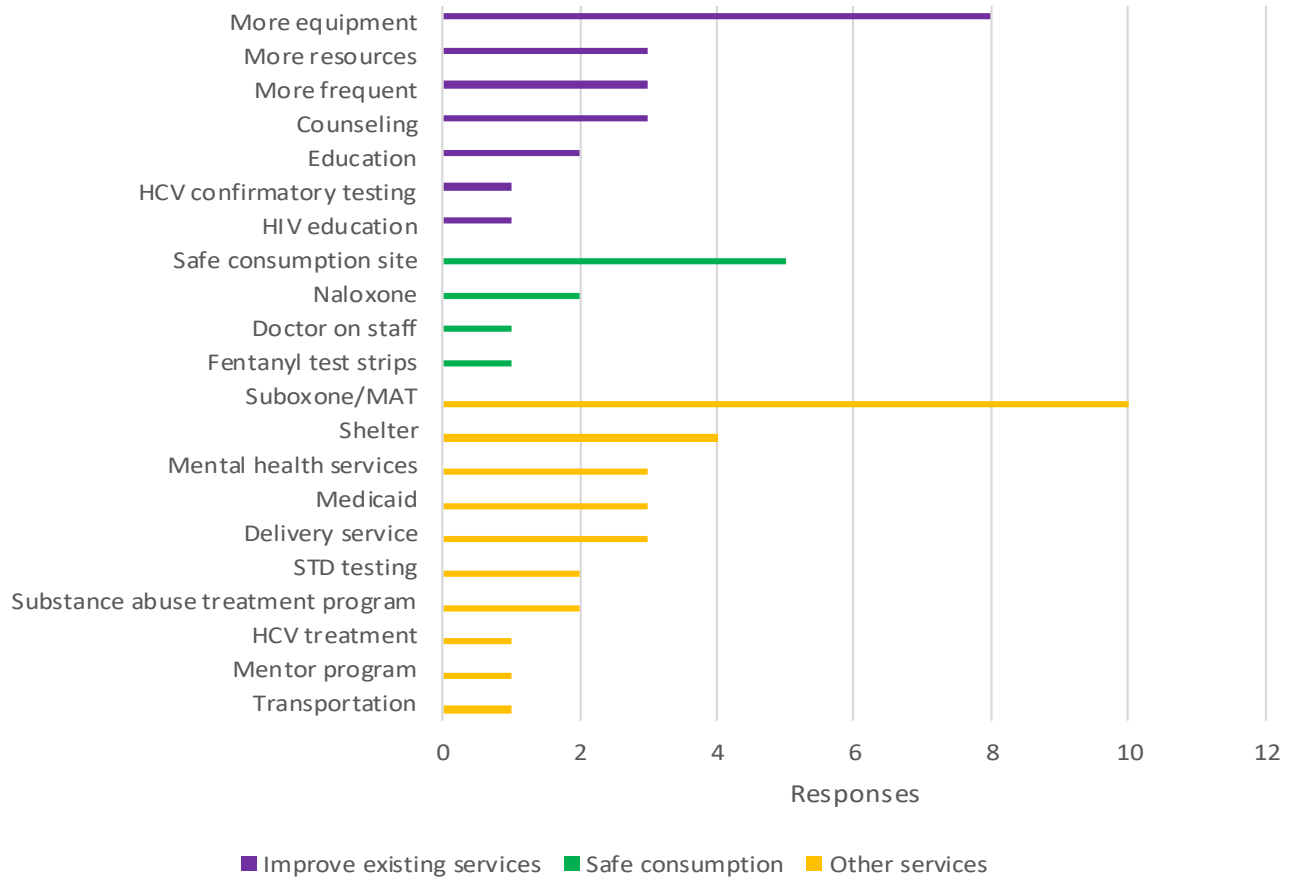
"What do you like MOST about syringe exchange?"



