NHS National Services Scotland

Guidance on Injecting Equipment Provision (IEP)

Scottish Health Protection Network (SHPN) 2021

Good Practice Guidance

Public Health Scotland

Contents

Acronyms and Glossary

ACMD	Advisory Council on the Misuse of Drugs
ADP	Alcohol and Drug Partnership
AIDS	Acquired Immune Deficiency Syndrome
AIR	Assessment of Injecting Risk
ART	Antiretroviral Therapy
BBV	Blood-Borne Virus
CoSLA	Convention of Scottish Local Authorities
CSPs	Community Safety Partnerships
DCR	Drug Consumption Room (see also SIF and SIS)

1	DHSS	Department for Health and Social Security
2	eMAS	electronic Minor Ailments Service
3	EMCDDA	European Monitoring Centre for Drugs & Drug Addiction
4	HBV	Hepatitis B Virus
5	HCV	Hepatitis C Virus
6	HIV	Human Immunodeficiency Virus
7	IEP	Injecting Equipment Provision
8	IPEDs	Image and Performance Enhancing Drugs
9	ISD	Information Services Division
10	LDS	Low dead space (syringes and barrels)
11	MSM	Men who have sex with men
12	NES	NHS Education for Scotland
13	NESI	Needle Exchange Surveillance Initiative
14	NGO	Non-Governmental Organization
15	NICE	National Institute for Health and Clinical Excellence
16	NSP	Needle and Syringe Programme
17	OST	Opioid Substitution Therapy (also known as Opioid Replacement Therapy
18		(ORT))
19	PEP	Post-Exposure Prophylaxis (for HIV)
20	PHW	Public Health Wales
21	PNSP	Prison (or other closed setting) Needle and Syringe Programme
22	POM	Prescription Only Medicine
23	PWID	People Who Inject Drugs
24	PWUD	People Who Use Drugs
25	SDF	Scottish Drugs Forum
26	SDM	Syringe Dispensing Machine (see also SVM)
27	SDMD	Scottish Drug Misuse Database
28	SHPN	Scottish Health Protection Network

SI	Statutory Instrument
SIF	Supervised Injecting Facility (see also SIS and DCR)
SIS	Safer Injecting Sites (see also DCR and SIF)
SSTI	Skin and Soft Tissue Infections
STI	Sexually Transmitted Infection
SVM	Syringe Vending Machine (see also SDM)
TB	Tuberculosis
UNDP	United Nations Development Programme
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNODC	United Nations Office on Drugs and Crime
WHO	World Health Organization

Consultation

It has been recognised that since the launch of the original Injecting Equipment Provision guidelines in 2010 there has been much change in the way drugs of many types are used and in the evidence behind why we deliver a variety of interventions. It is hoped the new guidelines will help deliver enhanced provision of IEP that has a large impact on mortality and morbidity among people who use drugs.

This consultation is for the wider drugs field, including people who currently inject drugs, those who work with them and those in strategic roles. It will include a webinar launch, workshops and an online survey.

Most of the compilation of these guidelines was carried out before the global pandemic caused such an impact on service delivery. This work helped to inform some of the responses to lockdown, including postal services. The pandemic does not change the intrinsic nature of IEP delivery however and so the guidelines do not attempt to include matters such as social distancing requirements or levels of PPE.

The consultation questions focus on chapters 3-6. The other areas are contextual and provide background evidence.

Foreword / Prologue

The foreword will cover:

- Previous guidance, who was involved, publication date
    - Update of the previous work done on guidance in Scotland
- Need for new guidance or reason to update

Section 1 - Introduction

The introduction will cover:

- Epidemiological overview

- About this guidance
  - Aims of the guidance:
    - Why this guidance and what does it cover?
    - Who is this guidance intended for?
      - How we hope it might be used
  - Principles supporting IEP programmes
  - Partners

  - Guidance development process and GDG membership
  - Consultation Process
  - Future updates

Section 2 - Current situation - Scottish context

2.1 Epidemiology of PWID in Scotland

People who inject drugs (PWID) are at risk of a range of health harms including blood-borne viruses like HCV and HIV, and bacterial infections such as botulism and tetanus.

In Scotland, there are an estimated 15,000–20,000 PWID[1,2]. Heroin continues to be the most prevalent drug injected with over 90% of those interviewed in the 2017-18 Needle Exchange Surveillance Initiative (NESI) reporting injecting it in the past six months, similar to levels in previous NESI surveys.[3] Reported injection of powder cocaine increased markedly from 9% in 2010 (n=217) to 29% (n=422) in 2017-18, with levels highest in NHS GGC (49%; n=286). Injection of 'legal highs' (i.e. novel psychoactive substances (NPS)), associated with increases in severe soft tissue infections (SSTIs) and HCV in parts of Scotland in recent years,[4,5] was rare within the 2017-18 survey, reported by less than 1% of participants.

People who inject Image and Performance Enhancing Drugs (IPEDs) such as steroids, growth hormone and tanning agents remain one of the largest sub-populations of PWID. National IPED injecting prevalence estimates are not available, however, unpublished data from services providing injecting equipment in NHS Greater Glasgow and Clyde suggests at least 3400 unique IPED users attended in 2018/19. Secondary distribution is more common within this group[6], suggesting many more people than those only accessing IEP may be injecting IPEDs.

Injecting drug use continues to be the most prominent risk factor for HCV infection in Scotland, accounting for over 90% of infections.[7] In Scotland, despite relatively low levels of reported needle and syringe sharing, HCV antibody prevalence remains high among PWID. The latest national estimates reported by NESI found that over half (57%) of those of those surveyed had ever been infected with HCV with rates highest in NHS Greater Glasgow and Clyde (68%).[3] The prevalence of HCV antibodies has not changed substantially since the NESI study commenced in 2008. However, between 2015-16 and 2017-18, there was an 18% reduction in the prevalence of chronic HCV in Scotland overall, from 38% (n=904) to 31% (n=566), with the largest falls observed in Tayside (from 29% and 18%). This decline in chronic prevalence is likely attributable to the increase in uptake of HCV therapy, which has been seen across all NHS Boards. The large decline in chronic prevalence seen in Tayside, in particular, is associated with efforts to increase treatment for HCV infection among people who are actively injecting drugs by offering it in community settings such as Injecting Equipment Provision (IEP) sites.[8] HCV prevalence in IPED is generally low with greater antibody prevalence perhaps attributable to the group that used both opioids and IPED[9].

In contrast to relatively modest levels of injecting equipment sharing, trends in reported personal re-use of needles and syringes appear to be changing: the proportion of those

interviewed reporting re-use of such equipment increased from 45% (n=805) in 2011-12 to 58% (n=848) in 2017-18, with rates particularly high amongst the growing population of stimulant injectors. There is also emerging evidence of increasing engagement with foil (for smoking drugs) since it was rolled out nationally from September 2016. In 2017-18, 35% of respondents (n=513) reported uptake of foil in the last six months, which is almost double what was reported in 2015-16 (18%, n=364). The lower rates in 2015-16 may be partly explained by partial roll-out of foil during the course of the NESI survey that year.

The GHSS on viral hepatitis and the draft action plan for the health sector response to viral hepatitis in the WHO European region[10] call for a major global increase in provision of sterile needles and syringes, from an estimated baseline of 20 needles and syringes per PWID per year to 200 by 2020 and 300 by 2030. However, these estimates do not account for individual differences in need. To better reflect the adequacy of needle and syringe provision, data from NESI are presented on self-reported adequacy of needle and syringe provision. In this metric, needle and syringe provision is considered 'adequate' when the reported number of needles received, met or exceeded the number of times the individual injected. In 2017-18, the proportion of PWID reporting adequate provision of needles and syringes was suboptimal at 80%3.

HIV prevalence among PWID has been measured nationally from 2011-12 onwards and has increased over time from 0.3% (n=6) in 2011-12 to 2.3% (n=45) in 2017-18, driven by an outbreak of HIV infection in Glasgow strongly associated with cocaine injecting, homelessness and incarceration.[11] In 2017-18, HIV prevalence in Great Glasgow and Clyde was 4.8% and 10.8% in Glasgow city centre; HIV cases were also detected in Lothian, Lanarkshire, Tayside and Fife, with prevalence rates ranging from 0.6% to 1.2%.

2.2 History of NSP/IEP in Scotland

Major outbreaks of HIV among people who inject drugs (PWID) were identified in the early 1980s in the cities of Edinburgh[12] and Dundee[13]. A key driver of these outbreaks was limited availability of sterile injecting equipment and, as a consequence, frequent equipment sharing within the PWID community. In response to widespread public concern about HIV and AIDS and the perceived threat to the general population, the UK Government sanctioned the opening of needle and syringe exchange services, more commonly now known as needle and syringe programmes (NSPs). Although NSPs had already been up and running in parts of the UK, they began officially operating in the UK in 1987 when the Department for Health and Social Security (DHSS) commissioned a pilot study to evaluate their effectiveness. In 1987, the DHSS set the following criteria for the pilot schemes; they should:

- Provide injecting equipment on an exchange basis to drug users already injecting and unwilling or unable to stop
- Provide assessment of and counselling for clients' drug problems
- Provide advice on safer sex and offer counselling on HIV testing

- Collect information on clients and collaborate with a monitoring and evaluation project.

The evaluation[14] which followed concluded that NSPs reached considerable numbers of PWID, many of whom were not in contact with any other services. As needle exchange was seen to be effective, did not outrage public opinion or cause other anticipated potential problems, the network of NSPs expanded rapidly across the country, alongside a national expansion in the substitute prescribing of methadone. The first NSP in Scotland was established in Edinburgh in 1987, with similar services opened in Dundee and Glasgow by 1989[a].

2.3 Evidence of IEP Effectiveness

A large body of evidence supports the effectiveness of the provision of sterile injecting equipment through IEP services to reduce injection risk behaviours that can lead to blood borne virus transmission and other drug-related problems[15,16,17,18].

IEP programmes have progressed over the years to include a range of delivery models including the provision of equipment through community pharmacies, dedicated/fixed outlets, backpacking/outreach, mobile and home delivery services, peer-led services and vending machines. These models are often delivered in partnership by a range of service providers including drug and alcohol services, homelessness services, prisons, hospitals and many others[19] – see section 4.

- **The evidence for the effectiveness of the provision of injecting equipment alone in preventing HCV among PWIDs** is mixed[20]. While some systematic reviews conclude that there is insufficient evidence to support or discount its effectiveness for the prevention of HCV in PWIDs (particularly the effect of pharmacy-based IEP services on HCV prevalence)[21], other more recent studies have acknowledged reported decreases in HCV infections[22].

  It has been acknowledged that the effectiveness of injecting equipment provision varies by geographical location, and that without also providing counselling (psychosocial and voluntary counselling), education and drug treatment services (OST), IEP services alone are insufficient to reduce transmission of HIV and HCV in PWID[23].

[a] In Scotland from 2010 onwards, the term Injecting Equipment Provision (IEP) was adopted in place of the more internationally accepted Needle and Syringe Provision (NSP) to reflect to broad range of equipment provided by Scottish services such as water, filters, spoons etc. This term will be used throughout this document to refer to all services that distribute injecting equipment – regardless of whether those services have the facilities to receive used injecting equipment.

SIFs, in addition to providing sterile injecting equipment, have been identified as an environment which may also greatly reduce the high risk injection practices (i.e., syringe sharing, shared cleaning) that increase the likelihood of HCV infection[24].

Examination of the heterogeneity of studies in this field – in terms of study design, inclusion criteria, definition of interventions, etc. – has established the need for further clarity in future community-level studies, particularly given the potential benefits of IEP services to reduce infectious diseases among the PWID[25]. Studies examining the impact of services in rural areas are particularly needed. Research is also needed to seek further understanding on how implementation of IEP, and other harm reduction services, can be scaled up and delivered more effectively in order to better respond to the health needs of PWID. This requires observational study designs[26].

- There is moderate quality evidence that **the provision of injecting equipment is effective in reducing HIV transmission and injecting risk behaviours (IRB) among PWID[59].**

  IEP services have been identified as a structural-level intervention to reduce population level HIV infection (either with reported decreases in HIV prevalence or in HIV incidence)**Error! Bookmark not defined.**.

- The implementation of **harm reduction services, and particularly the provision of injecting equipment, has been found to be cost-effective**[27] and **cost saving in some settings**, particularly when future health outcomes and costs are considered (i.e. lifetime cost of HIV)[28].

  A recent cost-effectiveness evaluation in three UK cities (including Dundee[b]) has estimated that IEP services are cost-saving under the 100-year time horizon[29]. This study estimated that by removing only IEP services from harm reduction interventions, regardless of setting, a large relative increase in the number of new HCV infections would be expected. The evaluation estimated a median increase in HCV infections in Dundee alone of 61% (95% CrI 12% to 219%) (CrI is “credible interval”[30]).

[b] Services in Dundee are commissioned through NHS Tayside and the Sexual Health & Blood-Borne Virus Managed Care Network Prevention Sub-Group. The Managed Care Network Sub-Group is a multi-professional group with representation from secondary care, primary care, the local authority, the voluntary sector and patient/carer/client representatives throughout Tayside, which has a remit for blood-borne virus prevention and sexual health improvement. This includes public awareness, education and harm reduction. The Tayside Substance Misuse Service is made up of two specialist harm reduction nurses, an administrator and a lead pharmacist. The service helps to co-ordinate pharmacy-based NSP services in addition to having several other responsibilities. The Cairn Centre is the busiest fixed-site injecting equipment provider in the Dundee area. Needle exchange services within CAIR Scotland are funded exclusively by the Managed Care Network. There are 15 pharmacies providing needle exchange services throughout Tayside, six of which are in Dundee. Pharmacies will offer injecting equipment either in packs or in pick and mix format. Most pharmacies in Dundee will also distribute OST; however, commissioning for this is managed separately.

