



Needle Exchange Services in Knowsley:

An investigation into the needs and experiences of staff and service users

Geoff Bates, Marissa Pendlebury, Madeleine Cochrane, Adam Mackridge

July 2015

Contents

Executive Summary.....	1
1 Introduction	5
2 Methodology.....	7
3 Results.....	8
3.1 Survey findings	8
3.2 Qualitative findings	9
4 Discussion.....	18
5 Conclusion.....	22
6 Recommendations	23
7 References	24

Executive Summary

This work was commissioned by Knowsley Council to inform the development of needle exchange (NEX) services in Knowsley and to ensure that they meet the needs of people who inject drugs (PWID) locally. The views and experiences of both service users and staff from drug services and pharmacies offering needle exchange services in Knowsley were sought regarding the extent to which NEX are meeting the needs of PWID including their perceptions regarding the support available, NEX accessibility and service delivery. Findings are considered in the context of NICE guidelines on the optimal provision of needle and syringe programmes in England.

Methods

Five NEX services in pharmacies (n=3) and specialised drug services (n=2) in Knowsley, Merseyside, were eligible to take part in the study. Service users were asked to complete a survey and take part in an interview primarily examining their perceptions and experiences about accessing NEX services. Service staff were asked to take part in an interview examining their experiences of providing a NEX service and engaging with PWID.

Key findings

In total, 18 service users completed a survey and 30 interviews were completed with services users (n=18), NEX staff (n=11) and one former service user. Key findings from the survey and interviews with clients and staff included:

Service accessibility

- Generally, service users responded positively to questions about their experiences of utilising NEX services in Knowsley and acknowledged how these had improved greatly over the past

decade. Some concerns were raised however about service location and privacy during the transaction, but among a minority of respondents.

- Location and opening hours are important. Where NEX services are out of town centres this may raise accessibility difficulties, particularly amongst service users without access to their own transport. Service users emphasised the importance of having access to services outside of normal working hours, including weekends and evenings, and it is important that where services are available at these times they are promoted effectively.
- Service users identified the specialist drug services in particular as being positive environments where they typically felt comfortable and had access to useful facilities.

Equipment provision

- Most service users were satisfied with the range and provision of equipment available to them, although it was raised that wider availability in pharmacies of needles for injecting into the groin would be beneficial. Most service users indicated they prefer to choose their needles and equipment, rather than being given standardised packs. However some staff were concerned that important equipment is not collected as part of the transaction when it is not routinely provided in packs. There were some differences amongst NEX staff regarding decisions on the provision of large amounts of needles for secondary distribution.

Staff and service user engagement

- Positive relationships between staff and service users were perceived as crucial in order to promote service user engagement, disclosure of personal information and increased willingness to access additional support. Most service users expressed high levels of satisfaction with staff members, especially in specialised drug services. Such relationships flourish when staff are viewed as trustworthy, friendly, professional, empathetic and non-judgemental, and support from ex-service users was noted as particularly valuable.
- A minority of service users suggested they were dissatisfied with the attitudes of staff based within pharmacy exchanges. Staff, especially in pharmacies, felt they would benefit from more training in order to confidently provide suitable advice, distribute equipment appropriately, make referrals, and feel comfortable talking about personal information with people who inject drugs. Pharmacy staff noted that the nature of the time-pressured transaction may limit engagement with service users.

Privacy and stigma

- Lack of privacy was raised as a concern by some service users in both pharmacy NEXs and specialised drug services, and can increase perceptions of being negatively judged by others, while ultimately postponing or deterring access to NEXs.
- Some concerns were raised about perceived judgemental attitudes of staff in pharmacy NEXs towards people who inject drugs and of steroid users accessing services towards people who inject psychoactive drugs.
- Concerns about both privacy and stigma were linked to brief transactions and limited engagement between service users and staff, particularly in pharmacy NEXs.

Image and performance enhancing drug users

- There is a growing proportion of steroid users accessing NEXs in Knowsley, the majority of whom may be reluctant to view themselves as 'drug users' and access opportunities for

additional support with their substance use and health. However, having a NEX service located nearby a gym may offer a positive way of engaging more steroid users.

BBV testing and needle sharing history

- Amongst the survey sample, around half sample had ever undergone testing for BBVs (HIV, hepatitis B and hepatitis C). Uptake of vaccination for hepatitis B was high. Amongst this small survey sample (n=18) rate of BBV diagnosis included HIV (28%), hepatitis B (22%) and hepatitis C (44%).
- Amongst the same sample over half of participants (61%) reported having ever used a needle that had already been used to inject another individual, including nine individuals (50%) who had done so in the previous month. Of those nine, six had injected with a needle used by someone else on over 10 occasions in the past month.

Conclusion

Findings from the current study suggest that NEXs, in pharmacies and specialised drug services, are accepted modes of harm reduction for PWID. By drawing upon current NICE guidelines, and suggestions for improvement from the current study, NEXs have the potential to offer additional forms of tailored support that contribute to promoting harm reduction and benefits for health and wellbeing. Ultimately NEXs ability to positively engage service users and reduce risky behaviour depend on several factors, including convenience of location, opening hours, efficiency of exchange process, and suitability of equipment provided. Increasing their provision and accessibility may further facilitate positive attitudes and experiences among staff and service users, as well as reduced risk behaviours and stigma. Furthermore, improvement of staff training and monitoring of services users alongside better integration of support services, especially in pharmacies, are likely to be beneficial.

Recommendations

These recommendations are based upon findings from this study in line with recommendations made by NICE for the provision of needle and syringe programmes (available at:

<https://www.nice.org.uk/guidance/PH52/chapter/1-Recommendations>)

1. Work with service users to identify strategies to help maintain their privacy and make them comfortable in the needle exchange. This process should involve consultation with current service users regarding their concerns and priorities. Creative solutions should be sought to help address any issues, with possible solutions including use of existing private areas (e.g. consultation rooms), use of separate entrances (where possible), and use of agreed procedures to reduce the need for open questioning (e.g. an order slip for items that includes all of the information required for the transaction and which can be completed prior to entering the pharmacy).
2. Allow service users to select from a consistent and wide range of needles and equipment in all NEXs to meet differing needs including injecting into the groin. Develop a policy around the provision of needles for secondary distribution to ensure a consistent approach from staff. Service users wishing to undertake secondary distribution should be able to do this, and asked to encourage service uptake amongst those they pass equipment to.

3. Providing educational information for service users to take away along with their needles and equipment is an important approach to harm reduction. It should be ensured that all NEXs, particularly those within pharmacies, have sufficient amounts of harm reduction and education materials and ensure that staff recognise the importance of making these available and promoting them to service users.
4. Increasing access to 'out of hours' services, including at evenings and at weekends, improves access to needles and equipment. NICE guidance (NICE 2014, recommendation 6) highlights options for expanding availability of equipment including the provision of out-of-hours vending machines and encouraging pharmacies that are open out-of-hours to provide a needle exchange service. Where a coordinated approach between different outlets to out-of-hours opening is developed, this needs to be promoted effectively to service users to ensure awareness of different service availability.
5. It is important to improve engagement with steroid users so that these individuals, who are increasingly accessing NEXs in Knowsley, receive the support with their substance use and health. Ensure staff have information and access to training on image and performance enhancing drugs to enable them to confidently and effectively engage with the population, and feel confident asking them to register with the service (to improve access to full screening options). Where service users resist registering with the service, staff should encourage them to seek screening within the primary care system.

Improving relationships between Huyton drug service and the gym situated close by is likely to be beneficial and help to engage with this population and allow opportunity for discussion with gym staff or members regarding methods of service delivery. For example, this may include a specialist service for this population offered outside normal working hours, or in an outreach setting. Also, this relationship should be used to help support pharmacies providing NSP services to users of performance enhancing substances (e.g. through offering opportunities to pharmacy staff to find out more about the realities of use for these substances).

1 Introduction

People who inject drugs (PWID) constitute a vulnerable group who are at an elevated risk of contracting and transmitting several blood borne viruses (BBVs), including HIV, hepatitis B and hepatitis C (Mathers et al., 2008). This can transpire through various risk behaviours, such as needle reusing and sharing needles, and unprotected sex – activities that have declined in recent years but still remain a significant problem (Public Health England, 2014). PWID are also more likely to encounter acute bacterial infections, following poor care of injection wounds, which alone cost the NHS around £47 million per year (National Treatment Agency, 2010). Furthermore, PWID are often exposed to socioeconomic inequalities and poor physical and mental health. Such experiences among PWID are exacerbated by unemployment, inadequate nutrition, stigma, social isolation and crime, leading to morbidity and mortality (Galea & Vlahov, 2002; Richardson et al., 2013; Stein & Sobata, 2001).

