The Implementation of Syringe Services Programs (SSPs) in Indiana:

Benefits, Barriers, and Best Practices



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Syringe services programs (SSPs) offer numerous public health benefits, including disease prevention, overdose prevention, linkage to treatment, criminal diversion, and needle-free public spaces.

KEY POINTS

SSP implementation and sustainability is dependent on several recommended and critical elements of SSP effectiveness.

A SSP should not only provide clean syringes to people who inject drugs but also act as a comprehensive community health resource.

Common barriers to successful SSP implementation include limited capacity and funding and lack of broad political support.

SSPs not only benefit people who inject drugs, they also serve to protect the health of the community as a whole by creating a safer environment for all.

Introduction

Syringe services programs (SSPs) provide people who inject drugs (PWID) with clean syringes and substance use education to prevent high-risk behaviors that could lead to spread of preventable diseases (CDC, 2016). There is strong evidence supporting the effectiveness of SSPs in reducing rates of HIV and Hepatitis C among PWID, and while not the goal, an additional benefit of SSPs is their potential to link PWIDs to substance use disorder (SUD) treatment (Wodak & Cooney, 2006). Despite evidence supporting SSPs, they are often met with community opposition due to the misperception that they enable continued drug use; however, empirical evidence has disproven this theory (CDC, 2018a). This brief report outlines the public health benefits associated with SSPs, best practices of effective SSP implementation, as well as barriers associated with implementing a SSP.

Benefits of SSPs

The public health benefits of SSPs are many and include disease prevention, linkage to treatment, overdose prevention, criminal diversion, and needle-free public spaces. It is important to note the benefits of SSPs are not restricted to those who use the program or those who inject drugs; larger communities also benefit from SSPs, as these programs help create a safer community with a reduction in the spread of infectious disease.

Disease Prevention

The Hepatitis C and HIV rates in Indiana underscore the need for statewide SSP implementation. As of December 2015, there were 11,698 people living with HIV in Indiana, with 621 of these cases being newly diagnosed (IUPUI Center for Health Policy, 2016). Of the newly reported cases, 32% were related to injection drug use (IUPUI Center for Health Policy, 2016). Additionally, rates of Hepatitis C in Indiana increased by 400% between 2010 and 2015 (Nicholas et al., 2015). Data from

Project POINT (Planned Outreach, Intervention, Naloxone, and Treatment), an emergency department-based opioid overdose intervention at Indianapolis's Eskenazi Hospital, demonstrates the need for public health intervention among PWID. Of 209 patients POINT staff tested for Hepatitis C as of April of 2017, 36 (17%) were confirmed to have the disease. The 2015 Scott County HIV outbreak, largely facilitated by injection drug use, is also indicative of the potential public health burden associated with the opioid epidemic. Recent data collected from patients receiving treatment in Indiana's Porter and Scott County had injected drugs in the past thirty days prior to the start of services (IUPUI FSPH, 2017). SSPs can help reduce rates of these diseases as sharing used needles among PWID is a large contributor to the spread of HIV and Hepatitis C. The preventive nature of SSPs also yields large economic benefits. According to 2010 data, the approximate cost of treating a person with HIV over their lifetime is \$380,000, and one study finds that in 2011 it cost \$64,490 to treat a person living with Hepatitis C over their lifetime (CDC, 2017; Razavi et al., 2013). It is estimated that the SSP in Scott County, Indiana, that was implemented in response to the HIV outbreak will save Indiana taxpayers approximately \$120 million in costs associated with treating those with HIV (Adams, 2017).

Overdose Prevention

Like the rest of the country, there has been a significant rise in Indiana's overdose death rates over the past several years, and Marion County has been greatly affected by the opioid epidemic (Figures 1-2). A study examining overdose deaths in Marion County, Indiana found 80% of drug overdose deaths in 2015 contained an opioid, approximately a 20% increase from 2010. (Ray et al., 2017). Heroin use increased slowly from 2010 and then peaked in 2014-2015 (Ray et al., 2017). Heroin was also the most commonly reported opioid within the study period (2010-2015); with it being detected in 50% of coroner's reports of accidental overdose death (Ray et al., 2017). A review of Marion County medical examiner notes shows heroin or a syringe were present at the site of 24% of overdose deaths in 2016 and 20% of overdose deaths in 2017. These data show the frequent use of syringes among those who use drugs in Marion County, highlighting the need for a SSP to prevent needle sharing. Clark County, Indiana has recently experienced a 30% reduction in overdose deaths between 2016 and 2017, attributable to their SSP and distribution of naloxone (the overdose reversal drug) (Hicks, 2018).

