Sioux Lookout
First Nations
Health Authority

Evaluation of the Needle Distribution Service within the Approaches to Community Wellbeing: Critical Findings from Sioux Lookout area First Nations

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Ownership

The data in this report is owned collectively by the First Nations in the Sioux Lookout area with SLFNHA acting as their data steward.

For Further Inquiry

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EXECUTIVE SUMMARY

The Needle Distribution Service (NDS), delivered through the Approaches to Community Wellbeing (ACW), is a key harm reduction service in Sioux Lookout area First Nations (SLaFNs). The service aims to reduce the spread of bloodborne infections, including HIV and hepatitis C, by providing people who use substances with timely and equitable access to sterile injection supplies. Over time, NDS has become an essential public health service that supports individual health, contributes to community wellbeing, and helps connect people to health and social supports. The continued growth of the program reflects both increasing need and improved access. In 2024, more than 93,000 safer substance use kits were distributed across participating communities, with injection kits accounting for most distributions.

The most recent evaluation of NDS was completed in 2017. Since that time, there have been significant changes in service scale, community contexts, and the broader substance use environment. As a result, earlier findings no longer reflect current conditions. This evaluation was conducted to provide an updated and comprehensive assessment of NDS, grounded in community perspectives, with the purpose of informing program improvement, policy development, and future planning in ways that respect First Nations leadership, knowledge, and priorities.

The evaluation used a qualitative descriptive design guided by community-based research principles. This approach emphasized lived experience, local knowledge, and contextual understanding as important forms of evidence. Seventeen participants from nine First Nations communities took part in the evaluation. Communities were selected to represent high, medium, and low levels of NDS utilization, as well as differences in geography, population size, and health infrastructure. Participants included Health Directors, harm reduction workers, nurses, National Native Alcohol and Drug Abuse Program (NNADAP) workers, and Council members. Semi-structured interviews explored how services are delivered and accessed, as well as issues related to privacy, stigma, medical waste management, workforce capacity, cultural considerations, and opportunities for program improvement.

The findings show that NDS is widely viewed as a necessary and valued service that plays an important role in protecting individual and community health. Participants consistently noted that access to sterile supplies reduces the sharing and reuse of equipment, lowers the risk of infection, and allows people who use substances to take steps to protect themselves and others. At the same time, the evaluation identified several ongoing challenges that affect how the service operates and how easily people can access it.

Privacy and confidentiality were identified as the most significant barriers to service access across all communities. In small communities where visibility is high and social networks are closely connected; many individuals fear being seen accessing harm reduction services. When NDS is delivered through nursing stations or shared health facilities, the lack of anonymity can discourage people from accessing supplies directly or lead them to ask others to obtain supplies on their behalf. These concerns are closely linked to stigma related to substance use, which remains common in many communities. Participants described how fear of judgment, gossip, and social consequences can outweigh concerns about health risks, leading some individuals to delay or avoid accessing services.

Medical waste management was also identified as a major challenge. Participants expressed concern about used needles being found in public spaces such as parks, beaches, walking paths, and near homes. These situations raise serious safety concerns, particularly for children and families. The findings suggest that improper disposal is not simply the result of individual behavior, but is strongly influenced by limited disposal infrastructure, lack of access to sharps containers, and challenges related to transporting biohazardous waste. These challenges are especially pronounced in fly-in communities. Both participant perspectives and existing evidence indicate that moving from a needle distribution model to a needle exchange model, without improving disposal infrastructure, is unlikely to significantly reduce the presence of discarded needles.

The evaluation also highlighted the central role of harm reduction workers and the pressures they face. Workers often manage multiple responsibilities, including outreach, education, crisis response, and community support, alongside needle distribution. Many participants described heavy workloads, emotional strain, and limited access to supervision or mental health supports. In small communities where workers may know clients personally, repeated exposure to overdose events, relapse, and death can contribute to burnout and emotional distress. These challenges affect not only worker wellbeing, but also the stability and quality of service delivery.

Participants emphasized that NDS cannot function effectively on its own and must be part of a broader continuum of care. While harm reduction is essential, communities identified gaps in addiction treatment, mental health services, aftercare, and culturally grounded healing supports. Stronger coordination between NDS and NNADAP services was widely viewed as an opportunity to improve referrals, continuity of care, and overall service effectiveness. Participants also stressed the importance of cultural safety, First Nations-led decision-making, and the meaningful involvement of community leadership, Elders, and people with lived experience in shaping harm reduction services.

In conclusion, this evaluation confirms that NDS remains an essential and effective public health service in SLaFNs. However, its long-term success depends on addressing interconnected system-level challenges. Priorities include improving medical waste disposal infrastructure, increasing privacy-focused access options, supporting the wellbeing of community harm reduction workers, reducing stigma through culturally grounded approaches, and strengthening integration across services. Decisions about service models and program changes must remain community-driven and guided by First Nations leadership and self-determination. By taking a wholistic, culturally safe, and systems-focused approach, NDS can continue to protect individual health, enhance community safety, and support responsive and resilient harm reduction systems aligned with community priorities.