Injecting drug use in England

There are estimated to be between 8 and 21 million PWID worldwide, with approximately 3 million having HIV and 10 million having hepatitis C virus (HCV; Mathers et al., 2008). In England, there are around 93,400 PWID, albeit prevalence seems to vary across regions, class, and according to the type of drug being used (Hay et al., 2013). In Merseyside there is evidence to suggest that the number of individuals injecting opiates and stimulants, such as heroin or cocaine respectively, is decreasing (McVeigh et al., 2003; Whitfield et al., 2014). Concurrently, injectors of image and performance enhancing drugs (IPEDs), such as anabolic steroids, are increasing (Iversen et al., 2012). As a public health challenge, injectors of IPEDs tend to engage in risky behaviour, such as sharing equipment, yet don't necessarily identify themselves as being 'typical' drug users, i.e. those taking psychoactive substances like heroin or cocaine, and may need additional support (Hope et al., 2014). Consequently, different service users are likely to have unique needs for equipment, information and approaches to engagement. It is therefore important to understand how PWID are able to effectively, or ineffectively, access and utilise appropriate harm reduction services, including Needle Exchange Programmes (NEXs).

Needle exchanges in England

In England, NEXs are provided by specialised drug services, as well as increasingly in local pharmacies, and are credited for their provision of safe and clean equipment to PWIDs. While their practices are informed by NICE guidelines (NICE, 2014), NEXs aim to encourage PWID to reduce risky behaviours and avoid dangers of overdose. From a public health perspective, NEXs further aim to minimise harm to the general public, including health professionals, who may be at an increased risk of infection when being exposed to contaminated needles and unprotected flesh wounds (Palmateer et al., 2010).

In Knowsley, needle exchange services are provided in two drug treatment services sites, operated by CRI, and at three community pharmacies. In 2013-2014 in Knowsley, 611 visits by PWID to needle exchanges were recorded, the majority of which accessed pharmacy NEXs ($n = 528$) compared to specialised drug services ($n = 83$; Whitfield et al., 2014). However more up to date information

provided by CRI reports that 163 NEX transactions occurred at the two drug treatment sites in the first quarter of 2015, suggesting that data regarding the number of transactions may have previously been underreported.¹

NICE guidelines informing the provision of needle and syringe programmes (NICE, 2014) include aims related to increase the proportion of PWID who have convenient access to NEXs at all hours. They further recommend that NEXs, when possible, provide tier 3 level support. This can involve providing PWID with, or referring them to, additional support services such as drug treatment, drug education, counselling, and self-help groups. As part of a broader commitment to promoting wellbeing, some NEXs provide additional opportunities to access skills and employment training, as well as housing and financial advice (Palmateer et al., 2010). Overall, well-resourced NEXs can offer several holistic ways to address drug-related problems and the deeper rooted issues and inequalities that PWID frequently experience.

Nevertheless, although there is a fair amount of evidence to suggest that NEXs are cost-effective interventions that help to reduce the transmission of BBVs (Jones et al., 2010), a recent ‘review of reviews’ characterised current evidence as ‘tentative’ (Palmateer et al., 2010). Effectiveness of NEXs can vary significantly depending on several physical, psychosocial and socioeconomic factors. In particular, service user outcomes may be largely influenced by NEXs’ location, opening hours, funding, provision of equipment and additional support services available. They may also be affected by the unique needs of each PWID, as well as their interrelationships with staff and other service users attending NEXs. For instance, less trusting relationships with staff in pharmacies can act as a barrier to further uptake of support services (Jones et al., 2013).

Previously it has been identified that not all service providers are fully implementing NICE guidelines or meeting the needs of specific service users, with a recent survey of NEX providers concluding that *“despite the indication that PH18 guidance has generally been widely implemented in one form or another, there remains clear variability in commissioning policy and practice across England”* (Bates et al., 2014). As an example, in Knowsley, individuals who inject IPEDs make up the largest proportion of the PWIDs (62.9%) at NEXS, yet nationally lack of health commissioning for this group prevents them from having equitable access to tier 3 levels of additional support (Bates et al., 2013). Updated NICE guidelines (NICE, 2014) recommend offering a diverse range of suitable equipment, tailored information, and appropriate support services to diverse groups of PWIDs, notably injectors of IPEDs. Furthermore, compared to specialised drug services, pharmacy NEXs appear to be less successful at fully implementing NICE guidelines, especially those relating to planning, needs assessment and community engagement (Bates et al., 2014).

Aims of the present study

The present study was commissioned to inform the development of NEX services in Knowsley and to ensure that they meet the needs of PWID locally. The views and experiences of both service users and staff from drug services and pharmacies offering needle exchange services in Knowsley were

¹ It is unclear whether the difference in NEX transactions is due to under-reporting in 2013/2014 or an increase in PWID attending services. CRI should ensure that the recording and monitoring of transactions is consistent and accurate.

sought regarding the extent to which NEXs are meeting the needs of PWID including their perceptions regarding the support available, NEX accessibility and service delivery. Findings are considered in the context of NICE guidelines on the optimal provision of needle and syringe programmes in England.

2 Methodology

Setting

The five needle exchange sites in Knowsley, Merseyside, including three pharmacies and two specialist drug services operated by CRI were invited to participate in the study. All five sites agreed to participate by distributing the client survey, and four sites (two pharmacies and the two drug services) agreed to host site visits by the research team. Copies of the survey were provided by the research team to each of the five needle exchanges.

Participants

Pharmacy staff were asked to promote the survey with clients and to encourage participation during the six week study period from mid-January to the end of February. Upon attending the needle exchange, clients were asked if they would complete a survey and return it to the pharmacy or drug service. Interviews were also carried out during visits with any needle exchange clients present who agreed to participate. Clients were offered a £10 Love2Shop voucher to thank them for their participation and as an incentive for them to agree to an interview. All needle exchange clients were eligible to participate in the survey and interviews. During site visits, staff in the needle exchange were invited to participate in an interview with a researcher, with additional interviews taking place by telephone for staff who were unavailable during the visit.

Data collection tools

A questionnaire was designed to capture information about the characteristics of needle exchange clients and their experiences of the needle exchange services in Knowsley and to explore their perceptions about service provision. A semi-structured interview schedule was designed to explore these issues in more detail. For service staff, a semi-structured interview schedule was designed to explore staff experiences and perceptions about needle exchange service provision.

Analysis

Survey data was inputted into SPSS and frequency tests ran for all outcomes. Interviews with both needle exchange staff and clients were transcribed and analysed in NVivo. Two researchers separately analysed the qualitative data and identified themes, which were then compared and a final list of themes constructed. This list of themes was discussed with a third researcher, who was consulted over any disagreements between the researchers.

3 Results

3.1 Survey findings

In total, 19 surveys were returned to the research team by staff all of which were completed in the drug services by service users who accessed the needle exchanges in both pharmacies and the drug services. One participant was excluded as they were not a current injecting drug user, leaving a total of 18 participants. Due to the small number of respondents and the fact that service users accessed multiple needle exchange sites, no comparison between the different sites was possible.

Table 1: Satisfaction with needle exchange services

	Very satisfied (%)	Quite satisfied (%)	Neither satisfied nor dissatisfied (%)	Quite dissatisfied (%)	Very dissatisfied (%)
Location	33	22	6	28	11
Opening hours	39	44	17	-	-
Staff attitudes	67	33	-	-	-
Staff knowledge	33	44	11	-	11
Privacy	56	17	-	17	11
Availability of needles	67	33	-	-	-
Availability of other injecting equipment	72	11	11	6	-
Information provision	50	28	22	-	-

Satisfaction with NEXs

In general, participants (n=18) indicated high satisfaction with the NEXs in Knowsley, with the majority expressing satisfaction with each of the service criteria presented. Findings (Table 1) suggest that some clients were not satisfied with the location and privacy of services however, but participants did not expand upon their reasons for this.

Obtaining and disposing of needles

The majority (78%) of participants reported that they had found it easy to obtain clean needles in the previous month. The majority of participants collected clean needles in the pharmacy needle exchange (n=12, 67%) or drug service (n=13, 72%), with small numbers reporting obtaining needles from a friend or partner (n=4, 22%) or other injectors (n=3, 17%). Similarly, the most commonly reported places to dispose used needles were at the drug service (n=10, 56%) or pharmacy (n=10, 56%). A minority of participants (n=5, 28%) reported disposing used needles in rubbish bins.