- There remains limited evidence on the effectiveness or cost-effectiveness of IEP services within young PWID[31].

- In terms of effectiveness in reducing the prevalence of injecting drug use in the community, ready access to sterile injecting equipment does not appear to prolong injecting drug use (i.e. it does not contribute to delayed cessation of injecting drug use)[32]. In fact, some studies have indicated that the establishment of IEP services has led to a decrease in the number of PWID by bringing them into contact with treatment services earlier in their drug using careers[33].

This represents some of the large and growing body of research which highlights the positive health impacts of IEP services on reducing injection risk behaviours (that can lead to HIV, HCV infections and other drug-related public health concerns). It is not surprising that the EU Drug Strategy for 2013–2020 – the first-ever strategic document on this level – has called for scaling-up and improving access to IEP services and other harm reduction interventions as an objective of EU's drug policy[34], a sentiment which is endorsed by this Scotland specific guidance.

2.4 Legislation

At their initial inception in 1987, NSPs operated within the parameters laid out in two key pieces of legislation:

- The Misuse of Drugs Act 1971 'section 9A'
  - At the time of NSP implementation in the UK, it was an offence for a person to supply any article - except a syringe or needle - in cases where 'the supplier believes it may be used by the recipient to administer an unlawful drug or prepare an unlawful drug for administration;
- The Medicines Act
  - At the time of NSP implementation in the UK, water for injections was a prescription only medicine (POM). This meant that, in practice, it couldn't be legally supplied by NSPs.

Outwith NSPs, section 9A exempted the following equipment if they were dispensed by a doctor, a pharmacist or someone working lawfully within drug treatment services:

- Swabs
- Utensils for the preparation of a controlled drug
- Citric acid
- Filters
- Ascorbic acid
- Water for injection ampoules of up to 2ml

It was not until 2003 that further amendments were made to section 9A following recommendations by the Advisory Council for the Misuse of Drugs (ACMD) on drug

paraphernalia supply. From 1 August 2003, this permitted NSPs to supply PWUD with the items listed above, with the exception of ascorbic acid (delayed until 2005).

Almost two years later Statutory Instrument (SI) 2005 No.1507 The Medicines for Human Use (Prescribing) (Miscellaneous Amendments) Order 2005 was published, with an amendment to Schedule 5 of the POM Order. The SI became law on 30th June 2005 and contained provisions for the supply, by drug workers, of water for injections to PWID (without any pack size restriction) and with a limit on the size of ampoule that could be supplied of 2ml. It is important to note that water for injections remains a POM and the exemption only applies to supplies made to PWUD. In the same year, ascorbic acid (Vitamin C) was added to the list of items that it is legal for NSPs to supply following further advice by the ACMD that was accepted by the UK Government.

In 2010, the ACMD wrote to the Home Office to highlight their latest report and to recommend that 'The ACMD consider that the balance of benefit favours exempting foil from Section 9A of the Misuse of Drugs Act 1971'[35]. Over the next few years the Home Office sought further information from the ACMD on the potential harms associated with smoking drugs[36] and the role of foil in transitioning people away from problematic drug use.[37] Then, on 4th July 2013, the Home Office published a statement confirming their acceptance of ACMD advice on the lawful provision of foil by drug treatment providers subject to the strict condition that it is part of structured efforts to get people into treatment and off drugs. On 9th August 2014 it was announced that a SI would be laid before parliament in September adding foil to the list of items exempt from section 9A. This was implemented on the 5th of September 2014.

To date, other equipment such as crack pipes are not exempt from section 9A and therefore supply remains technically illegal. Work across the UK looking to underpin provisioning and distribution of sterile inhalant pipes with a legal footing is ongoing.

2.5 Policy

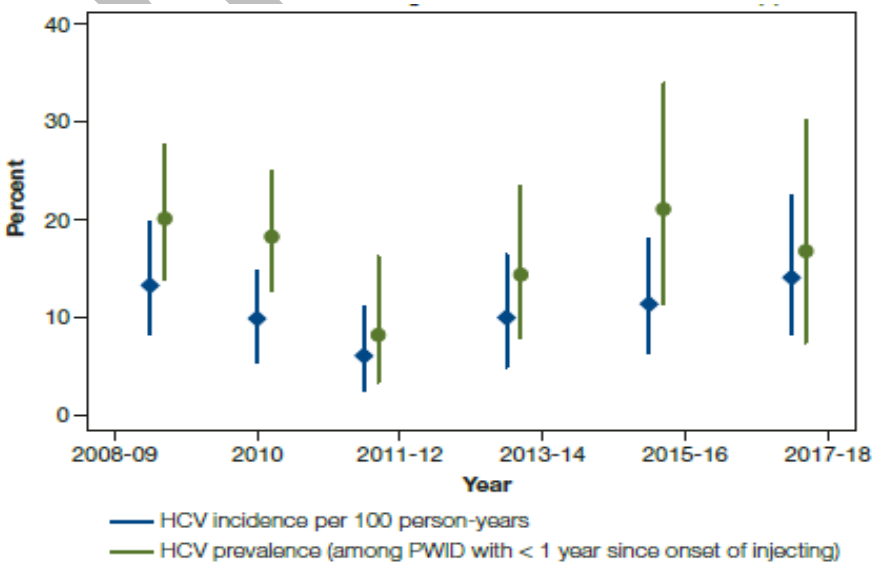
In 2008, the Scottish Government launched the Hepatitis C Action Plan for Scotland (Phase II), with one of its three main aims to prevent HCV transmission among PWID. The main driver for change was the release of the National IEP Guidelines, which recommended[38] the provision of a set of new sterile injection equipment for every injection, and additional dedicated funding (£3 million per year) be awarded to NHS Boards to enable improvement of services in accordance with these Guidelines.[c] Contemporaneously to the Action Plan, the Scottish Government's drug and alcohol strategy, Road to Recovery,[39] strived to improve treatment services for those dependent on opioids.

The HCV Action Plan was superseded by the first Sexual Health and Blood-Borne Virus Framework in 2011.[40] The Framework brought together policy on sexual health and wellbeing, HIV and viral hepatitis for the first time and included an outcome aimed at achieving 'fewer newly acquired blood borne virus infections'. The Framework was subsequently updated in 2015 covering the period through to 2020[41] and included a commitment by the Scottish Government to provide funding to support a review and update of the IEP Guidelines, working with the Scottish Prevention Leads network.

2.6 Effectiveness of NSP/IEP policy

An evaluation of the **potential impact of the legislative and policy changes on HCV transmission among PWID in Scotland** was carried out in 2014[42]. Specifically, its aim was to determine the association between harm reduction interventions (IEP and OST) and incident HCV infection among PWID in Scotland during 2008 to 2012. This study concluded that combined high coverage of needles and syringes and OST were associated with reduced risk of recent HCV and that the combination of harm reduction interventions may have averted 1400 new HCV infections during 2008–2012. However, since this study was published, the declining trend in HCV incidence appears to have regressed and research has suggested that this may partly due to the impact of NPS injecting in 2014-15[43]. Further research is required to determine the impact on averted infections between 2017 and 2018.

Figure 1. *Indicators of recently acquired HCV infection among NESI respondents, 2008 to 2018. The method for calculating HCV incidence is described in Appendix 2 of the Needle Exchange Surveillance Initiative (NESI) 2008-09 to 2017-18 published in April 2019[44].*



A more recent study has explored the **association between harm reduction intervention uptake and skin and soft tissue infections (SSTIs) among PWID**[45]. Specifically, it examined the associations between the uptake of IEP and OST on SSTIs among PWID, and the injecting behaviours associated with having had an SSTI. The study concluded that IEP and OST uptake may reduce the level of SSTIs among PWID, suggesting increasing combined uptake may be beneficial. Nevertheless, a sizeable proportion of PWID with high harm reduction intervention uptake experienced SSTIs, suggesting the importance of other interventions such as wound care clinics.

The impact of the Scottish HBV vaccination for all prisoners, a programme which commenced in 1999, was evaluated in another study[46]. This study aimed to compare rates of HBV vaccine uptake before and after implementation of the prison programme and to estimate the determinants of vaccine uptake, the levels of ever/current HBV infection and the associations between vaccine uptake and ever/current HBV infection. The study found that vaccine uptake increased from 16% in 1993 to 59% in 2008-14 among recent-onset PWID in Glasgow and from 71% in 2008-09 to 77% in 2013-14 among all PWID in Scotland, and was associated with incarceration. Vaccination was associated with reduced odds of ever and current HBV infection and prevalence levels among PWID were low compared with other European countries.

Section 3 - Implementing injecting equipment provision programmes

This section aims to provide a framework for the planning and delivery of IEP services, in order to maintain and improve the provision of injecting equipment in Scotland and make that provision more accessible.

3.1. Needs assessment

Before implementing new, or changing injecting equipment provision programmes or services it is important to understand the current needs of the people who will be using these services. Needs assessment provides a systematic method of doing this in a way that **focuses on the needs of the target population** rather than the service provider. It **is a key step in planning and commissioning integrated services** for people who use drugs and their families[47].

3.1.1. Understanding needs

"A **health needs assessment** is a systematic method of identifying unmet health and healthcare needs of a population (…) and making changes to meet these unmet needs"[48]. Broadly speaking, needs assessment has also been described as "a measure of how much of what is needed" or as "a process of ordering and prioritisation of community needs" [49].

The target population can be a group, or more specific subgroup, of the population. When considering people who inject drugs a needs assessment focussing on a group might look at all people who inject drugs whereas a subgroup needs assessment might focus on, for example: people who are roofless; women who inject drugs; people who live in a specific postcode area or people who use a specific type of drug such as image and performance enhancing drugs.

A useful definition of **need is 'the capacity to benefit from services'**[50]. This definition keeps the focus of needs assessment on interventions that can produce real benefits, and on identifying and understanding the needs of people who could benefit from receiving those interventions. It highlights the type and distribution of services and interventions that will bring the greatest benefit.

The **needs of the target population** are considered "when a benefit can be achieved from an intervention, and a measurable improvement can occur as a result of a change"[51].

A needs assessment should describe:

- the level of need for public services;
- the extent of unmet need;
- the pattern of supply and effectiveness of current services;
- how to work towards meeting a need;
- how to use resources in the most effective and efficient way.

3.1.2. Who should undertake needs assessment?

To be effective needs assessment should be led by, or as a minimum informed by, someone with experience in the process. Each Health Board area in Scotland has a Public Health team which has a key role in ensuring that health needs assessment is undertaken and that Scottish Government health improvement policies are carried out. The local public health team is therefore the recommended point of contact for discussing how needs assessment is taken forward. The local Sexual Health and BBV MCN should also be able to provide direction.

Alcohol and Drug Partnership (ADP) partners also have an important role to play in planning and commissioning needs assessments in their area.

A **collaborative approach** should be used to bring together stakeholders and people from different backgrounds and organisations to get a full picture of service need, delivery and priorities. It is especially important to involve the population whose needs are being assessed.

A steering group should be set up to lead and review the process. It should include individuals with a range of skills and responsibilities, including data analysts, to ensure that the process is undertaken effectively, that it is completed within a reasonable timescale, and that the findings result in action.

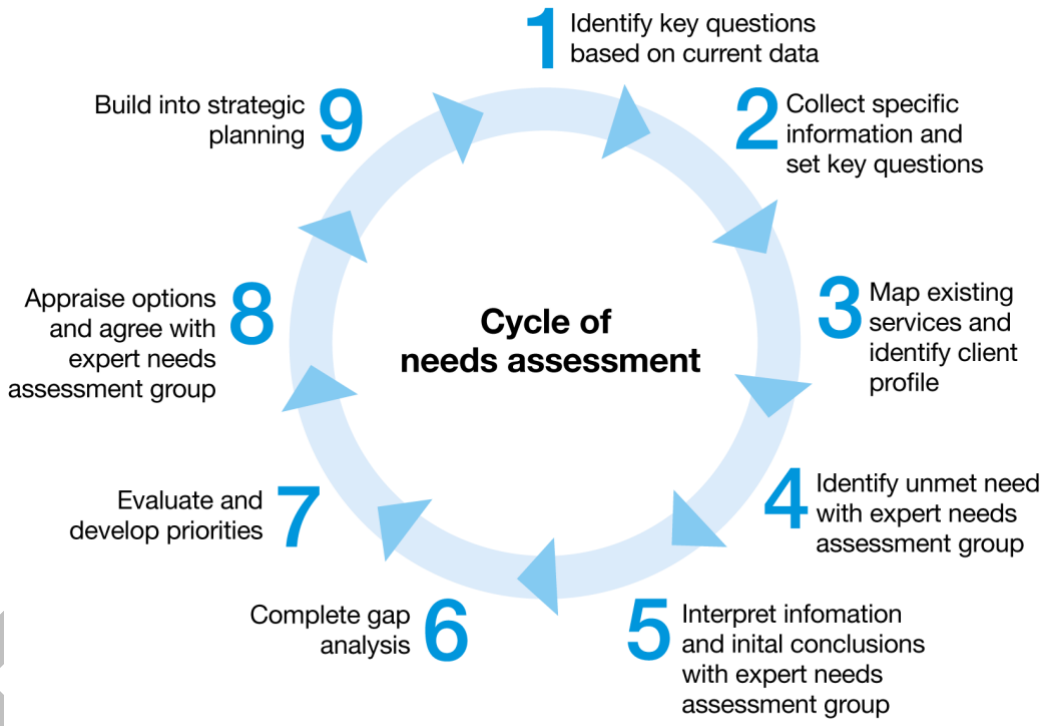
The Needs Assessment steering group membership should relate to the target population (i.e. service providers or practitioners, researchers); should represent them (i.e. family or carer groups and wider community); and should be able to make changes happen (i.e. managers of relevant agencies, service planners and commissioners)[52].