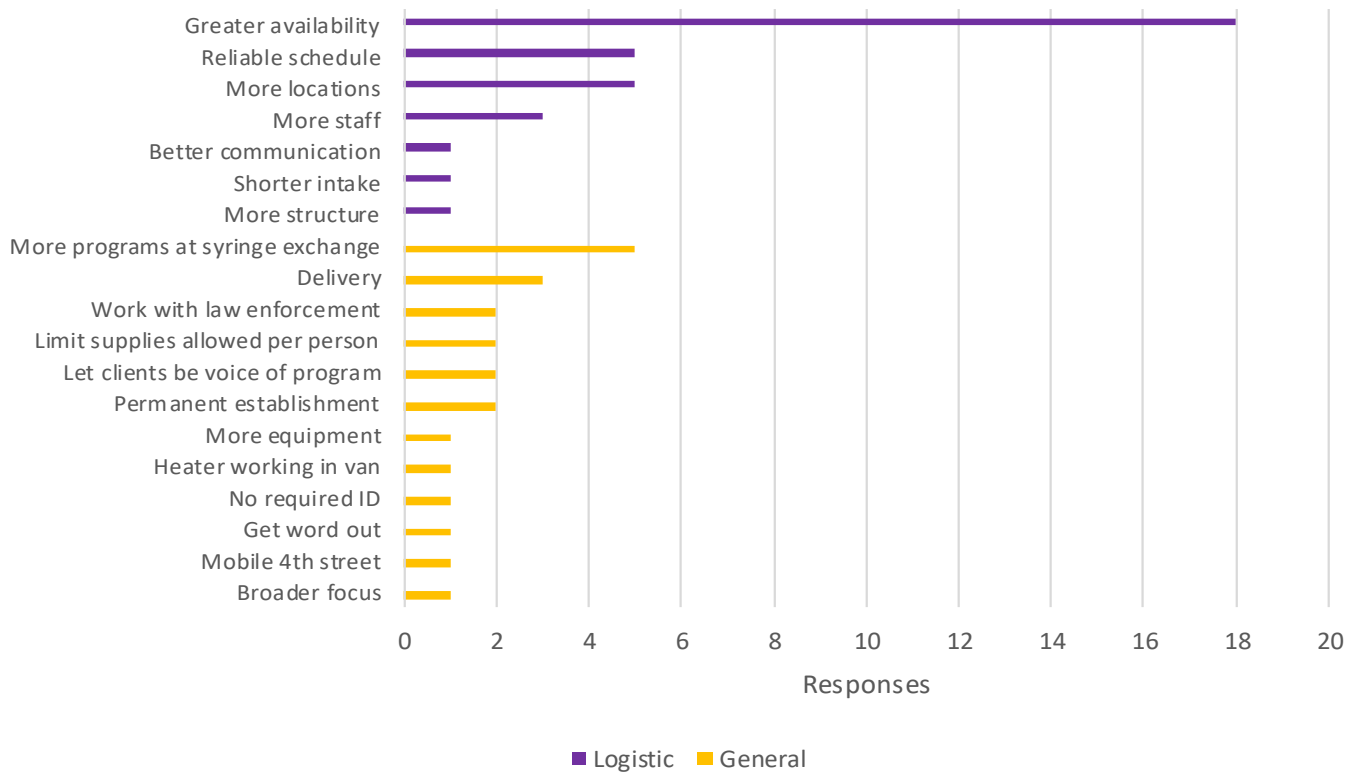
"What do you like LEAST about syringe exchange?"