Over half of participants (n=11, 61%) reported having ever used a needle that had already been used to inject another individual, including nine individuals (50%) who had done so in the previous month. Of those nine, six had injected with a needle used by someone else on over 10 occasions in the past month.

Service user drug use

All participants injected heroin and over half (n=10, 55%) reported injecting crack, and heroin and crack together. In addition to injecting opiates, smaller numbers reported injecting cocaine (n=3) and anabolic steroids or other bodybuilding drug (n=2).

Service user health

The majority (n=16, 89%) of participants were receiving drug treatment. Rates of testing and diagnosis for hepatitis B, hepatitis C and HIV are reported in Table 2. Just over half participants reported ever been tested for blood borne viruses, with relatively low rate of testing within the past 12 months. Rate of hepatitis B vaccination was reported to be high (n=16, 89%). Data provided by CRI suggests that rates of hepatitis B vaccination acceptance, commencement and completion increased markedly during April 2014-April 2015. CRI data on rates of hepatitis C testing amongst all new clients who inject (approximately 55%) is consistent with this survey data.

Table 2. Rates of testing uptake for blood borne viruses

		Test status		Diagnosis status	
		n	%	Positive n	%
HIV	Yes (past year)	3	17	5	28
	Yes (>past year)	6	33		
	No	8	44		
	Don't know	1	6		
Hepatitis C	Yes (past year)	4	22	8	44
	Yes (>past year)	6	33		
	No	7	39		
	Don't know	1	6		
Hepatitis B	Yes (past year)	4	22	4	22
	Yes (>past year)	6	33		
	No	8	44		

Half of participants had been sexually active in the past month, with no participants reporting more than two sexual partners in that time period. Condom use during every sexual encounter was reported by five (28%) participants and over half of participants (n=11, 61%) reported ever receiving sexual health information in their needle exchange service. Rates of diagnosis for BBVs are reported in Table 3, which shows that nearly half of participants were diagnosed with hepatitis C.

3.2 Qualitative findings

In total, 19 clients and 11 members of staff were recruited at the needle exchange sites to take part in interviews. Of the 19 client participants interviewed all with the exception of one were recruited at the two drug treatment services but typically accessed the needle exchange at pharmacies as well as the drug service. The majority (90%, n=17) of participants were male and all reported a drug history of injecting opiates (heroin) and/or crack cocaine. Despite implementing additional recruitment strategies, no steroid users took part in the evaluation. All five drug service staff, plus one peer mentor, were interviewed at Huyton CRI and five pharmacy staff were recruited across two pharmacies.

Service user characteristics

Service users participating in the study comprised of individuals who were long term users of psychoactive drugs, including heroin and crack, although most staff and service users reported that NEXs are being increasingly used by people who inject anabolic steroids. Staff at Huyton CRI and Kirkby pharmacy estimated that at least two thirds of their service users are injecting steroid users. Compared to people who inject anabolic steroids it appeared as though psychoactive drug users accessing NEXs are more likely to be middle aged and unemployed, with chaotic lifestyles, poor socioeconomic status and have limited access to their own transport. Steroid users were described as being predominantly young males, and staff felt that such individuals may require more tailored advice in NEXs about safe injecting practices. Psychoactive drug users were referred to as being middle aged and a mix of both male and female, who regularly access NEXs. Alternatively, steroid users were described as using NEXs intermittently, depending on their training and performance schedule.

No staff reported coming across anyone under the age of 18 or who identified themselves as LGBT, homeless, a sex worker or using novel psychoactive substances (NSP), although they were aware these groups may be accessing their service. There was recognition of a small minority of females using tanning agents; however, monitoring of specific demographic information of service users, including drug being used, was perceived as difficult. This was especially in pharmacies where there is a quick exchange procedure that only enables staff to obtain service users' initials and dates of birth.

Accessibility of NEXs

Perceived accessibility of NEXs was influenced by several physical and psychosocial factors, including service geographical location, opening times, and efficiency, as well as individual differences in the type of drug being injected, financial circumstances, physical health and socioeconomic status. Multiple service users suggested that needing to travel long-distances to NEXs was a significant barrier to accessibility, particularly among those not having sufficient financial resources or access to suitable transport. For instance, some service users referred to not accessing NEXs due to poor health, limited finances, and occasions of negatively evaluating the cost of travelling to NEXs against the cost of buying more drugs, which sometimes led to engagement in risky behaviours, such as sharing needles.

Male service user – specialised drug service: The location is a bit off key like because it's a bit of a way from everything with it being on an industrial estate, you know, I'd come into the service a lot more often only where it is, that deters me from coming in [...]. That could do with being changed because you know, everybody doesn't have the ability to get here, so I think local chemists should have a needle exchange. There's none in Huyton that I know of and there's none in Whiston either.

For most service users, NEXs located in the town centre were preferable, with pharmacies being cited as more conveniently accessible by public transport. However, accessing specialised drug services was sometimes preferred, since travelling to a more remote area reduced the risk of being recognised by family, friends, or key workers. A large proportion of service users noted that a significant barrier to accessing NEXs was limited weekday opening hours, especially among

individuals with additional responsibilities, such as full-time employment. The opening hours of NEXs in Knowsley are detailed in Table 3, indicating some midweek evening and weekend availability. It is important that service users are made aware of 'out of hours' openings. Both service users and staff suggested that NEXs, notably specialised drug services, should consider increasing provision of local NEXs and extending opening hours to obtain equipment later into the evening and weekends.

Table 3. Opening times of NEXs in Knowsley

	Huyton Drug service	Kirkby drug service	Newton Pharmacy	Boots Pharmacy (Halewood)	Rowlands Pharmacy (Weovale)
Monday - Friday	9:00am – 5:00pm Wednesday late night till 7:00pm	9-00am – 5:00pm Tuesday late night till 7:00pm	8:00am – 6:30pm	8:30am – 6:30pm	8:45am – 6:30pm (Thursday open till 6:00pm)
Saturday	Once every 2 weeks from 9:00am – 5:00pm	Once every 2 weeks from 9:00am – 5:00pm	9:00am – 8:30pm	8:30am – 12:00pm	9:00am – 1:00pm
Sunday	Closed	Closed	10:00am – 8:30pm	Closed	Closed

Male service user – pharmacy: Location wise it's definitely got to be Town Centre, it's got to be, it cannot be anywhere else because the Town Centre is the main hub of any community the Town Centre is the main hub so you've also got reason to be here so then people aren't thinking then "oh there's that smack head he must be going the [...] needle exchange.

Male staff – specialised drug service: I mean it's a double edged sword, the location can be - because we aren't the easiest building to find - maybe that can go against some people who use other exchanges even well out of the area, but some people come here because we're hard to find.

Male service user – pharmacy: [When I am at work] I have no other way of getting needles. I cannot send people in for mine; I can't say to my family can you go and pick my needles up [...] so that's something that should be looked at.

While pharmacies were preferred for their convenient location and longer opening times, efficiency of service provision in specialised drug services was perceived as an advantage over feeling less prioritised than the general public in pharmacies. Whereas psychoactive drug users were noted by staff as preferring to access specialised drug services, usually in the morning, steroid users were perceived to prefer to attend pharmacies, often later in the day following accessing the gym or after work. Steroid users were further described by staff as not regarding themselves as 'drug users', due to perceiving stigma attached with this label, which acted to diminish their willingness to engage with NEXs. Yet, staff from Huyton drug service noted that being located nearby a gym and having

positive relationships with gym staff significantly increased the number of steroid users accessing their NEX.

Provision of equipment

Most service users were satisfied with the diverse range of equipment available at NEXs. Depending on type of drug being used, equipment provided included: needles, syringes, citric acid, wipes/swabs, water, spoons, sharps bins and, sometimes, condoms. There was reference by staff, more notably in relation to pharmacies, to occasions where there had been insufficient equipment available, such as certain needle sizes or large enough packets of citric acid. The reasons for this were unclear, but one member of staff raised concerns around the process of restocking equipment that may lead to shortages.

The provision of a choice of needles and equipment (mostly in drug services) was the preferred method of distribution by service users, as opposed to standardised packs (mostly in pharmacies), as it was seen to promote autonomy and ability to tailor equipment to personal needs. It was also perceived by both staff and service users as more cost-effective than standardised packs that usually involved over packaging and wasting equipment.

Male staff – pharmacy: Well I think there's a good range of products that they can select from, which is really useful. I like the way it's not already in one big pack which could be wasted. Everything is sort of offered separately, so the user can select the particular lines that they really need.