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BACKGROUND

The Needle Distribution Service (NDS) of Approaches to Community Wellbeing (ACW) has become an essential component of harm reduction programs aimed at reducing the transmission of bloodborne diseases such as hepatitis C and HIV among people who inject drugs in Sioux Lookout area First Nations.

Over the years, the utilization of these services has grown significantly. In 2024, the NDS program distributed 93,609 safer substance use kits, the majority of which (97%) were injection kits. While this represents a growing need for access to harm reduction supplies, the large-scale distribution of these kits also requires a consideration of environmental and public health implications related to medical waste disposal, especially in rural and remote First Nations communities which have limited internal waste management infrastructure.

The concern regarding medical waste has been longstanding in communities, prompting many to switch to needle exchange models, rather than needle distribution models. Partners have expressed pushbacks about the NDS, especially the distribution model, citing increased rates of improperly discarded needles in public spaces.

An evaluation of ACW NDS services was previously conducted in 2017. Since then, there have been changes in both the scale and nature of service delivery, as well as shifts in how communities are managing medical waste disposal. Therefore, this evaluation no longer fully reflects current practices, community needs, or the broader public health landscape of substance use in these communities. As part of ongoing efforts to ensure the service's effectiveness and alignment with its public health objectives, it has become essential to conduct a more comprehensive and updated assessment.

Given the unique context of SLaFNs, and the consideration that First Nations peoples are often not represented in the available literature, this evaluation is essential to understand the model for the provision of safer substance use services in this region, ensuring that harm reduction supplies remain accessible for clients while minimizing risks associated with improper disposal of medical waste.

EVALUATION OBJECTIVES

- Evaluate service utilization patterns and accessibility
- Examine medical waste management practices
- Identify implementation barriers and facilitators
- Evaluate the impact of needle exchange versus distribution models
- Develop actionable recommendations for improvement

METHODOLOGY

Study Design

This evaluation employed a qualitative descriptive design focused on understanding the experiences, perspectives, and practices related to needle distribution services in participating communities. This methodology aligns with community-based research principles that prioritize local knowledge and lived experience as valid and essential forms of evidence.

Sampling Strategy

The evaluation used purposive sampling to deliberately select participants who could provide relevant and insightful information about needle distribution services. Communities were stratified by NDS utilization levels based on kit distribution data from 2023-2024, creating three tiers:

- High utilization: More than 7 kits per person
- Medium utilization: 2-7 kits per person
- Low utilization: Less than 2 kits per person

This stratification strategy ensured representation of diverse community experiences and allowed comparison across utilization levels. Furthermore, communities were selected to represent geographic diversity and variation in population size, remoteness, and existing health infrastructure.

Within each selected community, the evaluation sought to interview:

- Health Directors or designated nursing representatives
- Harm reduction workers with minimum 6 months experience (where available)
- Council members responsible for the health portfolio
- National Native Alcohol and Drug Abuse Program (NNADAP) workers and nurses (where available)

This multi-perspective approach ensured that the evaluation captured views from service administrators, frontline workers, community leadership, and substance use support staff.

Participant Characteristics

The evaluation included 17 participants from 9 First Nations communities across the three utilization tiers. Participants included Health Directors (N=8), harm reduction workers, NNADAP workers and nurses (N=7), and Council members (N=2). High utilization communities contributed 8 participants. Medium utilization communities contributed 5 participants. Low utilization communities contributed 4 participants.

Data Collection

Data were collected through semi-structured interviews conducted between April and October 2025. Semi-structured interviews used a flexible interview guide that covered key topics while allowing participants to elaborate on their experiences and introduce issues they considered important. This approach balanced the need for consistent data collection across participants with the flexibility to explore emergent themes and follow up on participant responses.

Interviews were conducted in person during community visits. All interviews were audio recorded with participant consent and subsequently transcribed verbatim for analysis.

The interview guide covered the following topic areas:

- Description of how needle distribution services operate in the community
- Barriers to service access and utilization
- Role of culture and stigma in service use
- Waste management practices and challenges
- Perspectives on distribution versus exchange models
- Additional support services needed
- Recommendations for program improvement

The interviewer used probing questions to encourage elaboration and clarification of participant responses.

Data Analysis

Interview transcripts were analyzed using thematic analysis, a method for identifying, analyzing, and reporting patterns of meaning within qualitative data. Thematic analysis is a flexible approach that allows both inductive coding, where themes emerge from the

data, and deductive coding, where analysis is guided by the research questions and conceptual framework (Braun & Clarke, 2006).

The analysis process involved several steps. First, the research team read through all transcripts multiple times to become familiar with the data and develop an overall understanding of the content. Next, segments of text relevant to the research questions were identified and assigned descriptive codes that captured their meaning. Similar codes were then grouped together into broader themes that represented patterns across the data. Themes were reviewed and refined to ensure they accurately represented the data and were internally consistent. Finally, themes were defined and named, and illustrative quotes were selected to demonstrate each theme.

Throughout the analysis process, the research team maintained attention to variation in perspectives across communities and participant roles. Particular attention was paid to differences between high, medium, and low utilization communities, as these might reflect varying contexts, needs, or program implementation approaches.