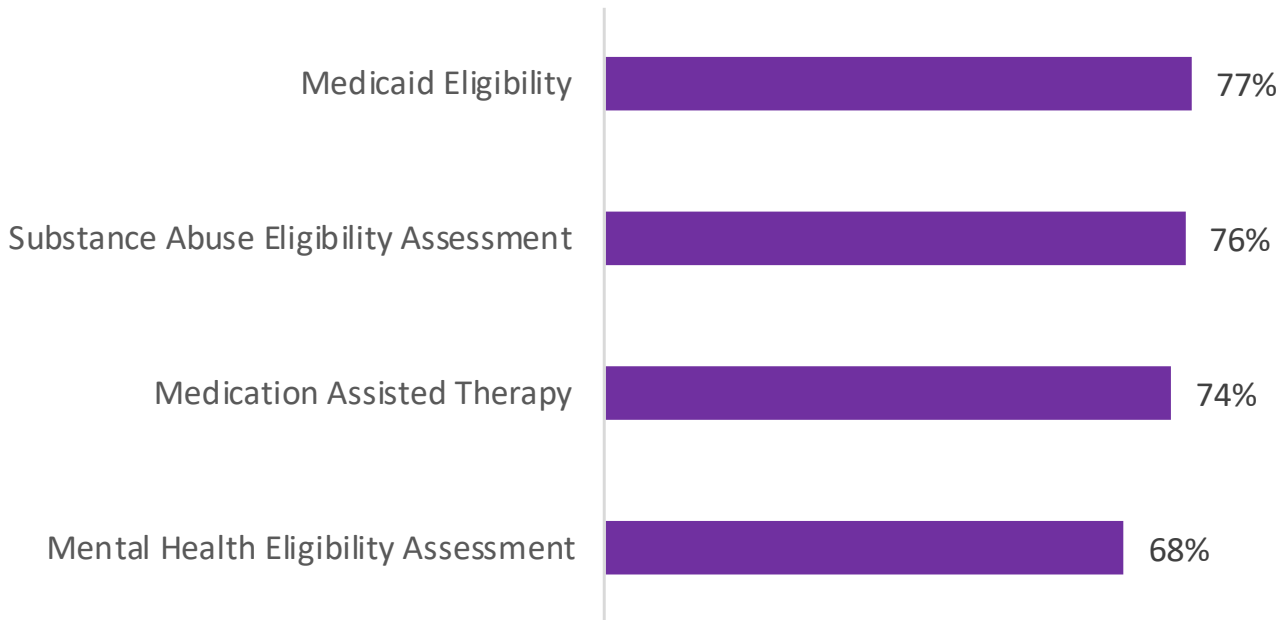
"Which services do you wish were offered?"



"What suggestions do you have on how the program can be improved?"

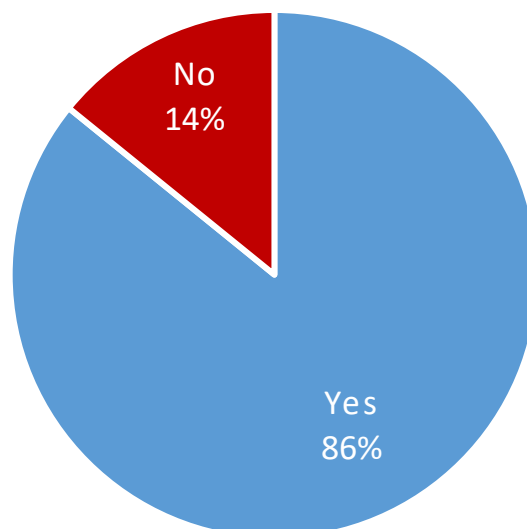


"Which if any additional services would you be willing to utilize?"

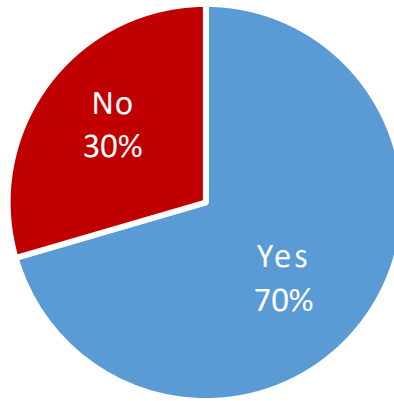


Fentanyl is a potent opioid that often leads to overdose due to it being unknowingly laced in other drugs. Survey participants were asked if they would be interested in a method to test if their drugs contained Fentanyl.

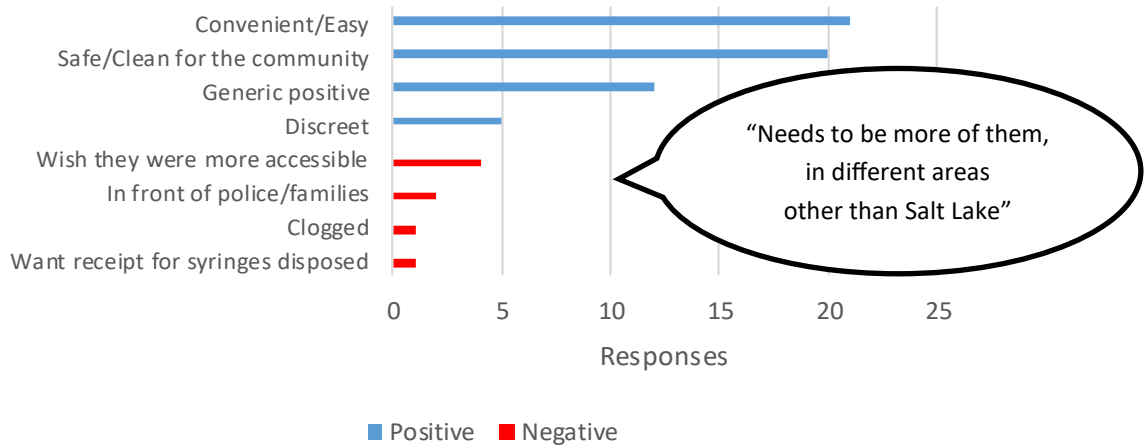
"If Fentanyl test strips were made available, would you use them?"