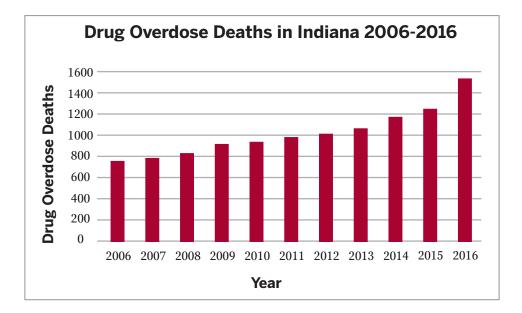


Figure 1 Source: Indiana State Department of Health

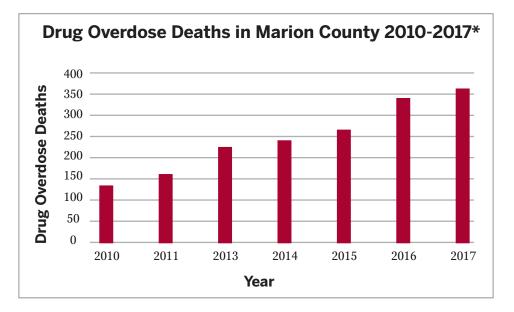


Figure 2 Source: IUPUI Richard M. Fairbanks School of Public Health

*2017 overdose deaths have not been finalized, suggesting even more deaths have occurred than what is reported at this time

Linkage to Treatment

Although the main purpose of SSPs is to reduce the spread of infectious disease, they can also serve as a gateway to helping PWID get into treatment and achieve recovery. Indeed, one study found SSP participants were five times more likely to enter treatment than those who do not engage with a SSP (Hagan et al., 2000). Another study found those who participated simultaneously in SSP and SUD treatment reported "less days of opioid and cocaine use, injection drug use, illegal activities, and incarceration" (Kidorf et al., 2011). Approximately 40% of individuals who engaged in a Scott County, Indiana medication assisted treatment program had previously utilized a SSP (IUPUI FSPH, 2017).

Criminal Diversion

SSPs reduce jail overcrowding by decreasing the number of people who are incarcerated for syringe possession. The implementation of SSPs are often accompanied with policies that allow the possession of syringes for individuals who can prove they are participants and thus acquired the syringe from the program. Some Indiana sheriffs and law enforcement officials have expressed their support for a SSP as a way to reduce overcrowding in prisons.

"Our jail is over-filled with drug addicts, mental problems, and we're not hospitals, but we are sort of the de-facto system for all of that. And it's because we have nowhere else to send them... I have a jail full of people who are charged with possession of syringes. That's one of the most common and highest level of charges that we have among our inmates. Theft and possession of a syringe, that's probably the top two criminal offenses that are in my jail outside of probation violation and all that." -Indiana Sheriff

By implementing a SSP and allowing syringe possession for those who participate in the program, the economic burden associated with jail and prison overcrowding will also be reduced, specifically for tax payers who fund the incarceration of citizens. Additionally, implementation of SSPs has been associated with decreased rates of crime. One study of a Baltimore SSP finds that the number of break-ins and robberies (often associated with financial needs of PWID) decreased by 11% following the implementation of a SSP in their city (CIPP, 2001).

Needle-Free Public Spaces

Allowing SSP participants to carry syringes reduces the number of used syringes discarded in public spaces, as it eliminates the fear of arrest for syringe possession and prevents PWID from feeling the need to "ditch" their used syringes in random community areas. As a result, the risk of community members or police officers suffering from an accidental needle-stick injury is also reduced. One study shows after allowing the possession of used syringes, the number of needle-sticks experienced by law enforcement officials was reduced by 60% (Groseclose et al., 1995). The return rate for used syringes given out by SSPs has been shown to reach a rate of 90%, resulting in a small number of used syringes present around the community (Ksobiech, 2004). Data from the Scott County Health Department (Figure 3) demonstrate similar numbers of syringes received as supplied.