Some service users found that pharmacies mainly stocked 'all in one' needles, which are unsuitable for drug users who inject into the groin. There was some disagreement from both service users and staff on whether foil was allowed to be provided along with injecting equipment. Furthermore, one staff member from the drug service was concerned that some drug users continued to use household spoons rather than those provided by NEXs, while a member of the pharmacy staff felt around half of their service users did not always obtain equipment necessary to help maintain hygiene, such as the swabs, citric acid and the disposal bin.

There was reference to service users, notably steroid users, who took more needles and equipment than necessary for themselves to share among their peer group (secondary distribution). Staff perceptions regarding this behaviour were mixed and there was no clear understanding about what related policies needed to be adhered to. Nevertheless, providing more equipment was generally regarded as preferable due to the belief that it reduced the likelihood of risky injecting behaviour among other PWID who are not yet ready or able to access NEXs. Rather than a specific policy being in place, the amount of equipment provided appeared to depend upon the personal discretion of staff in relation to each service users' unique circumstances.

Male staff – specialised drug service: You're better off to have people with more needles than less needles so they're not washing them out, but people want them to come back in instantly, bring the returns back and stuff like that, but I actually think it's a safer practice by actually giving them a few in case they're lending them out to their mates and stuff like that.

When service users referred to equipment disposal, there were widespread negative attitudes expressed about other PWID who did not return used needles, especially among long-term users of

NEXs. One pharmacy staff member also mentioned concerns over how their needle disposing site needed to be more regularly cleared as it frequently overflows, thereby resulting in a contamination hazard.

Stigma, confidentiality and privacy

The majority of service users, whether a specialised drugs service or pharmacy exchange, referred to experiences of limited privacy and confidentiality, as well as negative judgement by others. These encounters had an adverse impact on service user engagement and their ability to build trusting relationships with staff. There were also fears about being negatively judged by other service users, even those with similar drug-related problems. In a similar vein, some service users felt that new staff in pharmacies were more judgemental and not adequately trained or knowledgeable enough to understand how to respect their privacy. There were also recurring concerns from both staff and service users at specialised drug services about lack of privacy at both drug services. Some service users felt uncomfortable with the location of the NEX rooms, as they felt that those in the waiting room who were not accessing the NEX would know they were using the service.

Male service user – specialised drug service: Well yeah, the other people do [judge me] cos people like who don't hit up they just smoke they go oh there dirty bastards they hit up do you know what I mean and stuff like that.

Service user – specialised drug service: I just want a bit more privacy, you know what I mean, and it is embarrassing isn't it? You know sometimes, well you are embarrassed. I still get embarrassed.

Even when a private room was specifically allocated for NEXs at specialised drug services, service users felt as though their confidentiality was violated. In particular, by accessing one designated room for NEX, this increased the likelihood that service users would be easily recognised as having a drug-related problem. Furthermore, although most pharmacy staff appeared to be accepting of PWIDs, while understanding the importance of NEXs, some service users still felt embarrassment and shame when accessing NEXs.

Male service user- specialised drug services: Because of where we are, when we enter the door, soon as we enter the door and we come in here, the services on the left hand side for the needle exchange, now that's not the best position to put a needle exchange, straight away as soon as you walk in you've got the foyer to the right of you so therefore everyone can see the door to the needle exchange. Now I know it's confidential and you don't have to give your name in, as soon as you enter that room on the left then everybody knows it's a needle exchange.

To protect confidentiality and avoid stigma, some service users described how they would wait until the NEX was empty or not busy until accessing it, sometimes leaving them without clean injecting equipment for extended periods of time. Suggestions for improving privacy included accessing NEXs via a more discreet entrance, possibly at the side of the building or around the back or through the

use of an intercom system, in addition to accessing a consultation room that was used for other health services apart from NEX.

Male service user – specialised drug service: Sometimes I have come in for an exchange and people who are in the waiting room don't know that I'm injecting, so I will put it off for a couple of hours and then if I can't get back it can be a bit awkward sometimes. I don't want people really seeing me going in that room.

Male service user – specialised drug service: It would be better if it was a bit more discreet yeah, you know if they took you into like say if there was loads of rooms in there but everyone had to go in there but then they wouldn't know what room you were going [...]. If we had the intercom system, we could buzz it with no one around us and we could say exchange. They know what you want, you're dealt with, and you go out.

Issues around privacy and stigma were noted by one pharmacy staff member as being more salient for steroid users, who were described by staff as preferring to access pharmacy based NEXs where they could 'disguise' themselves among members of the general public accessing other health services.

Relationships with staff and other service users

Most service users expressed high levels of satisfaction with staff members, especially those in specialised drug services. Building positive relationships between staff and service users was recognised, by the staff and service users from the pharmacy and drug services, as being important in terms of promoting engagement and disclosure of personal information, as well as enhancing motivation to access additional support. Developing positive relationships necessitated staff to build trust, be helpful, provide clear information, maintain confidentiality, give respect, display empathy, and be willing to listen without negative judgement.

Positive relationships flourished when there was regular contact with staff who were familiar to service users, while perceiving an ideal balance of staff friendliness and professionalism. This type of interaction was reported by the drug service staff to be more common in their service, where there was more time and resources available to discuss personal issues. Favourable staff members were described by service users as being 'genuine' with real life experiences of drug use. Consequently, ex-service users of the specialised drug services could become peer mentors and positive role models. In opposition, service users did not respond well to staff that seemed judgemental, condescending, inexperienced, or as though they were 'reading from the textbook'.

Female Service user – specialised drug service: It's just the support and the help and that they're just there. In the other the staff are like, I'm the client and you're the user, where here (the drug service) it's not like that. It's like they're your friend but they also, they guide you in the right way.

Male service user – specialised drug service: Compared to a pharmacy, the people who actually give out the syringes [at specialised drug services] are usually more trained, more experienced, are aware of drug use, possibly less judgemental.

Some pharmacy staff noted that having regular service user-staff interactions helped to promote positive relationships and an efficient exchange process. However, there was not always enough staff or time available to regularly meet with the same service users. Furthermore, some pharmacy staff felt that the efficient exchange they provided limited accommodation of more in depth discussion with service users, while one staff member commented they felt nervous about talking about personal issues, notably with those of the opposite sex.

Male staff – pharmacy: We always do have our regulars we see them week to week month to month, we have a fabulous relationship. Even before they come in they know exactly where to go where the serving hatch is which is a private area.

Female staff – pharmacy: Like some people come in and you can see they feel a bit like uncomfortable they might be a little bit embarrassed sort of thing so I just try and do it as quickly as I can [...]. If I feel uncomfortable I tend to get a senior because I have to use my judgement to a certain line and sometimes I don't like talking in depth with a male person.

Service users suggested that more action needs to be taken around reducing stigma and promoting equality between different service users, as the stigma attached to being a psychoactive drug user often led to such individuals being harassed by steroid users.

Male service user – specialised drug service: Yeah they come in the foyer, steroid users. Sometimes it does cause conflict because they won't come in because they are saying dirty smack heads cos they smell and they stink, and they're car robbers. It is wrong, cos they come in and it does get peoples backs up it does.

Provision of additional services and facilities

There was diverse provision of additional support, especially in specialised drug services. These predominantly involved education, onsite testing for BBVs, as well as referrals to medical professionals who could provide advice around drug taking and sexual health. Service users and staff showed high levels of satisfaction for the additional support they had access to, particularly when referring to specialised drug services. Service users additionally endorsed how NEXs had vastly improved over the last decade, and provided regular updates regarding opportunities for service users to undertake training, further education and skills-related courses. Some service users felt that these opportunities could provide the 'outlet' they needed, while helping them to build new connections, self-confidence and hope for recovery.

Specialised drug services, more so than pharmacies, were described as providing comprehensive education materials, including posters and leaflets on injecting drug use. Drug treatment service staff are encouraged to provide harm reduction material to service users, although clarification to staff around this policy may be required as one member of staff suggested that providing literature was restricted due to cost, which does not reflect CRI policy.

Male staff- specialised drug service: We do have leaflets and information, although they're really expensive, so we're kinda, we can't give them out maybe as frequent as we'd like really.

A pleasant and engaging environment was created, more so in specialised drug services when free food, drink, computer facilities and comfortable communal areas were made available, allowing service users to feel welcome and like valued members of society. Such provision was mainly utilised by service users who identified themselves as being in need of support, as opposed to those in employment.

Male service user – specialised drug service: You can come in, sit down and have a cup of coffee and just socialise. Previously it was like a waiting room, they had an office with the receptionist behind a screen. It was really impersonal, so the way they have for it now is much better. They have got a room such as this where people can have meetings, group discussions and whatever. They also run other things like photograph or computer lessons.