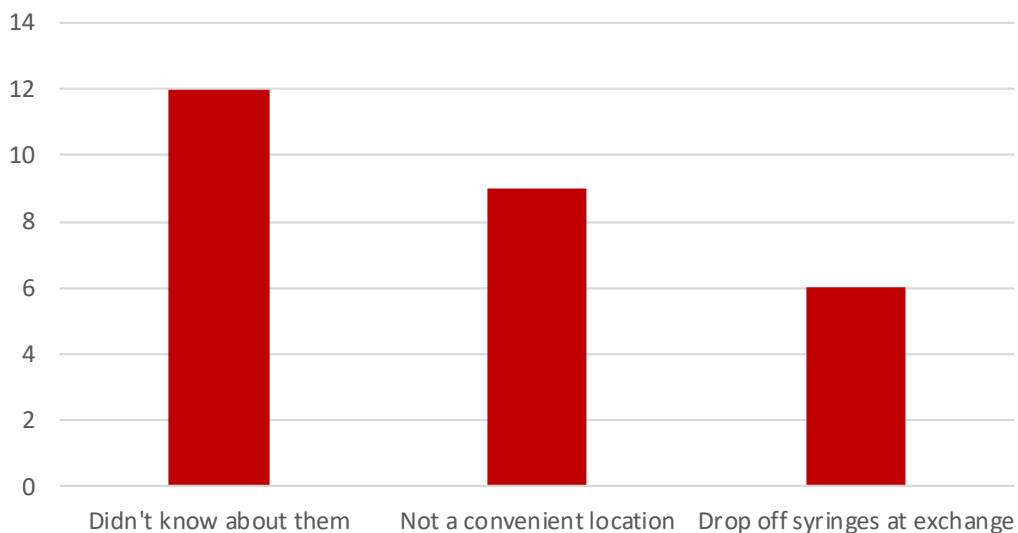
"Have you ever used the public syringe collection boxes?"



"What do you like or dislike about the public syringe collection boxes?"