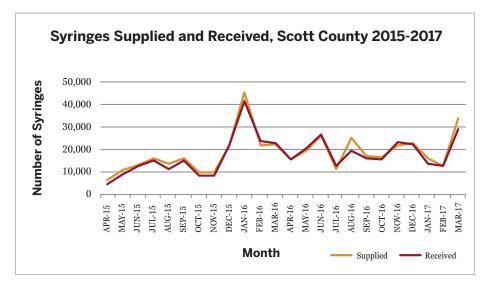


Figure 3 Source: Scott County, IN Health Department

Critical & Recommended Elements to Improve SSP Effectiveness

The following list provided by the World Health Organization outlines elements critical to the implementation of a succesful and effective SSP. We identified additional elements based on Indiana's unique context and experience of researchers doing work in the areas of opioid prevention and treatment. **These elements follow Table 1.**

Table 1: CRITICAL ELEMENTS OF AN EFFECTIVE SSP (WHO, 2007)		
Broad Coverage Implement SSPs in all areas of need	Dual Targets Services are provided to PWID as well as their sexual or needle-sharing partners	Sustainability Gain necessary support and funding to ensure long-term establishment
Quick Start Don't delay in getting PWID into treatment or accessing ser- vices	Monitoring Regularly assess health outcomes of SSP program participants and make needed changes	Education Educate participants on safe drug use, safe sex, and community services that are available to them
Careful Assessments Conduct a needs assessment of the community prior to implementation	Outreach Meet PWID where they're at in the community	Range of Commodities Provide more than just clean syringes— provide a range of resources and services
Community Mobilization Involve community stakeholders in the decision-making process	Respectful Treat PWID with dignity and use cultural competency when engaging with clients	Advocacy Persuade politicians and other key stakeholders to support legislation that promotes SSPs
Comprehensive Offers many services that meet the needs of those in the community	Flexible Reduces barriers to access and meets the varying needs of each participant	Easy to Access Services are provided at multiple locations, i.e. inclusion of a mobile site, such as a van

Recommended Elements

Non-Profit/Health Care Provider Ran

SSPs operated by nonprofit organizations or health care provider agencies might have the added benefit of increased trust between participants and staff as PWID may be wary of government-run agencies due to the fear of persecution. However, nonprofit organizations with no connection to government entities may have more success engaging these populations, as there is less fear and an increased sense of being genuinely being cared for in a judgment free environment.

Anonymity

Anonymity is essential for encouraging use of SSPs by PWID. SSPs should not require participants to provide any identifying information, i.e. participants should not have to provide program staff with anything more than their first name. Indeed, according to Indiana Code § 16-41-7.5-6, SSPs, should "provide syringe and needle distribution and collection without collecting or recording personally identifiable information" (IGA, 2017). This helps to establish trust between participants and staff, increasing the likelihood of PWID utilizing the SSP.

Low Visibility & High Accessibility

Related to the issue of anonymity, SSPs should refrain from establishing themselves in high-visibility areas, such as next to a police station or in a high traffic part of town. While it is important that SSPs be in convenient locations that are accessible to those using them, it is also necessary to maintain a level of privacy in order to make participants feel comfortable visiting the program. Just as important, SSPs should be located in an area that is easily accessible by the target population. Transportation is a common barrier to accessing treatment for people who use drugs (PWUD). As such, the SSP should be in a location that is accessible by bus or within walking distance to other treatment centers that may be utilized by PWID.

Avoid a "1 for 1" Exchange

SSP providers should avoid implementing a "1- for-1" syringe exchange policy. Because PWID often use more than one syringe during a single period of drug use, they need more than just one clean syringe. Recent results from a study examining the injection practices of PWID in Scott County, Indiana shows that most study participants report engaging in multiple injections per injection episode (MIPIE), with an average of 2 – 4 injections per episode (Broz et al., 2018). This resulted in an average of 35 injections per day (Broz et al., 2018). Not having an adequate amount of clean syringes will result in more syringe-sharing, contradicting the purpose of a SSP. As such, an additional risk of increased spread of HIV and Hepatitis C is associated with more syringe sharing and reusing. Studies show that PWID are far less likely to reuse and share syringes when their SSP has less restrictive exchange policies (Persad et al., 2017). Evidence also shows that 1-for-1 SSPs do not increase safe disposal of used syringes any more than SSPs employing a need-based dispensation policy (Bluthenthal et al., 2007). Furthermore, SSPs should implement needs-based dispensation policy a need-based dispensation policy (Bluthenthal et al., 2007). Furthermore, stops should implement needs-based dispensation policy and the stops are often accessing clean syringes for their friends and family members as well as for themselves.

Avoid Excess Data Collection

While evaluation is important, SSPs should not overly burden participants with data collection activities. Doing so makes anonymity questionable and might deter participants from returning to the program. Participants may also feel they are being "used" rather than genuinely supported and cared for. If direct data collection from participants is necessary, it should be as streamlined as possible, anonymous, and services should never be denied because someone does not wish to participate in data collection. Similarly, the administrative burden associated with ongoing data collection may hinder the ability of a SSP to perform to full capacity. Requiring program staff to spend time collecting and entering data reduces the amount the time and resources that could be spent engaging with program participants. Local officials often want data to demonstrate how many individuals have been referred to treatment through a syringe exchange program. In these cases, it is important to remember the primary goal of SSPs is disease prevention, not referral to treatment, and it is difficult for SSPs to verify if people engaged in treatment due to patient privacy laws. Communities interested in this information should work with their local treatment providers to see if they can collect and report SSP referral information at client intake.