Staff and service users perceived additional services as operating more effectively when they were accessible onsite, and also when there was smooth integration between different services. Onsite support also helped to ensure that service users were referred to appropriate services while being better able to have their progress monitored.

Male service user – specialised drug service: So that's why I think we are getting a lot more benefit now because it's an integrated system rather than just having one drug unit, one alcohol unit.

For service users accessing offsite support services, more so in pharmacies, the procedures used for referral were noted as being too informal and ineffective.

Another topic of concern was the lack of additional support perceived to be available to steroid users. Some drug service staff reported that they were not permitted to offer access to services such as BBV testing, nurse led health checks and vaccinations to steroid users who accessed the NEX, which they were able to offer other clients who were receiving ongoing treatment. Consequently, some staff felt frustrated and perceived that such lack of provision was unjust and inequitable. It is important to point out that CRI policy does not restrict the offering of interventions to steroid users, but all service users must be registered with the service in order to access support such as BBV testing and health checks, as it is essential that records are kept and that people can be contacted following tests². There is a need to increase engagement with people who use steroids to increase the number who are registered with the service, and who will therefore have access to this further support. Staff advocated that by gaining access to additional support in the same way as psychoactive drug users, this may enable steroid users to feel part of the drug using community, thereby enabling them to engage better with NEXs.

² The Service Manager offered further explanation on this point: "The needle exchange service offers harm reduction advice and provides clean needles. To access this service it is not a requirement that the client registers with the service or even provides their full name and contact details. In order to offer further health services such as screening or vaccinations the patient would need to register with the service as records of these interventions need to be kept".

Male staff – specialised drug service – some (steroid users) will come in and say maybe they want their blood pressure taken and I want to see a nurse, we have to say no. That's the bit I don't like.

Male staff – specialised drug service: Obviously the steroid users we are missing out on, you know, where people who are injecting heroin, we can get them in, do a health assessment on them. We can't with steroid users because they're not in treatment with us. I think we're doing half a job, we're giving someone injecting equipment but we can't take their blood pressure, or offer a BBV screening or Hep B vaccinations, yet we're happy to give them needles. I think we're doing them a disservice.

Knowledge and attitudes of staff

Service users were generally satisfied with the knowledge of staff, alongside the information and additional educational materials they provided, especially in specialised drug services. Most staff also referred to positive attitudes about the utility of NEXs as an effective public health intervention with wide scoping benefits beyond service users, and were therefore very willing to go to extra lengths to provide service users with appropriate information and advice when they felt competent enough to do so.

Service users perceived that staff at specialised drug services were doing all that they could to support them and were knowledgeable and empathetic about what life as a drug user entails. Comprehensive training and having personal experience in the area at specialised drug services enabled staff to feel more confident about giving advice to service users, while helping to diminish negative attitudes towards PWIDs. Conversely, although some pharmacy staff appreciated that they had access to routine training procedures, many thought that this was not comprehensive enough and did not feel adequately trained to provide appropriate advice, especially to IPED users. Both the drug service and pharmacy staff expressed a desire to access updated or further training on providing equipment, advice, and referrals, albeit this option was not viewed as realistic for all services due to limited funding, staffing, and time limitations in pharmacy NEXs.

For staff the identification of vulnerable individuals, such as sex workers and IPED users in need of advice and additional support, was limited by how they often presented themselves as 'normal'. However, staff in specialised drug services appeared more confident at identifying service users in need of more advice and additional support. They also appeared more knowledgeable about their connections with a diverse range of external agencies, for example housing associations, the walk in centre and mental health services that they could refer service users to.

Male staff – specialised drug service: All the workers here....if they're in crisis you're straight on it, you help people who are in crisis, it's just the way they present themselves. They would be flagged up straight away. So we can signpost them to whoever they need. But yeah, we've got like housing associations, you know, the mental health team we've got, if we feel like they need signposting to anywhere.

4 Discussion

In the current study, we were able to explore issues faced by PWID when accessing NEXs, as perceived by service users and staff from pharmacies and drug services in Knowsley, Merseyside. The findings from the study highlighted that in general, PWID in Knowsley reported high levels of satisfaction with the NEX services available to them but comments from staff and services users alike indicated areas for service development and improvement. Additionally, although numbers of participants were too small to confidently apply prevalence outcomes to the larger population of PWID, there was evidence of frequent needle sharing during the previous month and relatively large proportions of service users who reported diagnosis of HIV (28%), Hepatitis C (44%) or Hepatitis B (22%), with only half of participants ever tested for BBVs, including very low numbers in the past year. National figures in way of a comparison suggest that over three quarters of PWID are accessing testing for HIV and hepatitis C (Public Health England, 2014). While there is currently limited evidence regarding the pharmacy as a setting for BBV services, dry blood spot testing for hepatitis B and C in the pharmacy has been successfully offered and linked into vaccination, referral and treatment pathways (Noble et al., 2010) and this may be one promising approach for increasing testing rates.

Key findings are discussed here, with reference to the wider literature and current NICE guidelines for provision of needle and syringe programmes in England (NICE, 2014).

Service accessibility

According to NICE guidelines, NEXs should coordinate services so that clean equipment is accessible and available at all times for different groups of service users, even out of opening hours. Although most service users expressed satisfaction with the location, opening hours, and efficiency of NEXs, there were several barriers they regularly encountered when trying to access them. To combat accessibility barriers, it should be acknowledged that different types of service users have varied preferences for the opening times and locations in which they can attend. For example, tailoring locations and opening hours so that they accommodate steroid users and psychoactive drug users at their preferred time, with staff who they are familiar with, might encourage increased engagement. Advantageously, most staff in the present study expressed positive attitudes about the value of increasing accessibility of NEXs to individuals and the wider public, as reported in previous research with pharmacy staff (Scott & Mackridge, 2009). This suggests that encouraging action to increase provision of NEXs may be received more positively than in previous years; when drug users may have been viewed more negatively (Neal et al., 2008; McLaughlin & Long, 1996). Furthermore, since most service users viewed accessing NEXs and bringing back used needles as being important and aligned with their own values, especially among long-term users of NEXs, this supports the suggestion that NEXs are able to instil positive beliefs, attitudes, intentions, and even behaviours over time.

Provision of equipment and secondary distribution

NICE guidelines recommend that NEXs should provide a mix of equipment, while ensuring that syringes and needles are available in a range of sizes at various locations. There should also be convenient and safe sites at which to dispose used equipment. Most service users in this study were satisfied with the variety of equipment available, with staff feeling that the diverse choice of

equipment was an asset of NEXs. Nevertheless, there were concerns over poor availability of some needle lengths and sufficient amounts of citric acid. Furthermore, reordering of suitable equipment was not always reliable in pharmacies, which may have been down to individual staff decision making. For most service users, there was a preference for autonomously choosing their own equipment. As being given standardised packs, which was more common in pharmacies, was not deemed as cost effective or suitable for all service users' needs, providing a larger range of equipment that participants can personally choose from is likely to be beneficial. However, as there were concerns that not all service users automatically ask for safe injecting equipment, such as citric acid for example, these may need to be routinely administered by staff. Condoms might also need to be routinely provided, as many participants in this study reported being sexually active.

Findings suggest that some staff routinely provide more equipment than necessary to service users, notably steroid users who are likely to be engaging in secondary distribution. Although there appears to be unclear policies in place at NEXs to determine the amount of equipment provided, most staff positively viewed secondary distribution as reducing the likelihood that individuals run out of equipment, while being preferable over risky injection practices among PWID not currently accessing NEXs. Correspondingly, some service users distributing equipment to other PWID may act as positive peer role models, who can pass on advice and encourage PWID to access NEXs when they feel ready (Murphy et al., 2004). It should still be noted, however, that some service users may abuse the privilege of obtaining more needles than necessary, such as by selling them to other PWID (Burrows et al., 2010; Dwyer et al., 2013) and that secondary distribution might act as a barrier to engagement with health professionals amongst PWID who do not have to access the NEX.

Relationships with staff and between other services.

There is a large body of evidence to show that relationships between staff and service users can have a significant influence on levels of engagement and recovery-related outcomes (Matheson et al., 2008; Neale et al., 2007; van Boekel et al., 2013) and that negative attitudes of pharmacy staff towards PWID can act as a barrier to service improvement (Parker et al., 2012). NICE guidelines refer to ensuring that staff of NEXs remain non-judgemental towards service users. Regular contact with staff and perceiving them as friendly, yet professional with real life experience of drug use, was widely recognised as promoting engagement and disclosure of personal information. This builds on previous research demonstrating the value of peer support to promote recovery among drug users (Jones et al., 2013; Lutnick et al., 2012; Mackridge et al., 2010; White, 2009).