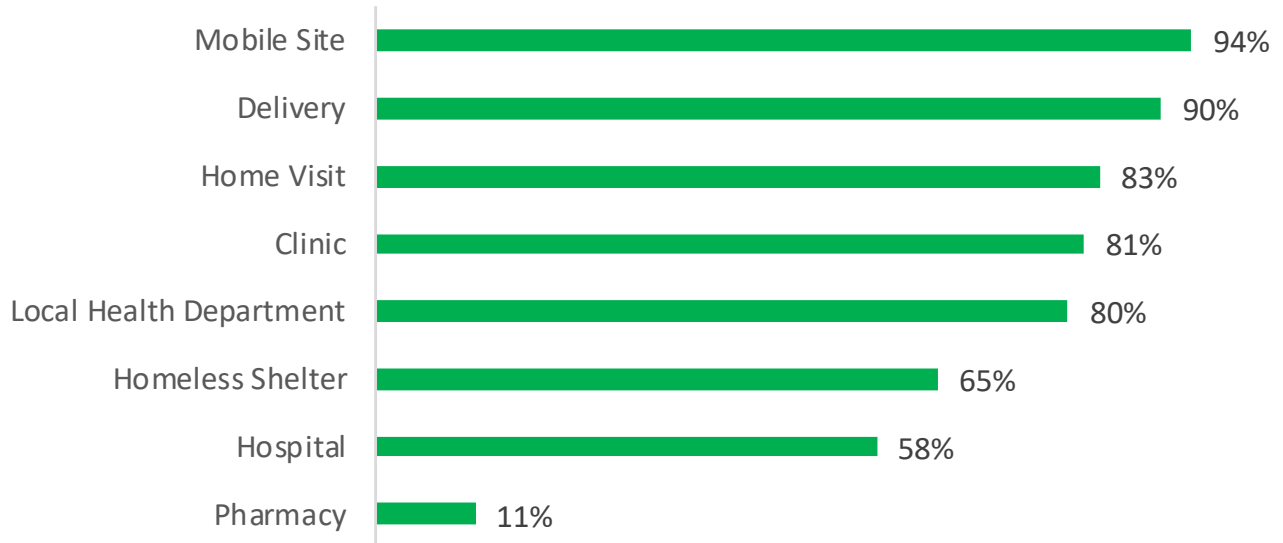


Reasons for not using public collection boxes



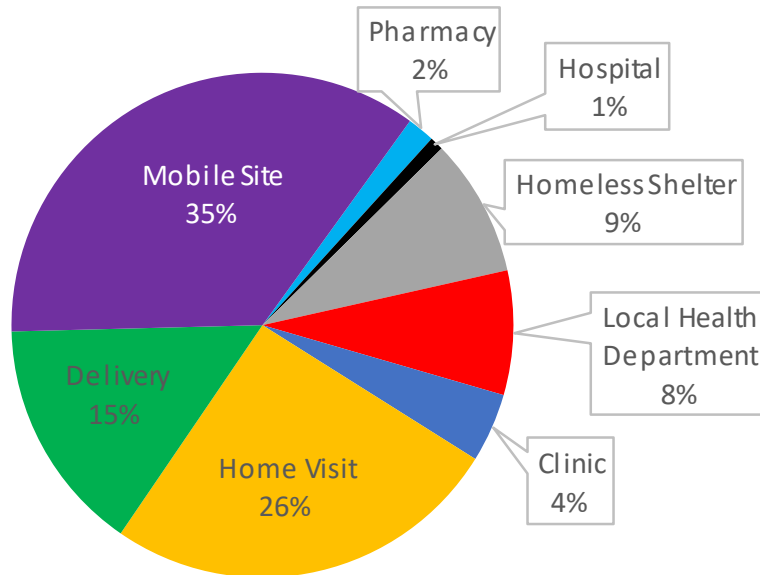
In the question below, survey participants were allowed multiple answers.

"Which settings would you be *willing* to access syringe services?"

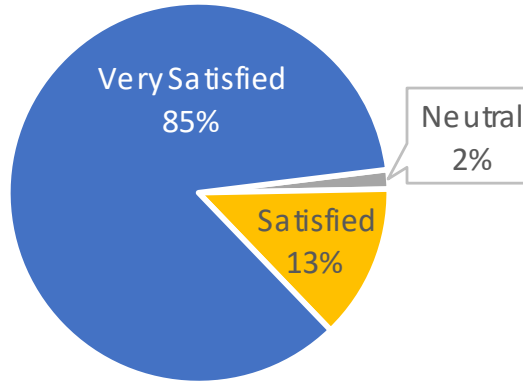


In the question below, survey participants were allowed only one answer.

"Which of these settings do you *prefer* to access syringe services"



"Overall how satisfied are you with Syringe Exchange?"



"Is there anything else you'd like people to know about syringe exchange?"

"It is saving lives and protecting from diseases."

"They are awesome!"

"Great program. Should be more widespread."

"Cool, legit people willing to stand up for client."

"They offer other resources."

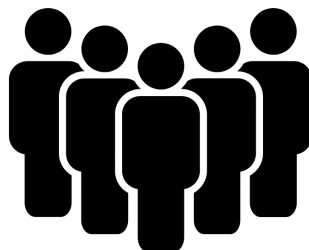
"It is a safe alternative."

"This is a safe space."

"They are here to help."

"It has been life changing."

All it does is help. It is not enabling!"



Lessons Learned

Substance abuse treatment:

The focus of the SEP is to reduce harm among the drug using population by providing sterile supplies in a safe environment, providing education, referrals and support, and more importantly, building rapport and connection. As part of a comprehensive service, SSPs are equipped to refer and enroll clients in substance abuse treatment programs when the client feels they are ready with the understanding that relapse is part of the recovery process. Survey data show about a third of clients have received substance abuse treatment at some point and 23% have actually completed it and are still utilizing syringe exchange. Substance abuse treatment is a tool to help people abstain from substances, relapse is common, and syringe exchange is an important service to reduce harms. Among the majority of clients who have not received any substance abuse treatment 9% did not know where or how to receive treatment. This result points to a few possible gaps in program efforts; namely, that clients are unaware SSPs can help them with treatment or SSPs are not always able to identify clients ready for treatment. This issue will be addressed for program improvement.