The steering group should establish a process to inform and drive the needs assessment.

3.1.3. Frequency of needs assessment

Needs assessment is an on-going process. It is anticipated that most systems will require a comprehensive needs assessment every three to five years. Needs may change over time therefore existing needs assessment(s) should be reviewed regularly through an annual refresh and/or by linking the process of needs assessment to on-going monitoring and evaluation.

Figure 2. *Annual cycle of needs assessment. Adapted from NHS National Treatment Agency for Substance Misuse. Needs assessment guidance for adult drug treatment. July 2007*[53]



3.1.4. Approaches to needs assessment

Defining the objectives of a needs assessment is a priority at early stages of the process; clarifying that the methods used will be completely dependent upon the population targeted and what is to be measured.

There are **two approaches** to needs assessment, and they will determine the method used to carry out a needs assessment[48]:

- **The first approach** establishes the needs of the target population solely on the basis of consultation with users and service providers, without any prior assumptions about what those needs might be.

  Examples: How can this service better meet the needs of females who use drugs? Is there a need in this area for a service for teenagers who use drugs? How do the needs of psychostimulant users differ from those who primarily use opiates?

- The **second approach** assumes, on the basis of other available information, that there is a need.

  Examples: What are the child care needs of women in this service? What is the best way of providing services for young people who use drugs problematically? What are the best ways of providing for the counselling needs of people who use psychostimulants?

Both approaches are useful, and it may be necessary to use either or both at different times.

3.1.5. Identifying elements of the Needs Assessment

Planning a needs assessment depends on the scope of the project and the population of interest. However, the following steps will be common to all:

- Identify the issue;
- Identify the population:
- Identify the sources of data available;
- Identify the gap between need and supply.

Key elements to consider while undertaking a needs assessment exercise:

- the needs of service users are the focus of the needs assessment;
- identifying the right people to be involved in the process and set up a steering group
- identifying what needs to be measured and the target population;
- preparing focused and specific questions; and finally
- agreeing the appropriate approach to carry out the needs assessment.

The process of needs assessment should ordinarily involve the following **steps**:

1. a review of the existing **sources of information** relevant to the target population;
2. a **profile of existing services** and **target population**;
3. a collation of the views of **the target population;**
4. a collation of the views of relevant **practitioners and service providers;**

5. an **analysis** and **interpretation** of the assessment in order to draw recommendations;
6. **a prioritisation** of the identified needs, appraisal of the options for meeting those needs, and a plan of implementation, including allocation of resources; and
7. **monitoring** and **evaluation** of how recommended actions have been implemented and the level of success in meeting the needs of the target population.

STEP ONE. SOURCES OF INFORMATION

Needs assessment involves the collection of data from a number of sources. In some cases, the data will already exist in the form of routinely collected data sets, the results of local population surveys, and published or unpublished research papers. Other information will have to be collected through, for example, focus groups or one-to-one interviews with practitioners and members of the target population.
Information required about the target population may comprise: population size and demographics (age, male/female rate, etc.); clinical history; patterns of drug use: drug-injecting behaviours; employment status; family and social dynamics; relationship with services; etc.

Effort should be spent in gathering **enough** information to **build up a picture** of the overall size and nature of the population's needs, not in gathering all the information that is available[54].

STEP TWO. UNDERTAKING A PROFILE OF EXISTING SERVICES AND TARGET POPULATION

The aim of constructing a service profile is **to identify the range of needs currently being met** by services, and the **capacity** and **accessibility** of those services.

An analysis of the gap between the needs of the target population and what is being provided will be the focus for future service planning.

It may be helpful to classify the needs of the target population into a small set of categories, such as: health-related; drug-related; accommodation-related; and employment-related needs.

STEP THREE. GATHERING THE VIEWS OF THE TARGET POPULATION

The target population should be at the very centre of needs assessment. Before setting out, **it is important to make it clear why you are seeking their views**. A short, focused, set of questions **and** a clear explanation of why the views of the population are being asked can maximise engagement and influence developments without raising unrealistic expectations. Further information about ways of engaging with your target

population is available from the EIU Guide, 'Effective Engagement. A guide to principles and practice'[55].

STEP FOUR. GATHERING THE VIEWS OF SERVICE PROVIDERS AND PRACTITIONERS

Staff at all levels within the agencies providing services (including statutory, voluntary and private sector agencies) are a crucial source of information about the needs of the target population.

Engagement with service providers should:

- be supported by effective communication channels and undertaken on a regular basis;
- provide clarity about the purpose of the needs assessment;
- provide feedback to them throughout the process.

Short surveys or face-to-face engagement (e.g. focus groups) might be a way to canvass the views of service providers and practitioners.

STEP FIVE. ANALYSIS AND INTERPRETATION OF THE ASSESSMENT

The project team should include someone who is suitably qualified to analyse and interpret the available data from the outset. They will be required to work alongside those who are gathering the information to ensure that it is interpreted accurately.
The findings produced from the analysis and interpretation of the data will be documented in a report, which may include:

- a concise and clear summary of the main findings;
- graphs, charts and tables to emphasise key findings;
- a discussion of the key messages derived from the analysis and interpretation of the data, as well as identified gaps;
- a set of proposed recommendations to provide a basis for discussion.

STEP SIX. TAKING ACTION

Decisions on appropriate actions will depend on several crucial and closely connected activities. These include:

- **Prioritisation:** a strategic process, undertaken by those responsible for the commissioning of services, in which the available needs and resources are ranked in some way to decide which needs will be met first and which will be met later.

- **Options appraisal:** There may be more than one way of meeting the needs identified[56]. Various options should be considered[57] and the evidence in favour of each approach should be considered carefully as well as recorded.

  Ultimately, the aim is to give first priority to actions that will have the greatest positive impact on the target population and which will require fewest additional resources.

- **Implementation:** When agreement has been reached about how the needs are to be met, an action plan (realistic, achievable and adequately funded) and a timetable should be drawn up, which includes a plan for resource allocation.

STEP SEVEN. MONITORING AND EVALUATION

The purpose of monitoring and evaluation is to determine whether the changes made as result of the recommendations resulting from a needs assessment (either in the way existing services are provided, or in the introduction of new services or interventions) are having the desired impact.

In the context of evaluating changes, it is helpful to use the following forms of evaluation:

- Process evaluation: which focuses on how an intervention is working and why; and
- Outcome evaluation: which aims find out whether the desired change has been achieved.

3.1.6. Further reading and examples of Needs Assessment

The following are examples of needs assessment and further guidance to support services undertaking needs assessment. These have been identified to provide a framework which national or local groups might consider when developing their own needs assessment:

- NHS Greater Glasgow & Clyde:
  Tweed E, Rodgers M, Priyadarshi S, Crighton E. (2018). “Taking away the chaos”: a health needs assessment for people who inject drugs in public places in Glasgow, Scotland. *BMC Public Health* 18, 829. Available at: https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-018-5718-9 [Accessed Oct 2019].

- NHS Lothian:
  NHS Lothian (2017) *Health Needs Assessment.* NHS Lothian. Harm Reduction Team. Available at: https://services.nhslothian.scot/harmreductionteam/Pages/Health-Needs-Assessment----2017-.aspx [Accessed Oct 2019].

- Scottish Public Health Network (ScotPHN):

Scottish Needs Assessment Programme (SNAP). Available at: https://www.scotphn.net/resources/scottish-needs-assessment-programme-snap/introduction/ [Accessed Oct 2019].

- NHS National Treatment Agency for Substance Misuse:
  NHS National Treatment Agency for Substance Misuse (2007) *Needs assessment guidance for adult drug treatment*. Available at: http://www.emcdda.europa.eu/attachements.cfm/att_231400_EN_UK45_Needs%20assessment%20guidance%20for%20adult%20drug%20treatment.pdf [Accessed Oct 2019].

- Information Services Division (ISD)
  ISD. *Population Needs Assessment for Health and Social Care Partnerships: guidance on the use of data sources.* Available at: https://www.isdscotland.org/Health-Topics/Health-and-Social-Community-Care/docs/HSCP_NA_031014.pdf [Accessed Oct 2019].

3.2. Planning and contracting or commissioning services

Effective planning and commissioning are key to ensuring delivery of an effective injecting equipment provision. This should cover the type, number and location of services required, the practicalities of service delivery and how this will be effectively communicated to maximise engagement. Undertaking needs assessment will give insight to many of these areas however the operational aspects of service delivery will require further consideration. This section aims to highlight the considerations which will inform the planning and commissioning process.

The diversity of IEP services models is intended to improve access for PWUD in terms of time of day, geographic location, and services offered. WHO, UNAIDS, and UNODC[58] recommend not providing injecting equipment in isolation but, instead, adopting a multidisciplinary approach which integrates various alternative and complementary models for delivery of injecting equipment and other harm reduction services. IEP services should, therefore, not operate in isolation but in the context of a comprehensive harm reduction strategy, which seems to be more beneficial[59].

3.2.1 Stakeholder Consultation and Engagement

SHBBV Managed Care Networks exist throughout Scotland, and generally these include representatives from agencies responsible for the commissioning and delivery of IEP services. To be truly effective, however, the planning of IEP services also needs to take into account the views of service users and community representatives.

Planners and commissioners of IEP services need to develop support and awareness among the **diverse groups that will be affected by IEP services.** These include: PWUD, familial and social networks, drug treatment and support services, the police, public health, primary care and mental health services, and community representatives. One way of developing support is by establishing an advisory group comprising relevant stakeholders.

The police are important stakeholders in relation to IEP services. Links to the police can be made through local community safety partnerships and discussions with the police should take place before setting up any new service since police support can help to allay fears and combat local opposition. It may be helpful, in some circumstances, to establish a protocol with the police (or any private security providers)[60].

While it is crucial to engage with stakeholders in the early stages of setting up a new IEP service, it is also important to maintain that engagement over time, so that services can identify and respond to any issues that arise, and promote successes, for example, in reducing street-based injecting or drug litter. A protocol, developed locally in conjunction with service users, may also be helpful to avoid inappropriate discarding of injecting equipment[61].

3.2.2. Community empowerment

Introduction of new IEP services can raise anxiety within the proposed communities. NHS Boards should be prepared to actively promote the benefits of IEP programmes to counter adverse media publicity and local opposition based on misinformation.

The United Nations Office on Drugs and Crime (UNODC), the World Health Organisation (WHO) and
the Joint United Nations Programme on HIV/AIDS (UNAIDS) have coined the term community empowerment to refer to the process whereby PWUD are supported "to address for themselves the structural constraints to health, human rights and well-being that they face, and improve their access to services"[62]. Community empowerment is, therefore, an essential approach that underlies all the interventions and programme components described in this guidance, and that are essential for ensuring community-led planning, implementation and monitoring of all aspects of prevention of the transmission of BBV infections[63, 64, 65, 66, 67].

At the local level, this means that organisations and networks of PWID are members of planning, funding and implementation committees and other relevant bodies. Connections with regional, national and global networks of people who inject drugs are useful to exchange knowledge, experience and support.

3.2.3. Operational aspects of service delivery

Needs assessment should highlight gaps in service provision and help identify what type of service(s) is/are needed in which location(s). Sections 4 of this document provides information on the types of services to guide discussion and information on recommended harm reduction interventions. Section 5 provides advice on the recommended injecting equipment and paraphernalia. Waste collection and disposal of these items will also be required. When used in combination these factors will help plan operational delivery of the service and associated funding requirements. This in turn will inform the commissioning process.

3.2.4. Staff training

It is the responsibility of services to ensure that their staff are properly trained prior to delivering an IEP service. However, it is the responsibility of service planners and commissioners to ensure that suitable training is made available, and that staff are given all necessary support to be able to attend. In the case of pharmacy IEP services, this may involve providing locum costs. Section 7 provides further information about the skills and knowledge that should be expected of all staff involved in the delivery of IEP services.

3.2.5 Communication strategy

Information about IEP services should, as much as possible, be targeted specifically at PWUD or who may have previously used drugs – e.g. BBV testing – and agencies that work with them. This strategy aims to reduce negative attention from the community, stigmatisation of PWUD attending services and practical difficulties for the service provider delivering the service.

3.2.5. Monitoring and Evaluation

Monitoring and evaluation are key components of service planning and delivery.

Monitoring is an ongoing process that involves the continuous or regular collection of key information to assess whether interventions are having the intended effect. The process of evaluation involves looking back to find out what difference an intervention has made. Evaluation can also be used to explore how and why something is working or not working.

It is recommended that a standardised electronic system of recording and information gathering is used to ensure compatibility and consistency of data nationally that allows comparison and evaluation of trends, developments and needs. To maximise data

accuracy and capture complete demographic information, it is further recommended that data is input at the point of transaction in real time.