While staff at specialised drug services usually had more time and expertise to provide tailored advice and support, pharmacy staff appeared to be more focussed on formal provision of equipment and time efficiency, with some being perceived by clients as judgemental and feeling uncomfortable around PWIDs. In line with previous research, these issues can act as a significant barrier to building positive relationships in NEXs (Parker et al., 2012). Moreover, decreased contact between staff and service users might reduce trust and disclosure of personal information (Bates et al., 2014). Pharmacy staff may therefore require more training opportunities and time availability to develop positive relationships with service users, reduce negative judgement, and better understand the complexities PWID face. With the increasing role of pharmacies in the provision of NEX it is important to consider how to make these settings more drug-user friendly.

Stigma, confidentiality and privacy

There continues to be a strong stigma attached to being identified as a drug user, which is also linked to discrimination, shame, and reluctance to access to drug-related services (Radcliffe and Stevens, 2008; Room, 2005; Lloyd, 2010). In the context of the present study, stigma associated with attending NEXs can act as a notable deterrent to accessing them. In a similar vein, service user perceptions of negative staff attitudes in NEXs have been associated with increased risk of needle sharing practices (Wilson et al., 2014). Although NICE guidelines recommend that staff need to be sufficiently trained to treat people in a non-judgmental way, findings from the present study indicate that service users still feel embarrassed about being identified as a PWIDs. Steroid users in particular were described as more prone to these feelings, especially when accessing specialised drug services.

Alongside stigma, issues regarding the maintenance of privacy and confidentiality in NEXs were recurrently emphasised. This can be a significant deterrent to accessing public health services among PWID and those attending NEXs (Eades et al., 2011; Mackridge et al., 2010; Saramunee et al., 2014), NICE guidelines recommend that NEXs should be set up in a way that respects privacy and confidentiality of PWID. Although some staff in the current study described speaking with service users in a discreet manner away from the main desk, the large majority of service users and staff noted a strong dislike of not having a private room in which to discuss personal issues, especially in pharmacies. Having a separate room, notably one that other service users couldn't identify as being specifically allocated for PWID, could therefore be suggested as an action for improvement. Correspondingly such action may help to avoid negative judgement and feelings of embarrassment, while helping service users to feel more comfortable disclosing personal information.

Image and performance enhancing drug users

Findings from this study support previous research and acknowledged that there is a growing proportion of steroid users accessing NEXs, mainly those who are young or middle aged males. NICE guidelines recommend providing specialised advice and support services for individuals injecting IPEDs. Findings here suggest that steroid users may not be accessing additional support, including BBV testing, vaccinations, and the on-site nurse, as they are less likely than psychoactive drug users to register with drug treatment services. Steroid users are likely to require additional support that involves addressing salient issues such as polydrug use, for example injecting illicit substances like heroin and/or cocaine (Sagoe et al., 2015). As steroid users are identified as a vulnerable population, who may frequently engage in risky injecting practices and come into contact with BBVs (Hope et al., 2013; Kimergård & McVeigh, 2014), a lack of additional support may increase risk of undiagnosed BBV in this group. Moreover, it is conceivable that inequitable provision of additional support services contributes to the perception that steroid users are somehow different to other drug users, thereby exacerbating stigma between different service users.

Steroid users, who often tend to have a 'middle class' background (Hope et al., 2014), may have limited ability to identify with psychoactive drug users. Hence, steroid users may prefer to present themselves as 'regular' customers in pharmacies, where there is less confrontation or obligation to address their use of drugs and associated harms. NEXs may therefore need to assist steroid users to alter their beliefs and attitudes associated with using IPEDs, and stigma around accessing specialised drug services. As an example of good practice, the specialised drug service in the present study was

able to attract more steroid users than might normally be expected due to being located nearby a gym. This may enable outreach to be efficiently facilitated with positive peer role models; individuals they can identify with and positively relate to.

Provision of additional support services and facilities

Providing additional support services can be important as a means to improving engagement and tackling underlying psychological, social and biological issues relating to drug misuse and recovery. To enable service users to utilise NEXs as a platform to recovery, rather than just a maintenance strategy, NICE recommend providing tailored advice, educational materials and referrals to specialised drug-treatment services and/or sexual and mental health services. Findings suggested that this additional support in drug services was particularly valued by service users, and was a valuable part of their recovery and treatment, and should be encouraged wherever possible. However, it may be the case that some staff at NEXs need to be made more aware that expense is not an issue that should limit their capacity to distribute educational resources.

There were positive views towards the provision of a welcoming environment and recreational spaces among service users, notably among those who may be socioeconomically disadvantaged, since they likely contributed to individuals becoming accepted and less stigmatised members of the community. Recreational spaces could also provide opportunities to make positive social connections, thereby helping to contributing to recovery capital. Recent research has positively linked the design of health-care environments, including in terms of making improvements to architectural structure, visible art work, furniture and communal environments, to indicators of patient engagement and wellbeing (Payne, Potter & Caine, 2014), which may have implications for the way NEX settings are designed.

Staff knowledge and attitudes

NICE recommend that staff of NEXs are adequately trained and competent enough to deliver the service on offer, including how to interact with service users from vulnerable groups. There should also be provision of tailored and understandable educational resources around issues like injecting IPEDs and sexual health. In line with these recommendations, most service users were satisfied with the information and advice provided by staff, and commended the provision of additional educational resources, which were particularly rich in specialised drug services. Nevertheless, staff recurrently acknowledged a need for refreshment or additional training on injecting drug use. Some staff also felt unable to provide appropriate advice, particularly in pharmacies, for users of specific drugs like IPEDs. Findings from the current study also highlight that pharmacies were sometimes unable to provide tailored advice and educational resources to specific populations of PWID, while educational materials that were available were also only scarcely distributed, perhaps due to some staff perceiving that NEXs had limited funding and resources to do so. These issues may act as barriers for service users to access crucial educational materials around their own unique needs, and should therefore be addressed as a potential area of improvement in NEXs.

Although limited knowledge and provision of advice from pharmacy staff in relation to drug use has previously been highlighted (Eades et al., 2011), these issues could partly be overcome by enabling NEXs to place a greater priority on training and awareness sessions. This is especially important considering that staff who are more confident in their ability to communicate and support service users, are likely to be in a better position to build rapport and develop positive and trusting

relationships with them (Mackridge et al., 2010). Training for pharmacy staff may benefit from including ways that they can become more empathetic and less likely to hold negative attitudes about PWID (Griesbach et al., 2006). Likewise, training could also focus on enabling staff to view PWIDs as encountering drug-related issues for several biopsychosocial reasons, rather than isolated individual problems. It is important that adequate time and resource for training on this topic is provided considering the pressure and busy schedule that pharmacy staff have to cope with.

Monitoring demographic information and services

To facilitate appropriate data collection and monitoring of PWID, NICE recommend that NEXs should collect details of their service users' demographic information, the drugs they use, and their injecting practices. However, in line with previous findings, this study's findings suggest that attaining such details can be challenging, and is not always pursued in NEXs (Abdulrahim et al., 2006). This was notably so in pharmacies, where staff tend to undertake a quick exchange process and, depending on how experienced and well-trained they are, feel too uncomfortable or lacking in the necessary skills to ask about personal or sensitive information. Collecting demographic information may sometimes be limited to a person's date of birth and signature, with current findings implying that pharmacy staff are less able to identify vulnerable service users when they initially present themselves at NEXs, as compared to staff from specialised drug services with more experience and relevant training. Consequently, pharmacy NEXs ability to assess their service provision, and also the progress of service users, may be inadequate.

Study limitations

While not disregarding the utility of the current study's findings, it is worth recognising that there were some limitations. In particular, findings are based on a small sample of non-randomly selected staff and service users from NEXs. As discussed above, service users participating in the study did not reflect the increase in steroids users accessing NEXs who, in the Knowsley area for example, often make up the largest proportion of service users accessing NEXs (Whitfield et al., 2014). Although steroid users were referred to in the current study, such individuals did not directly participate the study, so their unique circumstances and needs were only interpreted from the second-hand perspective of staff and other service users. This may partially highlight the difficulty of engaging steroid users in the additional support services NEXs offer; in this case the opportunity to play a role in helping to shape future development of services. Due to the relatively low number of needle exchange transactions, it was unlikely that the research team would encounter service users in pharmacies during site visits and therefore the vast majority of participants were from drug services. Additionally, as might have been expected, few service users completed the survey, particularly in pharmacy exchanges. Staff were responsible for encouraging survey participation and the lack of uptake in pharmacies might partially reflect the less developed relationships between pharmacy NEX staff and service users.