ETHICAL CONSIDERATIONS

The evaluation followed ethical principles for community-based research with First Nations communities. Prior to beginning interviews, the interviewer explained the purpose of the evaluation, how the information would be used, and the steps taken to protect confidentiality. Participants provided informed consent verbally to participate in the interview and to have their responses used as part of the evaluation. All participants were informed of their right to refuse to answer any questions or to withdraw from the interview at any time without consequence.

To protect participant confidentiality, this report does not identify individuals by name. Quotes are attributed only to participant role and community, and in some cases, additional details are removed to further protect anonymity. Interview recordings and transcripts are stored securely in password-protected files accessible only to the research team.

FINDINGS

The qualitative analysis of interview transcripts revealed several major themes related to needle distribution service delivery, accessibility, waste management, and stakeholder perspectives on program models. These themes are presented below with illustrative quotes from participants. To protect confidentiality, quotes are attributed to participant role and community only.

Theme 1: Service Organization and Distribution Practices

Participants described considerable variation in how needle distribution services are organized and delivered across communities. In most communities, services are provided through nursing stations or health centers, with harm reduction workers as the primary point of contact for clients. However, the degree of structure, formality, and consistency in service delivery varies substantially.

Distribution Mechanisms

In high utilization communities, where kit distribution is most extensive, services appear to be more formalized with designated harm reduction workers responsible for kit distribution. A harm reduction worker described the process:

> *People come to the nursing station and ask for kits. I hand them out. Sometimes people text me or call me and I deliver them to their homes if they can't come in.*
>
> (Harm Reduction Worker, Community X)

In lower utilization communities, needle distribution may be more informal and handled by nursing staff rather than dedicated harm reduction workers. A Health Director from a low utilization community explained:

> *We don't have a full-time harm reduction worker. The nurses hand out kits when people ask for them. We keep supplies at the nursing station.*
>
> (Health Director, Community X)

Home delivery emerged as an important accessibility feature in several communities, particularly for individuals who face barriers to visiting the nursing station. However, this practice also creates additional workload for already busy harm reduction workers.

Operating Hours and Accessibility

Most communities reported that kits are available during regular nursing station hours, typically from approximately 9:00 AM to 4:30 PM on weekdays. Several participants noted that flexibility exists to provide kits outside regular hours in emergency situations or for people who cannot access services during the day. A Health Director stated:

> *It's usually 9:30 to 4:30, but it's after hours too for late travelers.*
>
> (Health Director, Community X)

However, some participants expressed concern that limited hours may create barriers for people who work during the day or who prefer to access services at times when fewer people are around. Weekend access was particularly limited across communities. Only one community reported regular weekend availability, and even that was minimal. A nurse noted:

> *Weekends are a gap. People use substances on weekends too, maybe even more. But we don't have regular weekend hours. If someone runs out of supplies on Saturday, they have to wait until Monday or find some other way.*
>
> (Nurse, Community X)

Theme 2: Privacy and Confidentiality Concerns

Lack of privacy emerged as perhaps the most significant barrier to service access identified by participants across all communities. In small communities where everyone knows each other, concerns about being seen accessing harm reduction services can be a powerful deterrent. This theme was mentioned consistently by participants in all community types and roles.

Physical Space Limitations

A major privacy concern relates to the physical layout of service delivery locations. In most communities, needle distribution occurs through nursing stations that also provide general health services. People accessing harm reduction services must enter the same building and often the same waiting areas as people accessing other health services, making it obvious to community members what service they are seeking.

A Council member emphasized this challenge:

> *I think there needs to be more privacy for somebody who's picking up the needles because maybe they're ashamed of picking up needles. Using this multipurpose room isn't private. That's most likely a barrier because I know some people go to pick up for them. I think it would do best to have your own building for something like that. It would prevent people from just not wanting to come to the clinic.*
>
> (Council Member, Community X)

Similar concerns were expressed across multiple communities. A Health Director stated:

> *The biggest barrier is privacy. People don't want others to see them coming in for needles. In a small community, everyone knows everyone. If you walk into the nursing station, people know why you're there.*
>
> (Health Director, Community X)

A harm reduction worker stated:

> *Some people wait until evening when fewer people are around. Some people send friends or family to pick up for them. Some people just don't come at all because they don't want to be seen. We need better options for people who need privacy.*
>
> (Harm Reduction Worker, Community X)

Some communities attempted to mitigate these concerns through scheduling or procedural modifications. Another harm reduction worker described their approach:

> *We try to schedule people at times when the station is less busy. Early morning or late afternoon. We use a side door when possible. We put supplies in plain bags or boxes, so they're obviously not needles. These small things help a bit, but they don't solve the fundamental problem.*
>
> (Harm Reduction Worker, Community X)

Community Size and Anonymity

The challenge of maintaining privacy is amplified by the small size of many communities. In communities with populations of a few hundred, achieving anonymity is extremely difficult. People are likely to see and be seen by relatives, friends, and acquaintances when accessing services. A harm reduction worker explained:

> *It's hard to keep things private in a small community. People talk. If someone sees you at the nursing station picking up supplies, word gets around. Some people won't come because they don't want everyone to know their business.*
>
> (Harm Reduction Worker, Community X)