In addition, it is recommended that health boards support the Needle Exchange Surveillance Initiative (NESI); a biennial, bio-behavioural, cross-section survey of people who inject drugs attending IEP sites across mainland Scotland since 20083. NESI measures and monitors the prevalence of BBV and injecting risk behaviours among PWID in Scotland. The initiative was initially funded by the Scottish Government as part of the Hepatitis C Action Plan, which stated that efforts to prevent HCV in Scotland must focus on preventing transmission of the virus among PWID. More recently the initiative has been funded under the auspices of the Scottish Government's Sexual Health and Blood Borne Virus Framework. NESI provides information to evaluate and better target interventions aimed at reducing the spread of infection amongst PWID.

Section 4 - Models of service delivery

The provision of injecting equipment can be undertaken using a wide range of service models.

The previous chapter recommended the use of **a mixed-model approach** when implementing IEP**.** This section looks in detail at the different models available, and provides information about their strengths and limitations, based on research findings. This information is intended to inform local decision-making about how best to structure service provision so that it meets the needs of local populations of PWUD.

4.1. Core and Enhanced IEP Interventions

A wide range of interventions can be delivered by IEPs, as outlined in Table 1 (below). There is an expectation that all IEP services will be able to provide access to those interventions listed below as **core** at point of exchange. The extended range of **enhanced** interventions may not be delivered by every site; however, commissioners should strive to make these available in their local area. All IEPs in the area should know which services offer these interventions and support people to access them.

Table 1*. Injecting Equipment Provision (IEP) Interventions*

Interventions offered	**Type**
Maintain client records on IEP database at time of transaction	Core
Provide the agreed basic range of IEP equipment	Core
Basic safer injecting advice	Core
Provide Naloxone	Core
Advice on BBV testing and support people to access it	Core
Advice on wounds	Core
Extended range of IEP equipment	Enhanced
Undertake assessment of injecting risk (AIR)	Enhanced
In-depth safer injecting advice	Enhanced
In-house BBV testing	Enhanced
In-house wound first aid	Enhanced
In-house access to wider interventions e.g. sexual health, contraception, blood testing and health checks for IPED use, etc.	Enhanced

4.2. Models of Injecting Equipment Provision

A range of IEP models have operated in Scotland in recent years and can be roughly categorised as being delivered from either a fixed site or on a mobile base. These include specialist injecting equipment services, community pharmacy IEP, IEP as a part of drug treatment services, mobile IEP from a vehicle, outreach on foot and in-reach, where the outlet operates in another organisation's premises. Other forms of provision, such as needle replacement schemes and domiciliary (where injecting equipment is taken to people's homes), continue to account for only a small number of IEP outlets operated by agencies. The models are described in more detail below, along with their strengths and limitations and examples.

Evidence suggests it is difficult to draw conclusions on what works best[68]. It is recommended that a variety of services is therefore made available to meet the geographic and demographic needs of the area[69]. Evidence supports an integrated, multi-disciplinary, multi-modal approach to delivering harm reduction interventions as opposed to IEP operating in isolation (see section 6).

Key elements to consider include:

- Accessibility, location and transport
- Opening hours, including consideration of late opening/weekends
- Needs of specific subgroups – e.g. Image and Performance Enhancing Drugs (IPEDs), gender, men who have sex with men (MSM), prisoners, etc.
- Needs of specific environments – custody, hospital, prison.

Scottish context

The total number outlets reporting IEP provision in Scotland has remained broadly similar since 2011/12 (292)[70]. In 2016/17, 219 (78%) of the total 281 outlets were pharmacy-run and 62 outlets were agency-run.

A range of non-pharmacy agency IEP services have operated in Scotland over the past ten years. IEP as part of a broader drug treatment service, was the second most common form of non-pharmacy service (26%). This was followed by 'Mobile IEP' (16%), 'Street outreach' (15%) and 'Peripatetic outreach' (where the outlet operates in another organisation's premises) (13%). Other forms of provision such as needle replacement schemes and domiciliary (where injecting equipment is taken to people's homes) continue to account for only a small number of IEP outlets. **Biannual reports on IEP services** can be found at https://www.isdscotland.org/Health-Topics/Drugs-and-Alcohol-Misuse/Publications/index.asp.

4.2.1. Community pharmacy IEP services

Definition: IEP services delivered from community pharmacy premises by community pharmacy staff. This involves a mixture of staff including pharmacists, pharmacy technicians, dispensers and counter staff.

Scottish context

Service provision for PWUD is a core function of community pharmacy practice in Scotland[71].

- **Pharmacies in Scotland** are paid, via their NHS Board, to deliver IEP services through locally negotiated service level agreements.

- Pharmacy staff in Scotland have access to **a range of training options**[72], from professional distance learning packages to local seminars - most of which is free of charge and available through NHS Education for Scotland (NES), the Royal Pharmaceutical Society, nationally commissioned training organisations (e.g. SDF) and local Specialist Drug and Alcohol services[73]. By engaging in training activities, pharmacy staff across Scotland have, over time, developed a generally more positive attitude towards IEP programmes. Staff training has been recognised as an essential component of effective service delivery.

- The majority of Health Board areas in Scotland employ **specialist drug and alcohol pharmacy teams**. These roles promote and develop delivery of services such as IEP and may also have contributed to the scheme success in Scotland.

Expected benefits

- The use of **community pharmacies can make IEP services more accessible to PWUD** as they are typically already established within communities in both urban and rural areas.

- Providing injecting equipment within a community pharmacy also gives on-site **access to a qualified healthcare practitioner** and a full range of NHS pharmaceutical services.

- **Convenience** (location and opening hours), relative anonymity, and increasingly positive interactions with staff, are positive factors identified in customers' experiences of pharmacy-based access to injecting equipment[74].

- Community pharmacy is acknowledged as a resource for the delivery of effective

health care, including **encouraging activities to support BBV prevention**[75], testing and treatment. People accessing a pharmacy IEP may already have established relationships with pharmacy staff through accessing other services, such as OST. This may reduce barriers to access through the establishment of trust. Research suggests that this is supported by non-judgemental and confidential delivery of the IEP service[76].

- Training has been identified as key to developing positive attitudes regarding IEP provision and making appropriate training available to all pharmacy staff has been seen as beneficial to service delivery[77].

- The provision of injecting equipment within an existing pharmacy precludes the need to find and fit out new premises and hire staff, with all the expense that would entail. Furthermore, there is no need to obtain planning permission in order to deliver an IEP service within a pharmacy.

- Most pharmacies have private areas or consultation rooms that allow for greater confidentiality and privacy when speaking to customers.

- The Scottish pharmacy contract provides considerable opportunities for developing the care of PWUD in a community pharmacy context. For example, the electronic Minor Ailments Service (eMAS) allows access to counselling on general health ailments and the supply of a range of medications and dressings free of charge, directly from the pharmacist.

- A number of innovative developments and research projects have been undertaken to improve access to BBV testing and treatment. Examples include dispensing of HIV and HCV medication. The SuperDot C RCT enabled pharmacists to undertake the testing, diagnosis and treatment of HCV removing the need for patients to travel to specialist centres with positive patient outcomes reported[78-79-80].

Potential challenges

Concerns about **anonymity, associated stigma and recurrent anxiety** are reported, particularly in smaller towns and villages. There may be particular fear of negative perception or response where people are attending a pharmacy for OST but also require injecting equipment.

Community pharmacies are diverse services which are required to deliver a wide range of health interventions and services. As a result, the majority of pharmacy staff will not

have the same **level of in-depth knowledge,** as more specialist staff, with regards to injecting drugs habits and PWUDs.

Delivery of face to face **training** to pharmacy staff can be challenging as it may require **funding** to back fill staffing to attend. There may also be **limited staff** to cover the required backfill.

Key points

- Expansion of the community pharmacy IEP network should be considered by commissioners as an easily accessible route for distribution of injecting equipment in local communities where a need is identified. This should be complemented by access to more intensive support available from specialist IEPs.

- Collaboration, communication and integration with existing local or board-level drug treatment and support services should be encouraged[82].

- Access to general health care interventions available from community pharmacy should be advertised and offered to people accessing pharmacy IEP services.

- Commissioners should ensure that **appropriate training is made available to all pharmacy staff**, including pharmacy support staff, pharmacists and pharmacy managers / owners[71, 73, 81, 82, 83]. Pharmacy managers and owners should ensure that all staff involved in the delivery of IEP are supported to access the training[84].

- The availability of accessible information has been seen as a factor that facilitates dialogue and/or allow pharmacy staff to intervene in a more universal or broad-reaching manner with PWUD[82]. Commissioners should ensure that suitable materials are made easily available for use within community pharmacy.

4.2.2. Enhanced IEP Services

Background and definition

Enhanced IEPs can be used to describe IEP delivered by specialist harm reduction workers with extensive knowledge and training in the field of drug use. They can be delivered in isolation as a dedicated IEP but are more commonly delivered as a key component of a wider range of interventions designed to support the needs of PWUD.

Enhanced IEPs provide a wide range of services including:

- Distribution of a broad range of injecting equipment and paraphernalia which can

be tailored to the individual's specific needs

- Staff who have specific training, in depth knowledge and experience relating to drug use.
- In depth assessment of injecting risk
- In depth safer injecting advice
- Behavioural change work
- Tailored interventions including; overdose awareness and naloxone training, wound first aid, BBV testing, treatment and vaccination and sexual health services
- Links to wider services (onsite or by referral) such as treatment services, housing support and debt management.

Scottish Context

Since the 1990's, the busiest IEP in GGC has been Abbey Chemist in Glasgow City Centre. The clients using this outlet often presented with a wide range of injecting complications which the pharmacy staff struggled to help with. In 2018 a joint initiative was launched between NHS and Abbey Chemist to employ a specialist harm reduction nurse. The idea was to provide low threshold access to a wide range of harm reduction interventions. Over 270 injecting related wounds were identified and treated with the first year.

As well as wound care, the nurse provided Naloxone, injecting equipment and safer injecting discussions. Due to the success of this venture the nurse's role became incorporated with the NHS City Centre Outreach Team and the work continues embracing new initiatives such as WAND and AIR. The team continues to operate within the pharmacy five days per week.

A similar programme delivered in a number of pharmacies in Lothian achieved equivalent outcomes in terms of harm reduction.

Expected benefits

- Provides access to a wide range of services tailored to the needs of individual PWUDs
- Provides access to staff with specialist knowledge in the different types of drug use
- Enhanced IEP services provide opportunities for collaborative working with wider services.

Potential challenges

- May not be viable in areas with lower numbers of PWUD which may restrict access
- PWUD may not travel to access enhanced IEP services if not in local community.

4.2.3. Outreach services

Background and definition

Outreach work can be described as frontline, low threshold work, to establish contact with marginalised groups and to provide them with appropriate support[85]. Outreach services are often targeted at populations of PWUD that do not routinely access standard fixed-site services. In Scotland they are generally delivered as an extension of fixed site specialist IEPs thus providing access to the same level of staff knowledge, training and experience described in section 4.2.2. above. The range of interventions available will be determined by the mechanism of delivery, which may be less than what it is available from fixed site specialist IEPs.

"**Outreach**" is a generic term which may cover a **wide variety of IEP services**:

- Outreach (on foot) – backpacking, on-street, hot spot locations;
- Outreach (peripatetic) - on the premises of another agency, such as a health centre or homeless hostel on certain days of the week for a few hours each day;
- Outreach (to home) – home delivery or home-based intervention; and
- Outreach (vehicular) – mobile unit (van, bus, etc.).

Five **general aims** of drugs outreach work have been defined at national policy levels:

- to identify and contact hidden populations;
- to support members of these populations to access existing care services;
- to initiate activities aimed at prevention of harm;
- to promote safer use of drugs; and
- to identify the needs and perceptions that PWUDs have with respect to existing drug services, and to relay this information to key services[86].

Three types of workers can be active in the field of outreach work: **professionals, peers and volunteers**. Peers and volunteers' involvement, particularly, is of crucial value for keeping in touch with the target groups.

Specific guidance on delivering outreach IEP can be found at the United Nations Office on Drugs and Crime (2012) *Outreach for injecting drug users*[87].

Services provided through outreach:

- Education, advice and information either in individual or in group settings
- Regular distribution of injecting equipment and paraphernalia
- Safe collection and disposal of used injecting equipment and paraphernalia (see section 5.2.12)

- Referral services to appropriate healthcare and other agencies.
- A range of harm reduction interventions can be delivered to meet specific needs of this population.

Scottish context

- An example of this model in Scotland is what the **Assertive Outreach team offers in Glasgow**, since 2014, has achieved as result of a partnership created by the Glasgow City Alcohol and Drug Partnership (ADP)88, Turning Point Scotland and the Simon Community Glasgow. The Glasgow Assertive Outreach team consists of **four support workers who maintain a street presence** in the city centre and neighbouring areas of the Glasgow East End during afternoons and evenings, seven days a week[89]. An addictions nurse has also joined to the team to provide health interventions and to liaise with existing health services. Team activities include: distributing injecting equipment; providing harm reduction advice and training; and supporting clients to engage with other services such as housing, social work, addictions, and specialist healthcare. Further details available at *Taking Away the Chaos. The Health Needs of People Who Inject Drugs in Public Places in Glasgow City Centre*[90].

- In Aberdeen the 3rd sector service Alcohol and Drugs Action operates "Quay Services". This is a mobile (vehicular) outreach service aimed at providing support in the harbour area of Aberdeen specifically for women many of whom will work in the sex industry. The service provides access to a variety of items tailored to the person's needs including access to sterile injecting equipment and paraphernalia, condoms, panic alarms and naloxone. This is delivered with accompanying advice, including, but not limited to, harm reduction advice, support and information relating to sex work, drugs, alcohol and related issues. It offers support aimed at achieving positive changes in their lives. The service links women to internal and external services including sexual health and local alcohol and drug services. These skilled workers encourage women to engage with further one to one support where women can explore their substance use (drug or alcohol) and any related issues in more depth.