Mental health services:

The majority of survey participants (79%) had never received mental health services; 52% of these participants cited not needing these services. This conflicts with what the SSPs know about their clients and the prevalence of mental illness among PWIDs. The SEP connection to mental health services needs to be bolstered and available to all clients. This should include research into affordable options, as cost was mentioned as the greatest barrier to those who felt they needed services.

Drug use and equipment sharing:

Forty-one percent of survey participants are using less than they did before syringe exchange. This correlates to the effectiveness of SEPs, contradicting the narrative that this programming increases drug use. The vast majority of clients are either using the same or using less. In addition, more than half of all survey participants reported sharing equipment less. Syringe sharing particularly decreased, with 62% of participants reporting sharing less or have stopped sharing completely. Reduction in reusing syringes was also significant with 51% of participants reporting reusing less or having stopped reusing. This was an encouraging finding as it is a primary goal of syringe exchange and demonstrates the effectiveness of the program. The more people who stop sharing equipment, the fewer people are at risk for infection and transmitting infections of HCV and HIV through drug use. The more people who stop reusing equipment are protecting themselves against infection, abscesses, and further damage to their veins.

Client feedback:

Feedback received was overwhelmingly positive and the general sense observed by survey administrators was a sense of gratitude. Although unhappy clients may have not have been surveyed due to withdrawing from the program, survey results show that clients of the SEP are generally happy. Clients who use drugs are often afraid of authority and live with a great deal of self-stigma. The SSPs in Utah have been largely successful in easing clients' minds and making exchange a safe and comfortable space.

The most common suggestion and feedback from survey participants related to increasing access to syringe exchange. With only three agencies operating at different capacities, it is difficult to be available at all times across the state. However, SEPs will need to strategize and work together to more effectively reach every client who needs access. UDOH will also need to work to develop SSPs in other areas of the state to reach a greater number of people.

One of the barriers to developing SSPs is the assumption that potential clients would not come to certain locations to receive services. The survey shows that most participants are willing to access syringe services in various

locations. Preferences seem to align with the services offered currently. This could be due to two reasons. The first reason is that clients are used to what is already offered and have made it work. The other reason may be that PWIDs who are not SEP clients may not enroll or continue to visit because they do not prefer a mobile or delivery service. One of the least liked aspects of the program was being around PWIDs.

Evaluation Limitations

There were several factors associated with this evaluation that may have influenced results.

Possible Methodological Limitations

- While the qualitative survey was created in September 2018, submission to the IRB did not occur until late October due to the IRB monthly meeting schedule. Timing and circumstances beyond the control of survey administrators led to a delay in approval (December 2018) when the weather was not as favorable. UHRC largely operates a mobile site outdoors where, typically, notably fewer clients are served during colder months.
- Due to some programming/funding constraints, gift cards obtained were previously purchased from another program. The gift cards were to food stores not in walking distance from survey locations. This may have prevented more clients from participating.
- The majority of feedback received was positive. This is likely because those who may have been unhappy with the program, were likely to have stopped receiving SEP services and would not be captured by the survey.
- After administering the survey to a few participants, it became clear some of the survey questions were unclear, especially if participants were under the influence of substances. It is possible participants misinterpreted some questions but gave answers anyway. The wording of a few questions was changed to increase understanding.

Possible Limitation of the Researcher

- Many clients are comfortable with the SSP staff and are less trusting of strangers. Some clients may not have participated because they were uncomfortable speaking to survey administrators. This was especially true for clients who utilize the delivery service. The majority of OVR's clientele are served through delivery and in efforts to obtain a representative sample, scheduling surveys proved difficult if the client was uncomfortable.
- In some instances, surveys were conducted over the phone to reach clients who were unpredictably available or did not feel comfortable with an in-person survey. Survey administrators asked SSPs to leave the room in order to obtain as open and honest information as possible. However, due to logistical reasons, this was not always guaranteed. In some cases, participants hung up before completing the interview and became unreachable. Surveying officially ceased at the end of June 2019 in order to complete the report. The original plan was to reach the target number (~140) by early spring, but administration of surveys reached a plateau with interested clients and unique responses. Other challenges included time constraints and other duties of survey administrators.