An NNADAP worker articulated these dynamics:

> *In a community of a few hundred people, everyone knows everyone. If you're seen at the nursing station and someone notices you're there for harm reduction supplies, that information spreads. Within a day or two, lots of people know. That's terrifying for people who want to keep their substance use private.*
>
> (NNADAP Worker, Community X)

The consequences of such disclosure extended beyond embarrassment to encompass potential impacts on family relationships, employment, housing, and community standing. A Health Director explained:

> *People worry about their families finding out about, their employers finding out about, losing respect in the community. These aren't small concerns. They can have real consequences for people's lives. So, people weigh the risk of infection from reusing needles against social risks they face, and sometimes they choose the infection risk.*
>
> (Health Director, Community X)

Theme 3: Stigma Around Substance Use

Stigma surrounding substance use was identified as a pervasive barrier affecting service accessibility and utilization. Participants described multiple dimensions of stigma, including community attitudes toward substance use, judgment of people who use drugs, and the internalized shame experienced by individuals themselves.

Community Attitudes and Judgment

Many participants described negative community attitudes toward people who use drugs. Substance use may be seen as a moral failing or personal weakness rather than a health issue, leading to judgment and social exclusion of people who use drugs. A Council member explained:

There's definitely stigma. People judge. They see someone using drugs and they think that person is bad or weak. They don't understand it's an illness, an addiction. So people who use drugs, they feel ashamed. They don't want to be seen.

(Council Member, Community X)

Fear of Identification

Closely related to general community stigma is the specific fear of being identified as someone who uses drugs. Participants described how this fear can prevent people from accessing harm reduction services even when they need them. A harm reduction worker stated:

People are scared to come in. They don't want to be seen. They worry about what people will think, what people will say. Sometimes they won't come at all, or they wait until late at night when fewer people are around.

(Harm Reduction Worker, Community X)

Some communities had undertaken stigma reduction efforts, though these were generally limited in scope. An NNADAP worker described their approach:

We do education in the community. We talk about addiction as a health issue, not a moral failing. We try to humanize people who use drugs, to share stories of recovery. But it's slow work. Changing attitudes takes time, and we're working against generations of stigma and misunderstanding.

(NNADAP Worker, X)

Participants emphasized the need for comprehensive, multi-level stigma reduction initiatives involving community education, healthcare provider training, policy changes, and involvement of people with lived experience.

Theme 4: Waste Management Challenges

Waste management emerged as a major concern across participating communities. While perspectives varied on the extent of the problem and its causes, participants across all community types and roles acknowledged challenges with proper disposal of used needles and other injection equipment.

Publicly Discarded Needles

Used needles found in public spaces represent a serious health and safety concern across participating communities. Interview participants reported discovering needles in locations where community members, particularly children, regularly spend time. These include beaches, parks, walking paths, and areas near housing. The problem creates anxiety for parents and caregivers who worry about accidental needle-stick injuries.

The issue appears in both remote fly-in communities and those with road access, suggesting it is not limited to specific geographic or access contexts. Participants expressed concern that needle distribution programs intended to reduce harm may inadvertently contribute to this problem when users do not properly dispose of supplies. Several participants noted that children have found needles while playing, which raises urgent questions about how to balance harm reduction services with community safety.

A NNADP worker shared their experience:

> *At one point, there was a garbage bag full of needles buried near the high school. I went there with someone who said they had seen a few needles on the ground. When I dug, I found a bag buried underneath. Someone had hidden it there. There were at least 200 needles inside. The bag was tightly taped, but it had come open, likely because four-wheelers had driven over the area.*
>
> (NNADP Worker, Community X)

A harm reduction worker shared their concerns:

> *We're trying to prevent the spread of these and that's why we're doing this. But when you find needles in the playground it's the risk. Do you know what I mean when you're worried about little children picking up and you love them?*
>
> (Harm Reduction Worker, Community X)

This firsthand account illustrates the real danger that improperly discarded needles pose to community members, particularly children. Needle stick injuries carry the risk of transmitting bloodborne infections and cause significant anxiety even when infection does not occur.

Limited Disposal Infrastructure

Safe disposal of used needles requires proper infrastructure, but many communities face significant gaps in this area. The challenges include limited availability of sharps

containers, absence of secure drop-off locations, and difficulties managing biohazardous waste in remote settings. Some communities have no formal disposal system at all, while others have created temporary solutions that may not meet safety standards.

Transportation presents a particular challenge for fly-in communities, where the cost and logistics of shipping biohazardous materials are substantial. Health Directors described storing containers of used needles for extended periods while waiting for pickup, which creates safety concerns within health facilities. The lack of regular collection schedules means that even when disposal containers are available, they may overflow or remain inaccessible to clients who want to return used supplies.

Participants described practical and system-level challenges that limit the safe removal of used sharps from communities. Wasaya Airways was reported to usually transport only two sharps boxes at a time, often no more than once per week and sometimes less often. Participants explained that this level of transport does not match the number of needles being used and returned through the NDS. Participants also identified gaps in responsibility for waste removal, noting that Indigenous Services Canada (ISC) is not currently taking responsibility for removing sharps waste from communities, even though this falls within its mandate. As a result, sharps waste is often stored on site for long periods, which increases safety risks at the community level.