- See also mobile services (see 4.2.3.1)

Expected benefits:

- Can be a way of engaging IEP services with PWUD who do not or cannot access fixed site services.
- Can be a way of engaging specific target or high risk groups (see examples above).
- Outreach is associated with a reduction in injecting risk **behaviour and reduced**

exposure to BBV[91-92].

- **Different models and outreach strategies have evolved** over time in response to community needs, new knowledge and the availability of resources (or lack thereof).

Potential challenges:

- The effectiveness of outreach interventions depends greatly on the skills of outreach workers, the flexibility of approach and the appropriateness and comprehensiveness of the services provided[93].

- **Training is a continuous process** and it is especially important to **maintain up to date** information about: available services; prevention and health promotion; legislation; and human and civil rights[85].
- The range of interventions available may be limited by the mobile nature of the service.
- Outreach work appear be labour intensive to staff due to additional travel requirements however this should be balanced against the expected benefits of delivering outreach services.
- A mandatory risk assessment will be required to ensure staff safety.
- Mobile outreach using vehicles are likely to require significant outlay to procure, fit out and upkeep the vehicle(s).

Key points:

- Outreach work is **strongly recommended as an essential component** of all BBV and bacterial infection prevention and care programmes and as an **especially effective method for engaging** with those who are difficult to reach through other interventions[94-95].
- Outreach work should also aim to work in partnership with wider services to maximise the range of opportunities for people using services.
- **Adequate training, supervision and support** remain critical regardless of the worker's background experience[90].
- Clients, policy-makers and outreach work professionals and volunteers **need ways of assessing** whether the implementation of their outreach strategies are fulfilling their aims and objectives[96].

Useful links:

- NHS Greater Glasgow and Clyde (2016) *Taking Away the Chaos. The Health Needs of People Who Inject Drugs in Public Places in Glasgow City Centre*[90].

- WHO (2004) *Effectiveness of community-based outreach in preventing HIV/AIDS among injecting drug users*[97].
- WHO (2004) *Training guide for HIV prevention outreach to injecting drug users: workshop manual*[98].
- UNAIDS (2007) *Practical guidelines for intensifying HIV prevention*[99].
- Outreach Best Practices: Harm Reduction Coalition website: https://harmreduction.org/issues/syringe-access/tools-best-practices/manuals-and-best-practice-documents/additional-best-practice-documents/outreach-best-practices/

Mobile Services

Mobile services operate from a vehicle. Some large mobile programmes act like fixed sites with testing and other healthcare services also available. Others run in conjunction with fixed sites. In these instances, the mobile service is typically located in an area with high numbers of PWUD and it operates along regular routes at regular times, often at night, coinciding with the congregation of PWUD and those at high risk of harm, such as sex workers on the streets[100-101]. Mobile services can be more accessible than fixed sites and may face less opposition than fixed sites[102].

4.2.4. Police custody suite and prison IEP services

Background and definition

Police custody suites: When taken into police custody, PWID are required to dispose of any used injecting equipment. Police needle replacement schemes involve providing replacement packs of sterile needles and returning any sterile equipment to PWID when they leave custody.

Prison-based IEPs: Prison IEPs provide sterile injecting equipment to prisoners who inject drugs. Like community-based injecting equipment programs, prison IEPs have been shown to be very effective in international contexts. Scottish prisons do not currently offer these programmes, however, all prisons have the ability to provide injecting equipment on liberation.

The risk of acquiring BBVs such as HCV and HIV via injecting drug use in prison is well established[103, 104].

The global prevalence of BBV infections and tuberculosis in prison populations is estimated at 2 to 10 times as high, and in some cases up to 50 times as high, as in the general population[105]. The world prison census (2013) was around 10.2 million prisoners. Of these prisoners: 3.8% had HIV; 15.1% had HCV: and 4.8% had chronic HBV

infection. These rates of infections are influenced by the overrepresentation of people who inject drugs (PWID) and men who have sex with men (MSM) in prison populations[106].

A prospective cohort study (n=267), carried out in England in 2014, examined drug injecting prevalence and practice during imprisonment and explored views on prison IEPs[107]. 64 per cent of PWID were injecting until admission into prison. The majority intended to stop injecting in prison (93%), and almost a quarter did due to the lack of service provision (23%). Yet when hypothetically asked if they would continue injecting in prison if IEP was freely available, a third of participants (33%) believed that they would.

The high prevalence of **problem drug use by the prison population** is accompanied by a high risk of acquiring HIV and HCV among PWID in prisons[108].

Injecting equipment provision, accompanied by other harm reduction interventions, have been shown to be effective at reducing HCV and HIV transmission among PWID in the community[109, 110]. Prisons have the opportunity to become an **important setting to deliver HCV prevention interventions**, although few countries currently implement them[111,112].

The WHO, UNODC, and the UNAIDS have recommended the implementation of harm reduction initiatives in prisons and other places of detention as an **essential public health measure** and have developed international guidelines on how to do this[113].

Scottish context

There are currently no prison-based IEP schemes in Scotland. There have been attempts to pilot **in-prison injecting equipment initiatives** in the Scottish Prison Service, however, where available, this has so far been limited to paraphernalia.

The Scottish Prison Service supports, however, a **needle replacement scheme** on liberation in several prisons, in parallel to the schemes that exist in some police custody suites.

A cross-sectional sero-behavioural survey was conducted in Scottish closed prisons between June 2010 and March 2011. The study included all 14 closed prisons in Scotland and a total of 5187 prisoners took part (79% of available prisoners and 68% of the prison census on survey days. 8% of all prisoners and 25% of people who report injecting had ever injected in prison. 2.5% of all prisoners and 8% of people who report injecting, reported that they had injected drugs during their current period of incarceration[115]. More recently, among participants in the NESI study published in 2019 who had ever been incarcerated, 7.4% reported ever injecting drugs in prison[114].

Since the introduction of OST in Scottish prisons, **HCV incidence has been reduced** among incarcerated PWID[115]. Current evidence, however, indicates that the risk of hepatitis C transmission is elevated immediately following liberation from prison[116].

Police custody suites may be able to **reach a group of injectors** who are not in contact with other services. An evaluation by Central Scotland Police undertaken during the pilot of their own needle replacement scheme in 2003, reported that, within the first 10 months of the scheme, there were 127 needle replacement transactions. One quarter of arrestees who received sterile needles upon release from custody, had never used an IEP service before[117].

Expected benefits:

- Safe and effective implementation of harm reduction interventions have been found in prison settings with evidence among the incarcerated PWID population of reductions in: drug injection; needle and syringe sharing; HIV and HCV transmission; syringe-related violence and risk of overdose[118].

- Decreased HIV and HCV prevalence among PWID prisoners has also been observed in long-term prison-based needles and syringes exchange programmes in some countries[119], as well as the perception among most prisoners and prison staff that the needles exchange programmes do enhance the hygienic living conditions in the prison without increasing injecting drug use[120].

- In countries where long-term needles exchange programmes and OST have been jointly provided in prisons a reduction in HIV and HCV incidence among the prison population has also been documented, with no increase in drug use[120]. The training programme that accompanies harm reduction services delivery also contributes to widen awareness about HIV, HCV, and risk behaviours among prisoners and prison staff, as well as to a reduction in stigma and discrimination[121].

Potential challenges:

- It is widely recognised that, after liberation from prison, there is a critical period for HCV transmission, contributing substantially to BBV transmission risk in the community[122]. Upon liberation and in some prison settings, PWID are given naloxone to reduce mortality risk[123] and sterile injecting equipment to reduce injecting risk[124]. Recent evidence suggests that the scale-up of prison interventions could be an important part of comprehensive harm reduction programmes[125].

- Not providing sterile needles may increase risks associated with injecting for prisoners who continue to inject. However, providing such equipment may prolong injecting activity for other prisoners who currently cease injecting on account of injecting equipment not being provided in the UK prison setting[107].

Key points:

- **Prisoners should have access to an equivalent standard of health care** as anyone in the community**[126]. Providing injecting equipment to PWIDs remains an essential public health intervention**, regardless of setting. There are a number of prison-based needle and syringe programmes operating in other countries which work well and are supported by prison management and staff[127].

- Previous Scottish IEP guidance made recommendations to introduce IEP within Scottish Prisons[128-129]. This remains unmet, looks unlikely to happen, and may need revisited should the incidence of BBVs increase within the prison population or any outbreak occur.

- **Prisoners should have access to information, education, and support from trained personnel regarding safer drug injection**. Where a prisoner is known to inject, harm reduction advice should be given, although in the absence of IEP this may have limited benefit. Injecting within the prison may carry greater risks than injecting within the community as needles are often "homemade" (constructed with materials such as pens/paperclips and using the broken off tip of an insulin syringe) and cannot be adequately sterilized. The individual will also lack access to other key paraphernalia items (such as acidifiers, spoons, filters and water), so they may be forced to improvise equipment or share with others, which again increases the risk of bacterial infection and BBV transmission.

- **Prisons should provide easy and confidential** information regarding local IEP and drug treatment services available **on liberation as part of standard harm reduction practice**[130]. This will require prisons to work closely with supporting services around equipment supply and stock logistics, training for prison staff and to ensure the proper recording of transactions.

- It is generally accepted that while provision of injecting equipment is useful in addressing the prevention of transmission of BBV and bacterial infections in close settings, other harm reduction interventions should be part of the offered package in close settings, in order to achieve further impact[131].

- It is crucial to ensure **the continuity of BBV medication and treatment** upon arrest, pre-trial detention, transfer to prison, within the prison system, and upon liberation.

Note:

*In this document, the term “prisons and other closed settings” refers to all places of detention within Scotland, and the terms “prisoners” and “detainees” to all those detained in those places, including adults and juveniles, during the investigation of a crime, while awaiting trial, after conviction, before sentencing and after sentencing.

**Those employed in prisons and closed settings could include prison officials—including government officials—security officers, prison wardens, guards and drivers, and other employees, such as food services, medical and cleaning staff.

4.2.5. Secondary distribution

Definition and context. Secondary needle distribution refers to a range of formal and informal practices whereby a community member acquires and redistributes sterile injecting equipment to peers (PWID) within social and drug-using networks.

The practice of secondary distribution is highly prevalent among injecting populations[132]. For younger and less experienced PWID, secondary distribution has typically been identified as their primary source of clean equipment[133]. Qualitative research and recent epidemiological evidence also indicate that secondary distribution is common among IPED networks[134-135].

Expected benefits:

- Secondary distribution **facilitates access** to sterile equipment (including foil) for a greater number of PWID who might not otherwise access sterile injecting equipment and/or obtain sufficient equipment[136].

- Furthermore, secondary distribution **can be harnessed to disseminate accurate risk reduction and disease prevention information** through peer education, encourage health-promoting social norms and behavioural change, and recruit members of PWID social networks into other harm reduction services and interventions.

- Models of service involving outreach workers with lived experience of drug use can offer advantages since they may **more readily gain trust and may have a deeper understanding** of drug use and homelessness issues[85].

Potential challenges:

- The system relies on peers being able to effectively pass on key safer injecting and harm reduction messages. Services have little insight into how these messages are passed on.

- While secondary exchange is effective in distributing sterile equipment to non-IEP users, research suggests that health promotion and disease prevention messages might be diminished during the secondary encounters between the injecting equipment distributors and the PWID[137].

Key points:

- IEP services should actively encourage secondary distribution but should also encourage their participants to personally attend IEP services for wider harm reduction interventions[138].
- Information on secondary distribution should be recorded on the national database.
- Information on means of safe disposal should be made available to the distributor for communication to those in receipt of secondary supplies.
- IEP service providers should be encouraged to provide secondary distributors with in-depth advice and education on safe injecting techniques and be encouraged to engage others into IEP services.

4.2.6. People with lived or living experience (peer-led services)

Definition and context. Peer-led services refer to the model that relies on the involvement of a peer (or person with lived or living experience of substance use) in the distribution of sterile injecting equipment to PWID. It is similar in some ways to secondary distribution, in that it typically involves PWID or former PWID distributing sterile injecting equipment to other PWID. Typically, an element of training and education would be provided to the peer distributor to allow information communicated onwards to be evidence-based, high quality and accurate and in-keeping with that provided by more formal IEP services.

A **peer outreach worker or peer distributor** is a person with lived or living experience of drug use or a person with community connectedness, who conducts outreach to other PWID.

Expected benefits:

- The use of peer distributors **to disseminate key messages around prevention** among the PWID community is seen as an effective intervention, particularly because

these messages are seen to have greater validity when delivered by someone who has had comparable experiences to the recipient.

- **Existing peer-to-peer projects** have also obtained good results in terms of further educating the PWID community in prevention messages and involvement with test programmes (particularly Hepatitis C)**Error! Bookmark not defined.**. A partnership project between Addaction and The Hepatitis C Trust, has supported this by implementing three key interventions: peer-to-peer education; a buddying scheme and a workforce development programme[139].

Potential challenges:

- Supporting a scheme of peer distributors is a potentially challenging experience. As well as effective funding such a scheme would require effective recruitment, training and regular supervision and support of the peer distributors[140].

Key points:

- Support the development of local peer-led networks aimed at supporting people who are actively using drugs. These should build on and complement local peer-led recovery initiatives[141].
- Provide training and regular supervision and support for the individuals involved in such peer-led local networks.