Collaboration with Law Enforcement

Another aspect of successful SSPs is a collaborative relationship with local law enforcement officials, specifically those whose work will be affected by a SSP and have direct interaction with PWID, such as police officers. Studies show lack of active collaboration between local law enforcement and SSPs leads to an increase in used needle sharing as well as an increase in rates of HIV and other "drug-related mortality" (OHTN, 2016). As such, a positive working relationship between these two entities is important. This relationship ensures the goals of the police compliment public health efforts (OHTN, 2016). Local police leadership should be involved in the decision-making processes related to any SSP. This allows their concerns to be equally heard, thus a possible solution to such concerns can be more actively sought after. Harm reduction training for police officers is another way for them to be actively involved in the implementation of a SSP, as well as gain a better understanding of the need for and benefits of such a program (OHTN, 2016). Law enforcement diversion programs, such as Seattle's LEAD program (Law Enforcement Assisted Diversion) have been used to reduce rates of drug use, recidivism, and drug related harm; reduce racial disparities in drug use prosecution; and improve mental/physical health and increase employment among PWID (Drug Policy Alliance, 2016). Law enforcement facility, rather than jail (Austin, 2015). Such programs help to increase trust between PWID and law enforcement officials and promote overall community safety (Austin, 2015).

Program Participation Card

Comparable to methods used at the SSP in Scott County, Indiana, a SSP participation card can protect participants from penalties associated with carrying a syringe (e.g., police officers cannot charge these individuals with possession of drug paraphernalia). Though it is not ideal, many states, including Indiana, have laws prohibiting syringe possession. Thus, a participation card is often necessary for protecting program participants. However, law enforcement officials must be willing to honor this rule in order for this aspect of a SSP to be successful.

Resource Provider

In addition to providing PWID with clean injection equipment, SSPs should provide a large range of preventive health resources, such as access to naloxone and free HIV/STI testing. Some SSPs even offer food and clothing, counseling, and access to other social services (Bluthenthal et al., 2009). One national study found that 97% of SSPs provide access to SUD treatment and sexual health education in addition to education about safe injection (Paone et al., 1999). All operating SSPs in Indiana currently offer a multitude of services and resources to program participants. As such, SSPs encompass more than just providing clean syringes to PWID, they also serve as a community health resource to these individuals. Naloxone, also known by the brand name Narcan, is the overdose reversal drug used to combat the effects of an overdose on a person's nervous and respiratory s ystems. Free naloxone kits should be available to those who visit the SSP. According to Indiana Senate Enrolled Act 187, a standing order is in place that allows a "public health authority" to dispense naloxone as long as the proper registration process is followed (IGA, 2016; ISDH, 2016). As such, SSPs can dispense naloxone to the public. Training on how to use the naloxone as well as information on proper storage, how to recognize the signs of an overdose, and what to do after using naloxone should also be given with each kit.

Referral to Additional Resources

If a participant requires services the SSP is unable to provide then staff members should have an extensive list of service providers they can actively refer the participant to. It is important that SSP staff members have a strong working relationship with community service providers in order to facilitate an effective referral process. Strong collaboration between the SSP and the providing agency helps ensure the participant will not be lost in the referral process. It may also be helpful for the SSP staff to arrange transportation to the providing agency for clients, as well as following up with the client to ensure they received services from the referred agency. During the referral process, it is vital that SSP staff practice cultural competency and avoid referring participants to agencies that may pose a threat or harm to the well-being of the participant. Despite the benefits of a strong referral network, it is often difficult for SSPs in rural areas to establish such a network, as the number of community health organizations are limited. Sixty percent of Indiana counties are considered to be rural, resulting in a lack of appropriate services and resources. Lack of public transportation acts as a barrier to accessing resources outside the community, especially for those

with drug-related felony convictions that may have resulted in driver's license suspension. Further, SUD is a complex health condition, and one form of treatment is often not sufficient to help individuals achieve recovery.