A Health Director described challenges

> *I think we need more of those yellow bins. Because we lost a key for one. There used to be quite a bit over there, but they never safely disposed of them until we had that bin, but then we lost the key to the bin.*
>
> *(*Health Director, Community X)

Another Health Director explained:

> *We have our harm reduction workers and one of them is trained to pack it up in boxes from ISC. We work in partnership with nursing station, so their used needles and our used needles to pack our needles up and send them out. 2 boxes… that's our limit on Wasaya, we need an increase on our limit for boxes we can ship out. We have 6 boxes waiting to go and we can only send out 2 boxes at a time. X (staff name) is our harm reduction guy and he goes twice a week to see if Wasaya can take the needles out.*
>
> (Health Director, Community X)

A Harm Reduction Woker described:

They have to place it [needle] in the designated containers. Then, we record how much they brought in on the form. We track what comes in and what goes out, whether it's stems or only 20 have been returned out of the amount that went out.

(Harm Reduction Worker Community X)

Another Health Director shared similar concerns:

There's not a lot of places where they can come and put their used needles and stuff like that, so they end up throwing them at the dump.

(Health Director, Community X)

Theme 5: Perspectives on Distribution Versus Exchange Models

Participants were asked about their views on needle distribution versus exchange models and whether they believed transitioning to an exchange model would be beneficial. The responses revealed some support for moving toward an exchange model, though with some concerns about potential impacts on accessibility.

Support for Exchange Model

Needle exchange programs operate on the principle that clients should return used needles to receive new ones. This approach aims to reduce publicly discarded needles and ensure safer disposal. However, participants described mixed perception with exchange models, noting both potential benefits and implementation challenges.

A Council Member clearly articulated the following preference:

I would say to bring the used needles [exchange model], because it prevents them from getting sicknesses. It prevents the community from getting poked with a needle. Or even kids.

(Council Member, X)

Another participant stated:

Some are really private, and some are more open about it. So, that's the thing. I'm not sure how they'll feel about the requirements of the exchange model. I mean, it's 50/50. It might be harder for someone who's more private to want to bring back their

needles, because once people find out, they'll know who's doing it, and that could be an issue for them.

(Council Member, Community X)

Theme 6: Harm Reduction Worker Experiences and Challenges

Harm reduction workers play a central role in service delivery, yet they face significant challenges that can affect both their own wellbeing and their capacity to provide effective services. This theme emerged strongly from interviews with them but was also acknowledged by Health Directors and other stakeholders.

High Workload and Multiple Responsibilities

Harm reduction workers described being pulled in many directions, with needle distribution being just one of many responsibilities. A harm reduction worker stated:

It's a lot. I'm doing needles, but I'm also doing other things. Community health, crisis response, whatever comes up. Some days I feel like I can't keep up.

(Harm Reduction Worker, Community X)

Emotional Burden and Burnout

Working with people experiencing substance use disorders can be emotionally demanding. Harm reduction workers form relationships with clients and witness their struggles, setbacks, and sometimes deaths. A harm reduction worker shared:

It's hard. You care about people, you want to help them. But sometimes you can't. You see them struggling and there's only so much you can do. When someone dies, it hits you hard. You wonder if you could have done more.

(Harm Reduction Worker, Community X)

Theme 7: Need for Additional Support Services

Needle distribution addresses one aspect of substance use, but participants consistently emphasized the need for comprehensive support services. Communities identified gaps across the full spectrum of care, from prevention to treatment to recovery support. Many

lack basic counseling services, forcing individuals to travel long distances for help. The costs and logistics of leaving the community for treatment create substantial barriers.

Participants called for expanded access to addiction treatment programs, mental health services, detoxification facilities, and residential rehabilitation options. They stressed that services must be culturally appropriate and trauma-informed to be effective. Family support programs and aftercare services were also identified as missing pieces. Several participants noted that addressing substance use requires coordinated approaches that build on community strengths and Indigenous knowledge rather than imposing standardized external solutions.

Addiction Treatment and Counseling

The most frequently mentioned additional service need was for accessible addiction treatment and counseling. A Health Director explained:

> *People need treatment options. Yes, harm reduction is important, but some people want to quit and they need help to do that. Treatment programs are far away and expensive. We need more local options.*
> (Health Director, X)

Mental Health Services

Mental health issues and substance use disorders frequently co-occur, and participants emphasized the need for integrated mental health and addiction services. A Health Director stated:

> *Mental health and addiction go together. You can't address one without the other. But mental health services are limited here. People need counseling, therapy, psychiatric care. Those services are hard to access.*
> (Health Director, X)

Theme 8: Cultural Considerations

When asked whether culture plays a role in service utilization, participants generally indicated that culture itself is not a barrier to accessing harm reduction services. However, their responses revealed more nuanced understandings of how cultural factors might influence substance use, help-seeking, and healing.

Integration of Cultural Elements

Some participants described ways that cultural elements are integrated into broader substance use support services. A NNADAP worker explained:

Our NNADAP program includes cultural components. We do talking circles, we bring in Elders, we do land-based activities. These things are important for healing. They connect people back to their culture and identity.