4.2.7. Needle and syringes dispensing (unsupervised) machines

Background and definitions

Needle and syringes dispensing machines (also known as Syringe Dispensing Machines (SDM) or Syringe Vending Machines (SVM)) provide injecting equipment through an automated machine in order to reach PWID populations and geographical areas where fixed or mobile IEP services do not operate.

Syringe vending machines have been described as a supplement to standard IEP services[142-143].

SDM or SVM can be used either to actively exchange new for used equipment or to dispense equipment only with an attached or integrated, but non-compulsory, disposal bin. Dispensing machines may require coins or tokens (distributed, for example, by outreach workers) to limit inappropriate access. Dispensing machines are typically

mounted on the exterior walls of fixed site IEP services to provide greater accessibility at times where coverage is poor[144] or can be sited within pharmacies.

Several countries (including England, the Netherlands, Canada, Germany, Italy, Ukraine and Australia) use syringe dispensing machines to complement other forms of IEP services. In Australia, dispensing machines supply pre-packs which include several needles and syringes as well as alcohol swabs, cotton wool, sterile water, spoons and potentially educational materials[145].

Scottish context

There are currently no needle dispensing machines available in Scotland.

Though there is some evidence that dispensing machines are able to reach the target population, stakeholders across Scotland have often expressed that their preferred option to provide injecting equipment during evenings and weekends is by extending the hours of staffed IEP services, in order to maximise opportunities for harm reduction interventions[146]. Where provision remains limited or challenging, SVM may go some way to providing a workable solution.

Expected benefits:

- Non-stigmatized access to sterile equipment, anonymity, and privacy are potentially important advantages of dispensing machines[147].

- SVMs have also been successful in reaching sub-groups that for a variety of reasons do not normally attend fixed site IEP services, such as younger PWIDs and women[143].

- Evidence of the impact of this intervention suggests they can be valuable in increasing access to IEP services, particularly among the most marginalised[148].

- PWID may value the out-of-hours access to sterile injecting equipment that SVMs provide. Participants in published studies have described vending machines as *'convenient'*, *'still free'* (in some countries) and *'great for long weekends when pharmacies are not open'*[148].

- The use of syringe dispensing machines – in the context of a well stablished IEP strategy – has also been seen as beneficial, if local concerns and capacity to increase IEP services are monitored appropriately, allowing for extended hours of IEP provision – e.g.. placed in hospital waiting rooms and covering out of hours[149].

Potential challenges:

- Consider responsibilities and resources required for stock management, disposal of waste and for maintenance and repairs.

- Consider that any lack in service (such as mechanical breakdown) may lead to frustration and vandalism of the machine.

- Dispensing machines are very limited in their ability to provide IEP functions beyond just provision and disposal of injecting equipment. They are most usefully considered an adjunct to other IEP models of service rather than a replacement. The type of machine used may require specific materials not supplied under local provisioning.

- In some locations, community opposition may pose a serious barrier to IEP services in general, and, more particularly, to the use of syringe dispensing machines. The use of these machines has shown minimal impact on the local community in terms of increased crime or other potential, unintended consequences[150].

Key points:

- Consider the use of syringe dispensing machines as a supplement to existing harm reduction interventions in order to support underserved PWID populations, cover temporal or geographical gaps in IEP provision and reduce unsafe injection behaviour.

4.2.8. Supervised injection facilities (SIF)

Background and definitions

Supervised injection facilities (SIF) offer a safe and hygienic environment for PWUD to inject their previously obtained illicit drugs under the care and supervision of trained staff. They seek to minimise the individual risks of public injecting (which include transmission of BBVs, including HIV, SSTIs and overdose) and environmental risks such as presence of discarded needles in public places. It may also help engage PWUD with health and social care services, including other IEP and harm reduction services[151].

SIF are also often referred to as drug consumption rooms (DCR), safe injecting sites (SIS) or “overdose prevention sites (OPS)”, which is increasingly popular in North America as viewed as less stigmatising.

Typically, SIF provide drug users with, sterile injecting equipment; counselling services before, during and after drug consumption; emergency care in the event of an overdose;

primary medical care; and the opportunity for referral to appropriate social healthcare and addiction treatment services.

SIFs seek primarily to, facilitate less risky and more hygienic drug consumption; provide a safe environment free from pressures such as drug dealing or sharing; provide individualised safer use advice; provide emergency care in case of overdose or other adverse situations; and to provide a space for drug use that is protected from public scrutiny.

The first SIF was opened in Berne (Switzerland) in 1986. Facilities of this type have since been established in several European countries (Germany, the Netherlands, Spain, Norway, Luxembourg, Denmark, Greece and France)[152]. More than 120 safe injection facilities are currently in operation in Australia, Canada and Europe.

Scottish context

NHS Greater Glasgow and Clyde[89] has proposed to introduce and evaluate a pilot SIF in Glasgow city centre, to address the range of harms caused by a growing incidence of public injecting and in response to the increasing numbers of PWID diagnoses with HIV. A recent study showed prevalence of public injecting was 16% overall in Scotland and 47% in Glasgow city centre. Factors associated with increased odds of public injecting were homelessness, high alcohol consumption, high injection frequency (≥4 per day) and cocaine injecting. Odds were lower for those receiving opiate substitution therapy (OST) and older age. Public injecting was associated with an increased risk of HIV infection, current HCV infection, overdose and SSTI[153].

At time of writing UK law does not permit the operation of SIFs therefore progress has stalled. Such a facility would be established through collaboration and co-operation between key local agencies and the wider community, carefully integrated with existing services. The proposal included a robust, prospective evaluation – including an economic component – to confirm whether the benefits observed in other cities are transferable to the local context.

Expected benefits:

- SIF are generally located in areas identified as experiencing problems of public drug use, injecting litter and related issues. They seek to attract hard-to-reach populations of PWID, especially marginalised groups and PWID population groups with limited opportunities for hygienic injection (e.g. people who are homeless or living in insecure accommodation or shelters) to address such issues[154].

- A substantial body of documented evidence supports the effectiveness of SIF to reach

and stay in contact with highly marginalised target populations[155], effect immediate improvements in hygiene and safer use among PWID, as well as support wider health and public order benefits[156].

- When asked whether they would use a SIF, the majority of PWID surveyed through NESI said they would be willing to[157].

Potential challenges:

- UK legislation does not currently support the operation of SIFs.

- The introduction of SIF requires a significant allocation of appropriate resources, skilful management and experienced personnel.

- The creation of SIF may unintentionally generate local public opposition through increased PWUD presence in the surrounding environs. However, a recent study suggested that the majority of Scots would support SIFs[158].

- Public perception of risks associated with PWUD, resistance to the use of public funds for the care of 'drug users' and concerns relating to violation of local or national laws, may foster additional challenge to the creation of a SIF[159].

4.2.9. Hospital-based IEP services

Background and definition

Hospital-based IEP services are provided within a hospital (or health care facility) setting and may allow for 24-hour access to sterile injecting equipment.

IEP services predominantly operate separate from healthcare facilities, yet the mission of preventing or reducing complications of injection drug use is common to both.

Given the health complications of drug use, hospitals (and particularly emergency departments) regularly interact with PWUD. Hospitals and health facilities are a key element of programmes which link PWUD to community-based IEP services, infection-control systems and various health and social care treatment services through informal as well as formal referral mechanisms[160].

Scottish context

- **Acute Addiction Liaison nursing teams** are available in all acute hospitals in Glasgow, and aim
to provide people with drug and/or alcohol issues a bridge between acute inpatient

health care services and community addiction teams[146].

Expected benefits

Hospital-based IEP services have not been implemented broadly or in a systematic fashion. There is some evidence of how the integration of harm reduction services into healthcare facilities have improved access to health services among PWUDs, as well as engagement and PWUD–IEP provider relationships[161].

These types of services may offer support to PWUD who are not currently engaging with other support services.

There is potential to deliver “out of hours” care for people where conventional services are closed.

Although not currently available in Scotland, supervised injection in outpatient settings is, on the other hand, associated with decreases in needle sharing, rates of overdose in surrounding neighbourhood and public drug use, as well as with increased referrals to other IEP and social services[162].

Potential challenges

Attitudinal challenges (opposition, discrimination, stigma) and safety concerns of hospital staff and fellow patients may arise in healthcare settings where IEP services are being implemented[162].

Workload pressures on acute settings may demand that critical services are prioritised over hospital IEP.

4.2.10. Postal or delivery-only IEP services

Background and definition

Postal IEP provides access to injecting equipment delivery direct to the person’s home via a courier, postal service or uninvolved third-party. Contact with PWUD is generally remote e.g. by phone or online. Following discussion with an IEP worker the agreed type and quantity of injecting equipment will be posted to the individual. Telephone contact provides opportunity to discuss harm reduction along with advice on how and where to dispose of the equipment.

Such a model of supply allows only meagre opportunities for care intervention or education and requires alternative arrangements for disposal of waste (classified as Hazardous for the purposes of delivery).

Direct intervention or assessment could be arranged through for remote interaction with an IEP service to arrange delivery of supplies where verbal or video-link communication could allow reasonable levels of interaction.

in recent years in the UK people requiring injecting equipment have had the ability to purchase direct from suppliers with postal delivery. Dependant on local commissioning this can be a free service.

Scottish context

COVID-19 and its associated lockdown required innovation and service development to maintain service provision. This included development of postal options for injecting equipment and naloxone supply in several Health Board areas. Harm reduction discussions are undertaken remotely by phone or online chat which informs equipment selection including sharps bins. These are subsequently posted. To date numbers have been relatively low and some barriers have been identified for example the size of package means it is too large to go through the letterbox which poses issues if the client is not at home. It does however provide a starting point for evaluation and refinement to determine whether this is a useful addition in the longer term. In Grampian this has led to further interventions such as BBV testing kits being trialled using the postal system.

Potential benefits

- The ability to provide injecting equipment across a very wide geography utilising established processes which are typically cost-effective.
- There is little staff-time burden, particularly when compared with potential travel-time and mileage costs to access rural areas.

Potential challenges

- Providing a robust route for facilitating remote safe disposal of equipment provided.
- Not having a face-to-face assessment.

Table 2: *Summary of the key strengths and limitations / or challenges of the different models of IEP services*

Model	Key strengths	Limitations or challenges
Community pharmacy IEP services	- More accessibility and convenience: multiple locations and longer (including weekend) hours of operation - Access to qualified health care professional for general health advice and to a full range of NHS pharmaceutical services - Less stigmatising / more anonymous - Relatively inexpensive - No planning permission required	- Generally, it does not provide a full range of harm reduction interventions, in-depth advice and education (although these may be provided in enhanced services) - Needles / syringes generally given out in pre-packed bundles rather than tailored to client need - There can be difficulties with staff attitudes and lack of training / support
Enhanced IEP services	- In-depth education and advice. - Provision of injecting equipment can be tailored to individual client need. - Able to provide a wide range of interventions. - Option for locating other services on-site.	- Hours of operation - Variation in training and in the focus
Outreach services including mobile services; home visits; peripatetic IEP services (provided as part of a wider service)	- Increases accessibility – particularly useful for covering a large geographic area. - More attractive than fixed-site services for certain hard-to-reach and high-risk groups of injectors - Potential for in-depth education and advice to be made available - Relatively inconspicuous to the public - Able to reach hard-to-reach injectors (women in particular) - Better returns of used injecting equipment - May attract different groups of injectors - Improves accessibility in terms of location, time, culture and age group - Peripatetic services delivered in health centres may improve injectors' access to other primary care services - Relatively inexpensive	- Depending on the size of the vehicle, may have insufficient space for counselling sessions; arranging referrals; BBV testing; etc. - If they operate for only a short time at each location, there is a high chance that they will be missed - Cost and maintenance of the vehicle - Safety for staff - Potentially intrusive for clients - Resource-intensive - If they operate for only a short time in a particular location, there is a chance that they will be missed.

Police custody suite and prison IEP services	- Ensures that known injectors have access to sterile injecting equipment and information about local IEP services upon liberation from custody - May reach some injectors who are not otherwise in contact with IEP Services	- In reality, little or no harm reduction advice given
Prison-based IEP schemes (not in Scotland)	- Reduces sharing of needles, and other high-risk injecting practices among prisoners	- Can be opposition from politicians, prison staff and prisoners - Concerns among injectors about anonymity
Secondary distribution	- Improves reach to groups of injectors who will not (or cannot) use other forms of IEP services	- Lack of control over provision of, or accuracy of, harm reduction advice and information to recipients - Continued high-risk injecting behaviour
People with lived or living experience (peer-led services)	- Peer knowledge of drugs and drug use - Improves reach to groups of injectors who will not (or cannot) use other forms of IEP services - May provide education, employment skills and income for peer distributors - Convenient / accessible for clients - Peers have credibility and can be important role models	- Training / supervising of peers can be costly - Conflicting identities as peer worker and injector - High turnover of peer workers
Needles and syringes dispensing (unsupervised) machines	- 24-hour access - Anonymous - Location can be wherever the need requires - Convenient and easy to use - Limited staffing required	- No face-to-face education or advice can be provided - No way to regulate access to the machine (by under-16s for example), unless a token system is used - Difficult to maintain anonymity when located in a public place - Potential for public opposition
Supervised injection facilities (SIF)	- Attract hard-to-reach populations of PWID, particularly marginalized groups	- UK legislation does not currently support the operation of SIFs - Potentially generate local public opposition
Postal service	- Potentially reaching wide geographical areas	- Not having a face-to-face assessment

4.3. Special PWUD groups

Injecting drug use is currently registered and documented in at least 179 countries (up from 148 countries in 2007 studies) with a global estimate of 15.0 million PWID, aged 15-64 years, of which roughly one in six live with HIV, more than half have been exposed to HCV, and one in ten have active HBV[163]. It has been estimated about 15·6 million (95% uncertainty interval [UI] 10·2–23·7 million) PWID aged 15–64 years globally, with 3·2 million (1·6–5·1 million) women. Gender composition, however, seem to vary by location. 27·9% (20·9–36·8) of PWID globally are younger than 25 years, 21·7% (15·8–27·9) had recently (within the past year) experienced homelessness or unstable housing, and 57·9% (50·5–65·2) had a history of incarceration. Needless to say that some of these groups need further consideration when planning IEP programmes and their implementation.