5 Conclusion

Findings from the current study suggest that NEXs, in pharmacies and specialised drug services, are accepted modes of harm reduction for PWID. By drawing upon current NICE guidelines, and suggestions for improvement from the current study, NEXs have the potential to offer additional forms of tailored support that contribute to promoting harm reduction and benefits for health and

wellbeing. Ultimately NEXs ability to positively engage service users and reduce risky behaviour depend on several factors, including convenience of location, opening hours, efficiency of exchange process, and suitability of equipment provided. Increasing their provision and accessibility may further facilitate positive attitudes and experiences among staff and service users, as well as reduced risk behaviours and stigma. Furthermore, improvement of staff training and monitoring of services users alongside better integration of support services, especially in pharmacies, are likely to be beneficial.

6 Recommendations

These recommendations are based upon findings from this study in line with recommendations made by NICE for the provision of needle and syringe programmes (available at: <https://www.nice.org.uk/guidance/PH52/chapter/1-Recommendations>)

1. Work with service users to identify strategies to help maintain their privacy and make them comfortable in the needle exchange. This process should involve consultation with current service users regarding their concerns and priorities. Creative solutions should be sought to help address any issues, with possible solutions including use of existing private areas (e.g. consultation rooms), use of separate entrances (where possible), and use of agreed procedures to reduce the need for open questioning (e.g. an order slip for items that includes all of the information required for the transaction and which can be completed prior to entering the pharmacy).
2. Allow service users to select from a consistent and wide range of needles and equipment in all NEXs to meet differing needs including injecting into the groin. Develop a policy around the provision of needles for secondary distribution to ensure a consistent approach from staff. Service users wishing to undertake secondary distribution should be able to do this, and asked to encourage service uptake amongst those they pass equipment to.
3. Providing educational information for service users to take away along with their needles and equipment is an important approach to harm reduction. It should be ensured that all NEXs, particularly those within pharmacies, have sufficient amounts of harm reduction and education materials and ensure that staff recognise the importance of making these available and promoting them to service users.
4. Increasing access to 'out of hours' services, including at evenings and at weekends, improves access to needles and equipment. NICE guidance (NICE 2014, recommendation 6) highlights options for expanding availability of equipment including the provision of out-of-hours vending machines and encouraging pharmacies that are open out-of-hours to provide a needle exchange service. Where a coordinated approach between different outlets to out-of-hours opening is developed, this needs to be promoted effectively to service users to ensure awareness of different service availability.
5. It is important to improve engagement with steroid users so that these individuals, who are increasingly accessing NEXs in Knowsley, receive the support with their substance use and health. Ensure staff have information and access to training on image and performance enhancing drugs to enable them to confidently and effectively engage with the population, and

feel confident asking them to register with the service (to improve access to full screening options). Where service users resist registering with the service, staff should encourage them to seek screening within the primary care system.

Improving relationships between Huyton drug service and the gym situated close by is likely to be beneficial and help to engage with this population and allow opportunity for discussion with gym staff or members regarding methods of service delivery. For example, this may include a specialist service for this population offered outside normal working hours, or in an outreach setting. Also, this relationship should be used to help support pharmacies providing NSP services to users of performance enhancing substances (e.g. through offering opportunities to pharmacy staff to find out more about the realities of use for these substances).

7 References

- Abdulrahim, D., Gordon, D., & Best, D. (2006). *The NTA's 2005 survey of needle exchanges in England*. London: National Treatment Agency for Substance Misuse.
- Allen, E. J., Palmateer, N. E., Hutchinson, S. J., Cameron, S., et al. (2012). Association between harm reduction intervention uptake and recent hepatitis C infection among people who inject drugs attending sites that provide sterile injecting equipment in Scotland. *International Journal of Drug Policy*, 23, 346-352.
- Bates, G., Jones, L., & McVeigh, J. (2014). Analysis of survey data on the implementation of NICE ph18 guidance relating to needle and syringe provision in England. Available from <http://www.cph.org.uk/wp-content/uploads/2014/04/NICE-PH18-guidelines-implementation-report.pdf>
- Bonar, E. E., & Rosenberg, H. (2011). Using the health belief model to predict injecting drug users' intentions to employ harm reduction strategies. *Addictive Behaviors*, 36(11), 1038-1044.
- Brady, K. T., & Sinha, R. (2014). Co-occurring mental and substance use disorders: the neurobiological effects of chronic stress. *The American Journal of Psychiatry*, 162(8), 1483-1493.
- Burrows, D., Roper, D., & Tanguy, P. (2010). 'And one for my friend': Peer distribution of needles, syringes and other injecting equipment. *A review of literature and practice in Australia, US, UK, Canada and the Netherlands*. Sydney, Australia: AIDS Project Management Group (APMG).
- Cox, J., De, P., Morissette, C., Tremblay, C., Stephenson, R., Allard, R. et al. (2008). Low perceived benefits and self-efficacy are associated with hepatitis C virus (HCV) infection-related risk among injection drug users. *Social Science and Medicine*, 66, 211-220.
- Craine, N., Hickman, M., Parry, J., Smith, J., McDonald, T., & Lyons, M. (2010). Characteristics of injecting drug users accessing different types of needle and syringe programme or using secondary distribution. *Journal of Public Health*, 32, 328-332.
- De Vos, A. S. (2013). Heterogeneity in risk behaviour matters; modelling the spread of HIV and hepatitis C Virus among injecting drug users.
- DiSimone, J. (2005). Needle exchange programs and drug injection behaviour. *Journal of Policy Analysis and Management*, 24(3), 559-577.
- Dwyer, R., Power, R., & Dietze, P. (2013). North Richmond Public Injecting Impact Study Community Report. Available from http://creidu.edu.au/system/resource/9/file/Report-Nth_Richmond_Public_Injecting_Impact.pdf
- Eades, C. E., Ferguson, J. S., & O' Carrol, R. E. (2011). Public health in community pharmacy: A systematic review of pharmacist and consumer views. *BMC Public Health*, 11, 582. doi: 10.1186/1471-1471-2458-11-582