(NNADAP Worker, Community X)

Theme 9: Community-Specific Variations

While many themes emerged consistently across communities, some important variations were observed that may relate to differences in service utilization levels, community size, geographic accessibility, or other contextual factors.

Communities with high needle distribution rates tended to have more formalized service delivery structures, including designated harm reduction workers and established distribution practices. However, these communities also reported more significant concerns about waste management and publicly discarded needles.

Medium utilization communities presented as transitional cases with some characteristics of both high and low utilization contexts. Low utilization communities generally had less formalized service structures and often relied on nursing staff rather than dedicated harm reduction workers.

DISCUSSION

Service Accessibility

The accessibility barriers identified in this evaluation align closely with harm reduction research literature while also revealing unique challenges specific to remote First Nations contexts. Understanding these parallels and distinctions is essential for developing effective interventions.

Research in urban harm reduction programs has consistently identified privacy and confidentiality as important facilitators of service access (Small et al., 2010). Urban programs have addressed these concerns through standalone facilities, anonymous service access, and separation of harm reduction from other health services. However, implementing such approaches in remote communities faces distinct challenges.

The small population sizes of communities in this evaluation (ranging from a few hundred to a few thousand people) make anonymity inherently difficult regardless of service design. Even with standalone facilities, community members would likely observe who enters and exits. This reality requires different solutions than those effective

in urban settings, such as mobile services, home delivery, or integration of harm reduction with other services in ways that provide reasonable deniability about the specific reason for accessing the facility.

Research on healthcare service delivery in small rural communities has noted similar challenges across various health services, not just harm reduction (Wakerman et al., 2008). Strategies identified as effective include normalizing health service use broadly, creating multipurpose facilities that house various services, and training all health staff to provide basic harm reduction services so that accessing harm reduction does not require specialized visits. Some of these strategies could be adapted for the First Nations communities in this evaluation.

Stigma

While substance use stigma is well-documented in general populations (Earnshaw et al., 2013), First Nations communities face additional complexities rooted in colonization and its ongoing impacts. Research has documented how historical trauma, including residential schools, has contributed to elevated rates of substance use in Indigenous communities while simultaneously creating shame and secrecy around these issues (Brave Heart, 2003).

The Truth and Reconciliation Commission of Canada (2015) emphasized that substance use in Indigenous communities cannot be understood apart from the historical and ongoing trauma of colonization. This context suggests that stigma reduction efforts in Indigenous communities must address not only current inequities but also historical trauma and its intergenerational impacts. Culturally grounded approaches that incorporate Indigenous concepts of wellness, healing, and community may be more effective than Western clinical approaches alone (Gone, 2013).

Several participants in this evaluation referenced the importance of Elders, traditional practices, and cultural connections in healing from substance use. Research supports the integration of such cultural elements into substance use services for Indigenous peoples (Rowan et al., 2014). However, participants noted that cultural programming was more prominent in addiction treatment services (NNADAP) than in harm reduction services specifically. This represents an opportunity to enhance harm reduction services by incorporating cultural elements that could simultaneously reduce stigma and improve cultural appropriateness.

Waste Management: Evidence and Implementation

The waste management concerns identified by participants warrant careful attention balanced with evidence about what interventions are most effective. Research comparing

needle distribution and exchange programs on outcomes including publicly discarded needles has produced nuanced findings that should inform policy decisions.

Distribution vs. Exchange: What Research Shows

A seminal study by Doherty et al. (2000) examined the number of needles found in public spaces before and after a needle exchange program was introduced in Baltimore. The study found that even though many used needles were returned through the exchange program, the number of discarded needles in public areas did not decrease. This suggests that needle disposal is influenced by factors beyond whether a program uses an exchange or distribution model. Similarly, a review by Wodak and Cooney (2006) found little evidence that needle distribution programs lead to more discarded needles than exchange programs.

At the same time, it is important to recognize that these studies were conducted in large urban settings, which are very different from First Nations communities. Urban areas often have more disposal options, stronger waste management systems, and greater anonymity. In contrast, many First Nations communities are small, closely connected, and have limited disposal infrastructure. As described by participants in this evaluation, used needles may be discarded in shared community spaces because there are few safe and convenient places to return or dispose of them.

Taken together, both the literature and the evaluation findings suggest that switching from a distribution model to an exchange model is unlikely to significantly reduce discarded needles in remote First Nations communities (Beletsky et al., 2015).

Infrastructure-Based Solutions

Research supports infrastructure-based approaches to waste management, particularly widespread availability of sharps containers and public disposal sites. A study by Tookes et al. (2012) found that installation of public syringe disposal boxes reduced improperly discarded syringes by 40%. Similar findings have emerged from other jurisdictions implementing comprehensive disposal infrastructure (Islam et al., 2013).

For the remote First Nations communities in this evaluation, infrastructure-based solutions face logistical challenges including transportation costs, limited road access, and need for regular servicing of disposal sites. However, these challenges affect all medical waste, not just harm reduction waste. Addressing harm reduction waste management could be integrated into broader medical waste management system improvements.