4.3.1. Homeless / roofless

Homeless population has been identified amongst the hardest to reach in terms of prevention and treatment, while also a population considerably marked by health inequalities[164]. A strong association between homelessness or unstable housing in public injecting has also been a consistent finding in recent evidence[146]. More recently, homelessness has been described as a risk factor for NPS injecting[165]. In Scotland (and particularly in Lothian), parallel to increases in reported NPS injecting among PWUD who have experienced homelessness, an increase in HCV prevalence and HCV incidence have also been reported[43,166].

Substance use (particularly alcohol and heroin, in Scotland) among homeless people is a complex phenomenon, strongly associated with economic marginalisation, social isolation, alienation and, in particular, mental health problems[167]. Although evidence supports that homelessness and substance misuse are mutually reinforcing, substance misuse in itself, is generally not a necessary or sufficient condition for homelessness to occur, as other factors also appear to be involved[168].

Integrating IEP services and other harm reduction programmes into wider strategies to end homelessness has been suggested as essential, requiring a relevant and realistic policy framework that contributes to the creation of safer environments[169]. Four key areas for action are recommended: developing policies of social inclusion; ensuring adequate housing; providing harm reduction services “on demand”; and securing organizational infrastructure[170].

4.3.2. Adolescents or under 16

Young people who inject drugs have specific developmental, social and environmental vulnerabilities[171]. They are less likely than adults to use harm reduction and treatment services and may be less informed about risks and their rights[172]. Micro-environmental factors (i.e. places and times where and when IEP sites are accessible) which determine young PWID are tied, however, to broader, inter-connected, macro-environment forces, such as stigmatisation and the criminalisation of drug use[171].

Early onset of injecting and being a new injector are associated with increased risks of HIV and HCV transmission, while specific groups of young people, especially those that are public injecting, are at considerably higher risk. Harm reduction (IEP and OST) services for this age group and the interventions required may differ in their delivery than for older people who inject drugs[173].

The legal status of being a minor raises additional challenges for the development of targeted harm reduction interventions. These include issues relating to informed consent, parental consent issues and legal age restrictions on services.

It is important to observe that, while internationally IEP services and other harm reduction interventions have been tailored to meet the needs of young people facing a variety of issues[174], they have not yet always been applied to address the needs of sexually exploited children and young people (child sexual exploitation, CSE)[175]. Recent studies confirm how adolescents and young people require significant support beyond the comprehensive package of IEP services, with clear linkages to other sectors, social security, education and employment. Furthermore, for IEP and other harm reduction services to be effective with young PWID, it must be informed by their own experiences to ensure that adopted approaches are relatable and meaningful to them[176].

It is recommended that local, area-wide policies[177] are:

- developed and implemented on providing IEP and related services to meet the needs of different groups of young PWID under 16;
- provide young PWID with sterile injecting equipment, as well as advice on harm reduction and other services, taking into account, among the benefits of using services, their capacity to consent and the likelihood that they would inject, even if they don’t have access to sterile equipment; and
- sensitive to the needs of young people in the local area (i.e. specialist services, tailored messages for the young, information on access to local services, etc.).

4.3.3. Women (pregnant, transactional sex workers)

Women who use drugs are consistently reported to have less access to harm reduction services and
to be at higher risk of HIV and hepatitis C infection than men who use drugs[178].

Women can face a number of challenges, perhaps not fully understood or addressed, as they constitute an important cohort of the PWID population. Among them, and because they may contribute to reluctance to engage with IEP services, it is important to take account of gender-based violence; pregnancy and mothering; criminalisation; sex work; and stigma and discrimination[179].

To increase the effectiveness of IEP services, it is important to introduce a gender lens to harm reduction initiatives. In the context of women's substance use, harm reduction cannot simply be about the intersection of one health determinant with the use of substances; it is instead about how many of the various health determinants interact, and in turn amplify or influence the experience of women's substance use[180].

- Gender-sensitive IEP services are desirable and, when appropriate, women who use drugs should always be involved in the design and implementation of these programmes, to ensure that they are effective, appropriate, and respectful of their rights.

- IEP services should provide a 'menu' of options to improve and expand care for women who inject drugs[181]. Some of the following recommendations might be considered:

    - taking steps to address stigma, discrimination, mistreatment and abuse;
    - improving access to services for women (including child-care and mobile services for women with infants)
    - enhancing outreach and case management to reach women unlikely to seek services on their own
    - integration with other services
    - services to prevent and respond to domestic violence, including access to justice[182].

4.4. Improving the quality and integration of services

IEP services are well-placed to play a major role in bringing about better, more integrated care for injecting drug users. The approach adopted in this document focuses on improving integration between IEP services and related services and improving the way services interact with their clients. This includes services which aim to identify those with active BBV infection, and which link them into clinical care and social support. To some extent, this requires improvements in staff training — so that staff can feel more knowledgeable and confident in speaking to clients (section
Section 6 - Training: Improving the quality and consistency of IEP services through education, training and awareness raising for service providers and service users of IEP Services). However, there is also a need, even after staff are trained, to find better ways of engaging with clients — not only to find out what the client's needs are, but also to ensure that important messages are repeated to clients frequently and consistently across services.

IEP services have traditionally been seen as 'low-threshold' services. However, the intention has always been that IEP services should provide a route into treatment for injecting drug users. More recently specialist and enhanced IEP services in Scotland have begun to provide their clients with far more than just a route into drug treatment. These services give their clients access to a wide range of primary care and social care interventions, by providing regularly-scheduled "clinics" or consultations on IEP services premises. There is also a growing trend by enhanced services to offer a range of BBV interventions on-site.

There is also evidence from qualitative research carried out among injectors which indicates that injectors can face a range of barriers when trying to access help from generic health and social care services[183-184]. These barriers include the burden of appointments, travel to services, stigma and negative staff attitudes, personal ill-health, lack of material resources and anxieties about accessing support. Integrated care for drug users is an approach that seeks to **combine and co-ordinate** all the services required to meet the assessed needs of the individual. Therefore, any move towards providing these more generic services within the premises of an IEP service is to be encouraged and strongly supported.

Case Study

The NHS Greater Glasgow and Clyde '**WAND**' initiative focuses on four key interventions; **W**ound care, **A**ssessment of injecting risk (using the AIR tool, an in-depth questionnaire focussing on injecting behaviour), **N**aloxone and **D**BS testing. It was designed to address some of the biggest problems people injecting drugs within

Glasgow City Centre face, including drug related death, injecting related complications and BBVs.

Clients are given a ‘Starbucks’ style reward card, interventions are also recorded and date stamped on a database. When all interventions are completed, the client is provided with a 'Pay Point' voucher which can be taken to any shop to exchange for cash. Clients can access this incentive every 3 months. This has been seamless with the 400 vouchers issued also redeemed[185]. The preliminary results of the WAND campaign have been very encouraging. In the month of September, 2020, there were 403 wounds checked, 403 assessments of injecting risk, 467 naloxone kits supplied and 380 DBS BBV tests completed.

Section 5 - Equipment, paraphernalia and supporting services

5.1. Key Points

Injecting Equipment Providers **should ensure**:

- **all sites providing an IEP service offer a full range of injecting equipment** including; needles, barrels, syringes, spoons, filters, water, acidifiers, naloxone, cleansing swabs and foil (as an alternative to injecting);
- the syringes and barrels are **low dead space (LDS)** compliant when combined with needles;
- both syringes and barrels have a means of easy **identification**;
- an appropriate **selection of needles, syringes and equipment is available** to support the different drugs people inject as well as their anatomical injecting locations;
- that every IEP outlet should also **offer naloxone** to those at risk of opioid overdose;
- a supply of **naloxone** is available with the IEP for **emergency use**;
- there are **no limits** placed on the amount of injecting equipment people can access, regardless of the number or frequency of their returns;
- **secondary distribution** is encouraged, along with an attempt to engage those not yet known to the programme;
- people who take injecting equipment are offered an appropriately sizes sharps **container** and encouraged to return for proper **disposal**;
- **advice** is provided at every opportunity which is relevant to the type of drug being injected, the anatomical point of injection and the location the drugs will be prepared and injected;
- all sites **record** demographic and transactional data as directed by the national data collection system[d];
- a basic assessment of injecting risk is conducted at first registration and clients are aware where to access a specialist **Assessment of Injecting Risk (AIR)**;
- people have access to **BBV testing vaccination and are informed** about what services provide this in their area; and

[d] Currently, neo360® is the current approved IT system for IEP services on which all needle exchange transactions need to be recorded at point of exchange.

- people who inject drugs are **made aware of any local and national issues**, such as outbreaks, bacterial infections or blood born viruses.

5.2. Equipment

The range of needles, syringes and paraphernalia provided should be manufactured to medical standards and fit for purpose.

In Scotland, “paraphernalia” is provided including the following: spoons, filters, water, acidifiers, cleansing swabs and foil (as an alternative to injecting), as well as needles, barrels and syringes in a one-to-one ratio to encourage single use, or in single use packs (that contain a filter incorporated into the cap of the syringe).

There should be awareness that the injecting population in Scotland has never been more diverse with a wide range of drugs injected. Currently the main drugs of injection are heroin, cocaine and a wide range of Image and Performance Enhancing Drugs (IPEDs). With this in mind the range of equipment we offer should meet the needs of all these groups and the likely injecting methods they will use.

Paraphernalia sharing. A Scottish cross-sectional study[186] based on a voluntary anonymous survey of PWID (n=2,037) examined the factors associated with paraphernalia sharing. Results indicated that uptake of paraphernalia was associated with safer injecting practice.

5.2.1. Non injecting methods of administration

The introduction of foil (see section 5.2.11) as an alternative to injecting has proven to be very popular with high uptake from clients in some areas[187]. Foil provides a useful tool for frontline staff to promote route transition or breaks from more harmful injecting[188]. It is possible that as new drugs emerge methods of administration will change also. Services should be aware and respond to this.

Many of the items provided from IEPs have been specifically developed to facilitate the preparation and injection of ‘street drugs’ in the safest manner possible. However, no assumption should be made that clients will know how to use these items properly. Therefore, clients may need to be shown how to use these correctly through demonstrations, written or verbal instructions.

- It should be noted that **injecting any street drug comes with significant risk.**

- **All equipment should all be promoted as single use with sharing or reuse discouraged**.

- **Consideration should be given to providing equipment (other than foil) which supports non-injecting methods of drug use.** An example of this would be the potential introduction of crack-pipes in response to the reported increase in cocaine and smoking across most areas Scotland. Development of these types of intervention should follow needs assessment and be mindful of the legal framework.

Providing safer smoking equipment along with relevant harm reduction messaging offers an opportunity to engage high risk individuals who have limited reason to access drug related services. Current UK law prohibits supply of inhalant pipes and related paraphernalia under section 9A of the Misuse of Drugs Act 1971. As supply of pipes for smoking drugs is illegal, people smoking crack are forced to use makeshift alternatives. Services cannot provide harm reduction equipment to people who smoke drugs without fear of prosecution.

A letter of comfort to allow distribution of sterile equipment alongside other IEP provision is currently (2021) being sought from the Lord Advocate.

5.2.2. Low Dead Space (LDS) – syringes and barrels

All IEPs should provide this

LDS syringes and barrels should be presented in a sterile sealed packet – which requires opening – and clearly marked as single use.

The difference between high and low dead space syringes is determined by the amount of blood/fluid that is left in the syringe post injection. The more blood left in the syringe, the higher the dead space and the greater the risk of transmission of blood born viruses, if shared (directly or indirectly) with other people[189]. In 2012, the WHO recommended that needle and syringe programmes (NSPs) offer their clients low dead space (LDS) syringes[190-191], which may reduce the survival of HIV and HCV in syringes[192-193-194], as well as reduce transmission risk[195-196-197]. This recommendation was based on LDS syringes with permanently attached needles.

A recent study shows that exclusive use of LDS syringes is associated with lower prevalence of HCV amongst PWID, particularly among those who started injecting recently, suggesting LDS syringes use is protective against HCV[198].

Over the years a number of syringes, barrels and needles have been specifically designed to reduce this dead space and potentially reduce some of the risks associated with sharing[199].

- The key message of **"always use new injecting equipment for every injection and share nothing" should continually be promoted to clients.**

- **1 ml fixed needle syringes by design are the lowest dead space products available and should be promoted as best choice when suitable.**

- **Care should be taken when ordering low dead space equipment to ensure the separate components fit together e**.g. low dead space needles will not fit on a low dead space barrel.

  Although the use of LDS is recommended, the importance of syringe cleaning should also be emphasised for injecting situations where: 1) either clean syringes are not available; 2) there is uncertainty over whether using the own syringe; or 3) bleaching is not possible. This should minimise the possible risk of HIV transmission, while maximising the protective benefit of using LDS[195].