- Eisenberg, M. E., Wall, M., & Neumark-Sztainer, D. (2012). Muscle-enhancing behaviors among adolescent girls and boys. *Pediatrics*, 130(6), 1019-1026.
- Falck, R. S., Siegal, H. A., Wang, J., & Carlson, R. G. (1995). Usefulness of the health belief model in predicting HIV needle risk practices among injection drug users. *AIDS Education and Prevention*, 7, 523-533.
- Gagnon, h., & Godin, G. (2009). Psychosocial factors explaining drug users' intention to use a new syringe at each injection. *Addiction Research and Theory*, 17, 481-492.
- Galea, S., & Vlahov, D. (2002). Social determinant and the health of drug users: socioeconomic status, homelessness, and incarceration. *Public Health Reports*, 177(1): S135-S145. Available from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1913691/>
- Greenwood, J. (1992). Unpopular patients – GP's attitudes to drug users. Druglink
- Griesbach, D., Abdulrahim, D., Gordeon, D., & Dowell, K. (2006). *Needle exchange provision in Scotland: A report of the National Needle Exchange Survey*. Available from <http://www.dldocs.stir.ac.uk/documents/0031220.pdf>
- Gupta, S. K., Ambekar, A., Dhawan, A., & Mehta, M. (2014). Psychological factors associated with HIV-related high-risk injection behavior among people who inject drugs. *Journal of Mental Health and Human Behaviour*, 19(2), 62-68.
- Hawkins, W. E., Latkin, C., Mandel, W., & Oziemkowska, M. (1999). Do actions speak louder than words? Perceived peer influences on needle sharing and cleaning in a sample of injection drug users. *AIDS Education and Prevention*, 11, 122-131.
- Home Office. Drug misuse: Findings from the 2012 to 2013 crime survey for England and Wales. Available from <https://www.gov.uk/government/publications/drug-misuse-findings-from-the-2012-to-2013-csew/drug-misuse-findings-from-the-2012-to-2013-crime-survey-for-england-and-wales>
- Hope, V. D., Cullen, K. J., Croxford, S., Parry, J. V., & Ncube, F., (2014). *International Journal of Drug Policy*, 25(5), 924-927.
- Hope, V. D., Mc Veigh, J., Marongiu, A., Evans-Brown, M., Smith, J., Kimergard, A., Croxford, S., Beynon, C. M., Parry, J. V., Bellis, M. A., & Ncube, F. (2014). Prevalence of, and risk factors for, HIV, hepatitis B and C infections among men who inject image and performance enhancing drugs: a cross-sectional study. *British Medical Journal*, 3. doi: 10.1136/bmjopen-2013-003207
- Huo, D., Bailey, S. L., & Outlet, L. J. (2006). Cessation of injection drug use and change in injection frequency. The Chicago needle exchange evaluation study. *Addiction*, 101(1), 1606-1613.
- Jones, L., Pickering, L., Sumnall, H., McVeigh, J., & Bellis, M. A. (2010). Optimal provision of needle and syringe programmes for injecting drug users: A systematic review. *International Journal of Drug Policy*, 21(5), 332-342.
- Kimergård, A., & McViegh, J. (2014). Variability and dilemmas in harm reduction for anabolic steroid users in the UK: a multi-area interview study. *Harm Reduction Journal*, 11:19. doi: 1186/1477-7517-11-19
- Iversen, J., Topp, L., Handan, W., & Maher, L. (2013). Are people who inject performance and image enhancing drugs an increasing population of Needle and Syringe Program attendees? *Drug and Alcohol Review*, 32(2), 205-207.
- Mackridge, A. J., Beynon, C. M., McVeigh, J., Whitfield, M., & Chandler, M. (2010). Meeting the health needs of problematic drug users through community pharmacy: A qualitative study. *Journal of Substance use*, 15, 367-376
- Macniel, J., & Pauly, B. (2010). Needle exchange as a safe haven in an unsafe world. *Drug and Alcohol Review*, 30(1), 26-32.
- Mathers, B. M., Degenhardt, L., Phillips, B., Wiessing, L., Hickman, M., Strathdee, S. A, et al. Global epidemiology of injecting drug use and HIV among people who inject drugs: A systematic review. *The Lancet*, 372, 1733-1745.
- Matheson, C., Anthony, G. B., & Bond, M. K. (2008). Assessing and prioritizing the preferences of injecting drug users in needle and syringe exchange service development, *Journal of Public Health*, 30, 133-138.
- McLaughlin, S., & Long, A. (1996). An extended literature review of health professionals' perceptions of illicit drugs and their clients who use them. *Journal of Psychiatric and Mental Health Nursing*. 3(5), 283-288.
- McVeigh, J., Beynon, C., & Bellis, M. A. (2003). New challenges for agency based syringe exchange schemes: analysis of 11 years of data (1991-2001) in Merseyside and Cheshire, United Kingdom. *The International Journal of Drug Policy*, 14(5), 388-405.

- Murphy, S., Kelley, M., & Lune, H. (2004). The health benefits of secondary syringe exchange. *Journal of Drug Issues*, 34(2), 245-268.
- National Treatment Agency. (2010). *Injecting drug use in England: A declining trend*. Retrieved from <http://www.nta.nhs.uk/uploads/injectingreportnov2010finala.pdf>
- National Statistics. (2013). Drug misuse: Findings from the 2012/13 crime survey for England and Wales. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/225122/Drugs_Misuse201213.pdf
- Neale, J. (1998). Reducing risks: Drug user views of accessing and signposting of injecting equipment. *Addiction Research*, 6(2).
- Neale, J., Tompkins, C., & Sheard, L. (2007). Barriers to accessing generic health and social care services: a qualitative study of injecting drug users. *Health and Social Care Communications*, 16, 147-154.
- National Institute of Health and Clinical Guidance. (2014). NICE guidelines [PH52]. Needle and syringe programmes. Accessed July 2014. Available at: www.nice.org.uk/guidance/PH52/chapter/1-Recommendations
- Palmateer, N., Kimber, J., Hickman, M., Hutchinson, S., Rhodes, T., & Goldberg, D. (2010). Evidence for the effectiveness of sterile injecting equipment provision in preventing hepatitis C and human immunodeficiency virus transmission among injecting drug users: a review of reviews. *Addiction*, 105(5), 844-859.
- Parker, J., Jackson, L., Dykeman, M., Gahagan, J., & Karabanow, J. (2012). Access to harm reduction services in Atlantic Canada: Implications for non-urban residents who inject drugs. *Health and Place*, 18(2), 152-162.
- Payne, S., Potter, R., & Cain, C. (2014). Linking the physical design of health-care environments to wellbeing indicators. Wellbeing: A complete Reference Guide. doi: 10.1002/9781118539415.wbwell069
- Public Health England. (2014). *Shooting up: Infections among people who inject drugs in the United Kingdom 2013*. Retrieved from https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/370707/Shooting_Up_2014.pdf
- Radcliffe, P., & Stevens, A. (2008). Are drug treatment services only for 'thieving junkie scumbags'? Drug users and the management of stigmatised identities. *Social Science and Medicine*, 67(7), 1065-1073.
- Richardson, L., Wood, E., & Kerr, T. (2012). The impact of social, structural and physical environmental factors on transitions into employment among people who inject drugs. *Social Science and Medicine*, 76, 126-133.
- Room, R. (2005). Stigma, social inequality and alcohol and drug use. *Drug and Alcohol Review*, 24(2), 143-155.
- Sagoe, D., McVeigh, J., Bjornebekk, A., Essilfie, M. S., Andreassen, C. S., & Pallesen, S. (2015). Polypharmacy among anabolic-androgenic steroid users: a scibitive metasynthesis. *Substance Abuse Treatment and Prevention Policy*, 10(1). doi: 10.1186/s13011-015-0006-5
- Saramunee, K., Krska, J., Mackridge, A., Richards, J., Suttajit, S., & Phillips-Howard, P. (2014). How to enhance public health service utilization in community pharmacy?: General public and health providers' perspectives. *Research in Social and Administrative Pharmacy*, 10, 272-284.
- Scott, J., & Mackridge, A. J. (2009). Pharmacy support staff involvement in, and attitudes towards, pharmacy-based services for drug misusers. *International Journal for Pharmacy Practice*, 17(6), 325-332.
- Stein, M. D., & Sobata, M. (2001). Injection drug users: Hospital care and charges. *Drug and Alcohol Dependence*, 61(1), 117-120.
- Tsigos, C., & Chrousos, G. P. (2002). Hypothalamic-pituitary-adrenal axis, neuroendocrine factors and stress. *Journal of psychosomatic Research*, 53, 965-871.
- UK Drug Policy Commission. (2010). Getting serious about stigma: the problem with stigmatising drug users. Available from http://www.ukdpc.org.uk/wp-content/uploads/Policy%20report%20-%20Getting%20serious%20about%20stigma_%20the%20problem%20with%20stigmatising%20drug%20users.pdf
- Livingstone, J. D. Milne, T., Fang, M. L., & Amari, E. (2012). The effectiveness of interventions for reducing stigma related to substance use disorders: a systematic review. *Addiction*, 107(1), 39-50.

Lloyd, C. (2010). *Sinning and sinned against: The stigmatisation of problem drug users*. London: UK Drug Policy Commission. Available from <http://www.ukdpc.org.uk/wp-content/uploads/Policy%20report%20-%20Sinning%20and%20sinned%20against%20the%20stigmatisation%20of%20problem%20drug%20users.pdf>

van Boekel, L. C., Brouwers, E. P. M., van Weeghel, J., & Garretsen, H. F. L. (2013). Stigma among health professionals towards patients with substance use disorders and its consequences for healthcare delivery: Systematic review.

White, W. L. (2009). Peer-based addiction recovery support: History, theory, practice and scientific evaluation. Chicago, IL. <http://www.fead.org.uk/docs/2009Peer-BasedRecoveryWW.pdf>

Whitfield, M., Reed, H., Chandler, M., Bates, G., & McVeigh, J. (2014). Merseyside and Cheshire inter-agency drug misuse database (IAD) needle and syringe programme 2012-2013. Available from <http://www.cph.org.uk/wp-content/uploads/2014/05/Cheshire-and-Merseyside-IAD-NSP-1213-Report-Final.pdf>

Wilson, H, Brenner, L., Mao, L., & Treloar, C. (2014). Perceived discrimination and injecting risk among people who inject drugs attending Needle and Syringe Programmes in Sydney, Australia. *Drug and Alcohol Dependence*, 144(1), 274-278.

World Health Organization. (2007). *Guide to starting and managing needle and syringe programmes*. Geneva: World Health Organization

World Health Organization, United Nations Office on Drugs and Crime & Joint United Nations Programme on HIV/AIDS. (2009). *WHO, UNODC, UNAIDS technical guide for countries to set targets for universal access to HIV prevention, treatment and care for injecting drug users*. <http://www.unodc.org/documents/hivaids/idu_target_setting_guide.pdf>