Workforce Issues: Burnout and Vicarious Trauma

The challenges faced by harm reduction workers in this evaluation are consistent with findings from broader research on professionals who work with people experiencing substance use. Studies have shown that compassion fatigue, burnout, and vicarious trauma are common risks in this type of work, particularly when staff are regularly exposed to stress, loss, and trauma (Bride et al., 2007).

Studies suggest that burnout can be more common among helping professionals in small and remote communities due to factors such as isolation, limited resources, multiple job responsibilities, and blurred boundaries between work and personal life (Stewart et al., 2012). All of these factors were clearly reflected in the experiences shared by harm reduction workers in this evaluation.

Harm reduction workers also described a significant emotional burden, including regularly witnessing client struggles, relapses, and deaths. This experience is consistent with research on vicarious trauma, which refers to the emotional impact that builds over time when workers are repeatedly exposed to other people's trauma (Pearlman & Mac Ian, 1995). In small communities, where harm reduction workers may personally know their clients as family members, friends, or community members, this emotional impact can be even stronger.

Studies have identified several protective factors against burnout and vicarious trauma, including clinical supervision, peer support, manageable workloads, clear role boundaries, and access to mental health support (Maslach et al., 2001). Few harm reduction workers in this evaluation reported having access to such supports, suggesting important gaps in workforce support infrastructure.

Furthermore, studies of harm reduction workers specifically have found that training in self-care, regular debriefing, organizational support, and connection to broader professional communities can help prevent burnout (Miller & Irwin, 2006). Implementing such support for harm reduction workers in remote communities would require creative approaches including regional peer support networks and organizational policies prioritizing worker wellbeing.

Integration of Services

Participants' emphasis on the need for services beyond needle distribution reflects contemporary understanding of substance use disorders as complex conditions requiring multifaceted responses. Research increasingly supports integrated models that combine harm reduction, addiction treatment, mental health services, and social supports (Hawk et al., 2017).

Historical debates positioned harm reduction and abstinence-based treatment as competing approaches. However, recent perspectives recognize these as complementary strategies along a continuum of care (Marlatt et al., 2012). Research shows that harm reduction services can serve as entry points to treatment, while treatment services benefit from incorporating harm reduction principles (Hawk & Vaca, 2018).

For the communities in this evaluation, this suggests that strengthening connections between NDS and NNADAP programs could benefit both services. Harm reduction workers could facilitate referrals to NNADAP for clients interested in treatment, while NNADAP could support harm reduction clients not yet ready for abstinence. Such integration requires clear protocols, regular communication, and shared understanding of how the services complement each other.

Additionally, the frequent co-occurrence of substance use disorders and mental health conditions is well documented, with prevalence estimates ranging from 50-75% depending on population and conditions studied (Kelly & Daley, 2013). Research shows that integrated treatment addressing both conditions simultaneously produces better outcomes than separate, sequential treatment (Drake et al., 2008).

Participants in this evaluation emphasized need for expanded mental health services. Research supports this priority, particularly given the elevated rates of mental health challenges in Indigenous communities related to historical trauma, ongoing discrimination, and social determinants of health (Kirmayer et al., 2011). Effective integrated treatment in Indigenous contexts should incorporate cultural perspectives on mental wellness and healing.

Cultural Safety and Indigenous-Led Solutions

The evaluation findings regarding cultural considerations must be understood within broader frameworks of cultural safety and Indigenous self-determination in health services. Studies show that Indigenous-led health programs produce better outcomes than externally-imposed programs (Smylie et al., 2016).

The National Collaborating Centre for Aboriginal Health (2016) has emphasized that meaningful health system transformation for Indigenous peoples requires community control over health services. While ACW operates in partnership with First Nations communities, ongoing engagement of community members, leadership, and Traditional Knowledge Keepers in program design and evaluation remains essential.

Research on Indigenous governance of health services describes that that community-controlled programs are more likely to be culturally appropriate, trusted by community members, and sustainable over time (Lavoie et al., 2010). For NDS specifically, this

suggests the importance of ensuring that decisions about service models, locations, staffing, and policies are made with substantive community input and reflect community priorities.

Finally, attention to cultural safety is essential for ensuring that healthcare services are accessible, respectful, and effective. Cultural safety extends beyond cultural awareness or sensitivity to address power imbalances and historical factors that shape healthcare relationships (Brascoupé & Waters, 2009). Research shows that culturally safe healthcare services must address not only cultural differences but also historical trauma, systemic discrimination, and power dynamics within healthcare encounters (Turpel-Lafond, 2020).

Applying cultural safety principles to harm reduction services involves recognizing how colonization, residential schools, and ongoing discrimination have shaped community experiences of substance use and healthcare. It requires healthcare providers to reflect on their own biases, to understand historical context, and to work in partnership with communities rather than imposing external solutions (National Aboriginal Health Organization, 2008).

LIMITATIONS

Several limitations of this evaluation should be noted:

- The evaluation did not include direct interviews with service users, which limits understanding of client perspectives and experiences.
- While the evaluation included 9 communities, findings may not be fully generalizable to non-participating communities.
- Qualitative research provides in-depth understanding of experiences and perspectives but does not provide quantitative measures of program outcomes.