Barriers to SSP Implementation

Lack of Funding & Limited Capacity

Lack of public health funding impacts the ability of public health departments and/or other health organizations to sustain a SSP. Public health spending in Indiana averaged \$45 per person in 2016 (America's Health Rankings, 2016). Local health department funding is primarily based on county tax revenue; Indiana law has a local tax capitation that results in our state ranking 42nd in the nation for public health spending per capita. A lack of funding diminishes a SSP's ability to financially support an adequate number of staff, placing an administrative burden on existing staff members. Lack of SSP funding also directly impacts the decision of county-level officials to support the implementation of a SSP. Many Indiana counties currently lack access to proper health care and have limited availability to resources necessary to support a SSP. Moreover, current health care organizations and AIDs service organizations (ASOs) in many counties are already spread incredibly thin, thus lacking the capacity to support yet another community program.

Dissemination & Implementation

Proper implementation is crucial to program sustainability and, if not correctly designed, can serve as a barrier to program success. Indeed, striving to implement all the components listed above will ensure a stronger and more sustainable program. Many factors may reduce community acceptance of a program similar to a SSP, including poor relationships between the SSP and existing healthcare providers, resistant community members, lack of transportation to the program, and difficulty in recruiting target populations (Watson, 2017). Factors that may increase community acceptance include a strong history of collaboration between community healthcare providers as well as a strong pre-existing relationship betweenhealthcare providers and clients (Watson, 2017). However, a community with strong ties may also serve as a barrier to program sustainability, as community members and organizations may be weary of the inclusion of a new community center. "Strong champions" outside the program and high levels of trust within the program were shown to be crucial to program sustainability (Watson, 2017). Varying characteristics of a community and its culture can serve as barriers or facilitators to a successful SSP. As such, these community characteristics must be taken into account when implementing a SSP in order to ensure program sustainability.

Lack of Broad Political Support

In 2016 Congress lifted the ban on federal funding being used toward SSPs; and in 2017, House Bill 1438 was passed, allowing Indiana counties to implement a SSP without state approval. Despite these progressive legislative changes, political opposition to SSPs still serves as a barrier to implementation. Original resistance to SSPs began with critics pointing to a lack of evidence of SSP effectiveness (Des Jarlais, 2000). As there is now ample evidence demonstrating SSP effectiveness, critics are weary of unproven implications of providing PWID with syringes, and politicians may fear being labeled as supporting substance use if they favor SSPs (Des Jarlais, 2000; Burris et al., 2014). Indeed, the SSP in Lawrence County, Indiana recently shut down due to concerns of morality (Hedger, 2017). Others view the issue as a legal one, rather than a scientific one, meaning that even if SSPs work, drug use and the possession of drug paraphernalia is still illegal, and the law should be enforced (Buchanan et al., 2003). Lastly, some SSPs have not been successful, largely due to poor implementation, yet these unsuccessful programs are incorrectly used as evidence to show that SSPs should be a state, county, or city level one. North Carolina has recently implemented several comprehensive laws that support SSPs by making it legal for any governmental or nongovernmental organization "that promotes scientifically proven ways of mitigating health risks associated with drug use and other high risk behaviors" to create a SSP (NCHRC, 2018). Approximately 25 SSPs are currently operating in the state (NCHHS, 2018).

Conclusion

Despite the recent increase in the number of SSPs in the US, they are not new program. In fact, SSPs have been operating in the US since the 1970s, and to-date there have been over 120 empirical studies showing their effectiveness. Because of this strong

evidence demonstrating not only SSP effectiveness but also the limited harms associated with them, SSPs continue to proliferate. For example, evidence in support of SSPs influenced Indiana lawmakers, who were previously uncomfortable with SSPs, to allow a successful program be implemented in Scott County. Since the implementation of the Scott County SSP, the number of individuals sharing syringes has dropped from 74% to 22%, and to date over 200 people have been tested for HIV since the beginning of the outbreak in 2015 (CDC, 2018b; Fentem, 2018). Furthermore, a study conducted by the Centers for Disease Control and Prevention examining the effectiveness of the Scott County SSP found a "link between SSP use and greater awareness of pre-exposure prophylaxis, a daily medication that can reduce the risk of getting HIV through sex or injection drug use" (Fentem, 2018). However, successful SSPs are dependent on their implementation; it is vital to the success of the program that it follows the best practices outlined in this report. As the opioid epidemic continues, it will be necessary for Indiana counties, including Marion County, to begin implementing preventive programs that reduce the spread of disease and facilitate entry into treatment, and SSPs have been shown to be vital in protecting the public's health while fighting the opioid epidemic. Indeed, SSPs are not only beneficial to PWID, they are essential to promoting the health of an entire community as they create a safer environment for all.

Resources

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