RECOMMENDATIONS

Policy Recommendations

1. Treat needle disposal as a system-wide medical waste issue, not only a harm reduction issue, by formally integrating NDS waste into community and regional medical waste policies.

2. Avoid mandating a strict needle exchange model as a standalone policy, recognizing that evidence does not support it as an effective solution without supporting infrastructure.

3. Embed harm reduction within broader health service delivery, so accessing supplies is not clearly identifiable as a substance-use–related service.

4. Adopt organizational policies that support harm reduction worker wellbeing, including expectations for supervision, workload management, and access to mental health supports.

5. Formalize coordination between Needle Distribution Services and NNADAP programs, recognizing harm reduction and treatment as complementary parts of a continuum of care.

6. Ensure First Nations leadership and community input are central to policy decisions about service models, locations, and program changes.

Implementation Recommendations

7. Expand and standardize sharps disposal infrastructure, including locked bins, discreet drop-off locations, and sufficient sharps containers for clients.

8. Improve biohazardous waste transport capacity, particularly for fly-in communities, by increasing shipment limits and ensuring regular, predictable pickup schedules.

9. Provide clear and consistent education to clients on safe disposal practices and available disposal locations.

10. Increase privacy-focused access options, such as home delivery, mobile outreach, discreet packaging, and flexible pickup arrangements.

11. Extend service availability beyond regular weekday hours where feasible, including limited evening or weekend access.

12. Implement community-based stigma reduction activities, using culturally appropriate messaging and involving people with lived experience and Elders.

13. Establish regional or virtual peer support networks for harm reduction workers to reduce isolation and support shared learning.

14. Provide regular opportunities for staff debriefing and supervision to address burnout and vicarious trauma.

Further Research Recommendations

15. Conduct research that includes the perspectives of service users, to better understand barriers to access, disposal practices, and service preferences.

16. Explore culturally grounded approaches to harm reduction, including how Indigenous healing practices can be meaningfully integrated into NDS.

CONCLUSION

This evaluation confirms that Needle Distribution Services are an essential part of harm reduction efforts in Sioux Lookout area First Nations communities, playing a critical role in reducing the spread of bloodborne infections and supporting people who use substances. At the same time, the findings highlight significant challenges related to privacy, stigma, medical waste disposal, workforce burnout, and limited access to broader mental health and addiction supports. Addressing these challenges requires a strategic, culturally grounded, and culturally safe approach that reflects the realities of communities, respects First Nations leadership and lived experience, and strengthens systems rather than relying on single program changes. By investing in disposal infrastructure, flexible service delivery, workforce support, stigma reduction, and integrated care, Needle Distribution Services can continue to protect both individual and community wellbeing while remaining responsive to community priorities and values.

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APPENDIX: STUDY INSTRUMENTS

Service Accessibility

1. Can you describe how needle distribution services work in your community?
2. Which specific barriers are present regarding utilization of needle distribution services in your community?
    - Are there any challenges with accessing the services? (e.g., location, hours of operation, requirement to return needles, limited supplies, etc.)
    - Does culture play a role in whether people use services? If so, please explain.
    - Does stigma around substance use affect people's willingness to use the services?
    - Are there any issues of safely disposing of used needles? (e.g., lack of access to containers, not being able to return needles privately, etc.) If so, please explain.
3. How might you think service users perceive the accessibility of harm reduction services under a distribution versus exchange model?
4. How well do you think the NDS program respects and incorporates the cultural values and practices of your community?

Harm Reduction Outcomes

5. How has the NDS program affected the health and wellbeing of service users?
    - Can you share any specific changes you have observed?
    - Are there any reasons why you think the program has not had an impact?
6. What additional support services, if any, do you think would enhance the health outcomes of people who use NDS programs in your community?

Waste Management

7. Can you describe how harm reduction waste is currently managed in your community?
8. What challenges exist regarding proper harm reduction waste disposal?
9. How do you think harm reduction waste disposal can be improved in your community?
10. Can you describe how you think a distribution versus exchange model would impact the number of needles found in public spaces?

Implementation Barriers and Facilitators for Distribution Versus Exchange Models

11. If you were given the choice to implement a needle distribution versus needle exchange program, which program would you implement and why?
    - What would be the consequences of choosing one model over the other?

- Do you think choosing one model over the other would impact the level of service utilization in your community?
- Do you think choosing one model over the other would impact the accessibility to NDS in your community?
- Do you think choosing one model over the other would impact the satisfaction that service users have with the NDS in your community?
- Do you think choosing one model over the other would impact the amount of harm reduction waste found in public spaces?
- Do you think choosing one model over the other would impact the level of stigma that is attached to substance use in your community?

Recommendations for Improvement

12. If you could suggest any improvements to the needle distribution services, what would they be?

- How might we be able to increase service utilization of needle distribution services among people who use substances?
- How might we be able to improve the accessibility to needle distribution services for service users?
- How might we be able to reduce the amount of harm reduction waste found in public spaces in your community?
- How might we be able to improve the cultural alignment of needle distribution services in your community?
- How might we be able to reduce the stigma associated with accessing needle distribution services in your community?

13. If there is one thing you could change about needle distribution services in your community, what would that be?