5.2.3. Needles

All IEPs should provide this

All the needles provided should be of medical standard and should be presented in a sterile sealed packet – which requires opening – and clearly marked as single use.

All needles are designed to be **single use** and should be properly disposed of immediately after use, in an appropriate sharps container.

Clients should be encouraged to use the most appropriate size needle for the drug being injected and anatomical location. Choosing the right size of needle for the planned injection is essential if harms and complications are to be minimised. As a general rule of thumb, the smallest, thinnest needle, which comfortably reaches the target vein or muscle, should be first choice.

All detachable needles are marked by both length and gauge (thickness). It is important to know that 'the higher the gauge the finer the needle'. There is also a colour-code system to help quickly identify sizes. See appendix 2.

- All outlets should **keep stock of variety of needles** which are suitable for subcutaneous injections, superficial intravenous injections, deep vein injections and intramuscular injections.
- **Needles should be single use and disposed of immediately after use** (in the sharps bin provided).
- **Sharing needles with others is very risky** and can easily transmit Blood Borne Viruses (BBV) – HBV, HCV and HIV.
- **Reusing needles increases the risk of bacterial infections.** The needle will also be less sharp and likely to cause vein and site damage.

5.2.4. Barrels and Syringes

All IEPs should provide this

All barrels/syringes provided should be of medical standard. They should be presented in a sterile sealed packet – which requires opening – and clearly marked as single use.

All barrels/syringes are designed to be **single use** and should be properly disposed of immediately after use, in an appropriate sharps container.

- **Sharing syringes / barrels with others increases risk of transmitting Blood Borne Viruses – HBV, HCD and HIV.**
- **Barrels and syringes should be single use and disposed of immediately after use** (in the sharps bin provided).
- **Reusing your own barrels creates a risk for bacterial infections.**

There are 2 main types of barrels/syringes available: a fixed needle and syringe and a selection of barrels/syringes which are designed to accept a separate detachable needle.

- **The fixed barrel and syringe (1ml only)**
  This 'one piece' unit is manufactured with the needle permanently attached to the end of the syringe. This perfect fit ensures the volume of blood left behind after injection is minimal, making it the lowest dead space option available. The needle attached is of a high gauge (27g-30g) so likely to cause the minimal amount of harm if used properly. Wherever possible this should be the first choice for anyone injecting street drugs.

- **The separate barrel**
  Barrels come in a range of sizes (including 1ml, 2.5ml and 5ml). The most common barrel to be used for the injection of both street drugs is either a 1ml or 2.5ml barrel. For steroids the choice is usually 2.5ml. This is more than enough fluid volume for most people to consider injecting and for this reason 5ml barrels or bigger should be discouraged.

5.2.5. Syringe Identifiers

All IEPs should provide this

The rationale behind syringe identifiers is to reduce the likelihood of accidental mix ups. As primary effort, though, if PWID must use a compromised equipment, **they should properly clean it before use** (see section 5.2.10).

The two main methods of identification currently available are colour coded barrels or scratch panels. People can also scratch off one of the measuring numbers on the syringe barrel. It is important that clients are not given a false sense of security by believing identification reduces all risk of BBV transmission. People should be advised that if **they lose sight of their needle and/or syringe they should treat this as compromised and use a new needle**.

- **Syringe identifiers do not guarantee that the needle and syringe will not have been used by another person.**
- The key message of **"use new injecting equipment for every injection and share nothing" should continually be promoted to clients.**

If PWIDs must reuse a syringe, barrel or needle then **proper sterilising steps should be used.**

5.2.6. Cleaning Injecting Equipment

All IEPs should provide information regarding this

- It is better to plan and have enough **new injecting equipment** for each injecting episode that will take place. However, there are times or situations where this may not always be possible. This is particularly true if the individuals living environment prohibits injecting and the safe storage of equipment – i.e. prisons, supported accommodation or night shelters. There may also be times where an individual's injecting equipment has been out of their possession and sight. If this does arise, the needle, syringe and paraphernalia should be treated as compromised (used without knowledge) and properly cleaned before use.

- If at all possible, **smoking using foil** may be a less harmful option until PWID can access new injecting equipment. It may be easier to carry a small pack of foil than carry all the equipment needed for cleaning, therefore clients should be encouraged to carry spare foil with them at all times.

- Most individuals will draw **water** in to their needle and barrel and flush it out, if the equipment is to be used again, this is called '**flushing'**. Although this does not in any way guarantee the killing of any BBV, it is almost certainly better than doing nothing.

- Cleaning needles and syringes using clean water and bleach is often referred to as 'bleaching'. This process requires two ampoules of water for injecting (WFI) or clean cold water and **thin** bleach. Bleaching is an effective way of killing BBV's and reduces the likelihood of BBV transmission. No individual should assume

that thin bleach or clean water will always be available where they prepare and inject their drugs.

- **Regardless of cleaning method used, there is a still significant risk associated with the sharing of paraphernalia** (e.g. spoons, filters and water) as BBVs and bacteria have the potential to survive on this equipment.

- If a person **reuses their own needles/syringes and paraphernalia this also comes with significant bacterial infection risks**.

- Using the larger ampoules of WFI (5ml) for any flushing and bleaching will ensure enough water is available for all barrel sizes to be flushed out properly. Therefore, **clients should be encouraged to carry spare WFI** with them at all times.

Table 3. *Pros and cons of "flushing and bleaching" methods, keeping in mind that there is a still significant risk of BBV and bacteria transmission, regardless of cleaning method used.*

Method	Pros	Cons
Flushing with water only	• Water likely to be available • Better than doing nothing.	• Water alone does not clean as well as bleaching. • Other paraphernalia used is likely to have been used previously and therefore carries a significant risk of bacterial infection. • If paraphernalia has previously been used by others, the risk of BBV transmission is significant. • As the needle will have been used before, it may not be as sharp and contribute to vein damage or injecting site injury.
Bleaching using the '3 cup' method	• Very effective at killing BBVs, if done properly.	• Difficult to access water, bleach and 3 cups if injecting away from home or outdoors. • Thin bleach may be difficult to find. • The other paraphernalia used is likely to have been used previously and carries a significant risk of bacterial infection. • If paraphernalia has previously used by others, the risk of BBV transmission is significant. • As the needle will have been used before, it may not be as sharp and contribute to vein damage or injecting site injury.

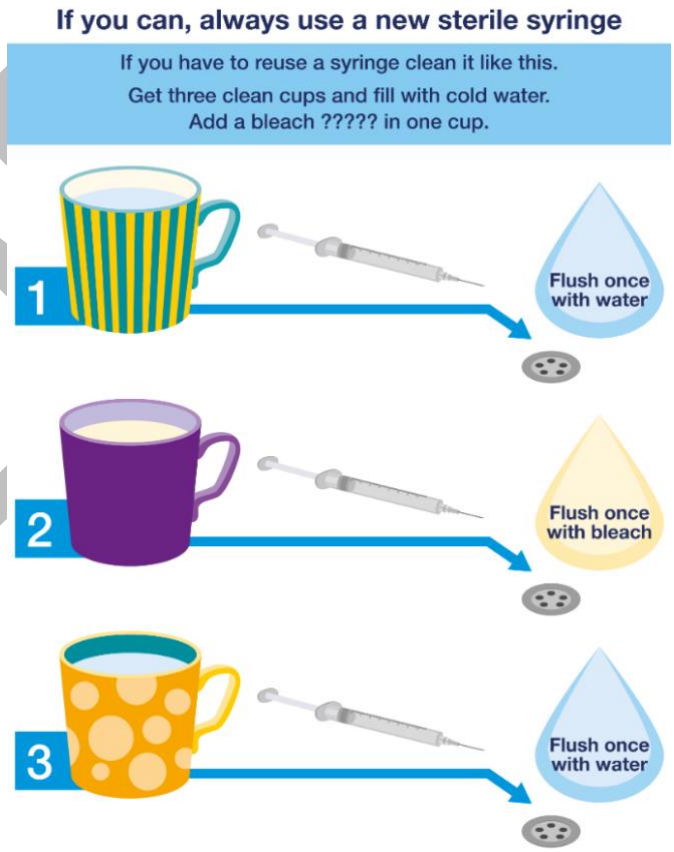
- While the central message of “always use new and sterile injecting equipment” prevails, **it is important to ensure PWIDs know how to clean needles and syringes** with the use of bleach[200]. This acknowledges that fact that PWID may occasionally not have sufficient needles and syringes with them and so, sensibly, they take steps to clean their needles and syringes.

- The following steps should be recommended **to use bleach to clean equipment**:

    - Find a clean and level surface.
    - Wash your hands.
    - Fill two clean cups or containers with cold tap water.
    - Fill one cup or container with thin household bleach.
    - **STEP 1** - Draw clean water into the syringe from a cup or container until the barrel is full, then flush the contents down the sink
    - **STEP 2** - Draw up the bleach into the syringe until the barrel is full and flush contents down the sink
    - **STEP 3** - Draw clean water into the syringe from a cup or container until the barrel is full and flush the contents down the sink

If chlorine tablets are available these may be dissolved and used in place of bleach.

Figure 3. *Recommended steps if using bleach to clean equipment*



5.2.7. Spoons

All IEPs should provide this

Spoons should be presented in a sterile sealed packet– which requires opening – and is clearly marked as single use.

Spoons (sometimes called cookers) are used to allow solid drugs to be dissolved with water to create an injectable solution. Some drugs such as heroin also require other steps such as addition of acidifier and/or the solution to be heated to help the drug dissolve. This is usually by holding the flame from a lighter underneath the spoon.

- **Sharing spoons increases the risk of BBV transmission.**
- **Choosing spoons / cookers other than those provided may increase the risk of bacterial infections.**
- **Reusing any spoons / cookers may increase the risk of bacterial infections.**

5.2.8. Filters

All IEPs should provide this

Sterile filters should be presented in a sterile sealed packet and clearly marked for single use. There are a number of filter types available ranging in effectiveness by design or material[201,202].

Drugs which are prepared for injection are commonly filtered before injection in order to remove particles or impurities (such as cutting agents or plant matter). A number of injecting related complications can arise from poor filtration, including abscesses, infections and embolisms. The sharing of filters with other people who inject is common and creates a risk of the transmission of blood borne viruses. Some people reuse filters; the risk of bacterial infection if reused, though, is high.

- **Sharing filters with other people may increase the risk of BBV transmission**
- **Reusing other people's filters may increase the risk of BBV transmission**
- **Reusing filters increases the risk of bacterial infections.**

The most common filters are small cigarette type filters or the specialist filter built in to the cap of a syringe. The use of all other filters, such as cotton wool or bits of gauze should be discouraged.

- **Filters which trap the smallest spore or particle size should be first choice and promoted by services.**
- **Filters should be single use and disposed of immediately after use** (in the sharps bin provided).

5.2.9. Acidifiers

All IEPs should provide this

The acidifiers provided should be of the highest standard possible. They should be presented in a sterile sealed sachet, clearly marked single use.

There are two main acidifiers available to help break down some types of drugs for injection - citric acid and vitamin C (ascorbic acid). Both are very effective at breaking down drugs and selection is very much a matter of choice for each person.

- Citric acid can be seen as more effective; however, it is easy to add too much and the solution becomes too acidic and causes vein damage[203].
- If vitamin C is used, more of it has to be added to dissolve the drug; this may also result in vein damage. Heroin, crack cocaine and freebase cocaine all require an acidifier during the preparation process to help break the drug down.

- **Regardless of what acidifiers are used, they should be used in the smallest amounts possible, as overuse can cause vein damage and make it harder for injecting sites to heal. Making a small measuring scoop available with IEP should be considered to achieve this in a measurable way.**
- **Once the packet of vitamin C is opened, any leftover should be discarded, so that it does not become contaminated and cause an infection.**

5.2.10. Swabs

All IEPs should provide this:

The swabs provide should be of the highest quality and appropriate for cleaning the target injecting site. They should be presented in a sterile sealed packet which requires opening.

Sterile swabs are used to clean the injecting site prior to injecting. They may also be used to clean hands however this should be considered in the general context of sterility with regular hand cleaning recommended in the first instance. To use properly, wipe the identified injection area from the centre outwards. Swabs should **not** be placed on the injection site after injecting to stop bleeding as the alcohol will stop healing and encourage bleeding and bruising.

- **It is important that swabs are not seen as a substitute for proper hand and site cleaning.**

5.2.11. Water for injection

All IEPs should provide this

The water provided should be of medical standard and clearly marked ‘water for injection’. These are provided in a sterile ampoule which requires opening.

Water for Injection (WFI) is a specially prepared, cleaned and purified form of water which contains no chemicals or bacteria. It is available in either a 2ml glass or 5ml plastic ampoule. The ‘Luer slip’ design of the plastic 5ml ampoule allows for needles or barrels to be easily attached to the end and water drawn without spillage. The plastic is made from robust polypropylene and is tough enough to be carried in a bag or pocket without fear of breakage. Most areas have chosen to provide this over the glass ampoules.

Only the 2ml glass ampoule is listed under an approved supply list under an amendment to the Controlled Drugs Act, 1971. Currently all areas in Scotland are providing the 5ml plastic ampoule, which received a letter of comfort from the Lord Advocate to allow legal distribution throughout Scotland.

- **Regardless of the size of ampoule, they are single use and should never be shared**
- **Any sources which are shared may pose a risk of transmitting blood-borne viruses**
- **Unsterile sources of water (including reuse of sterile water) carry a risk of serious bacterial infections if injected.**

In the absence of water for injections people will revert to alternative sources of water. Harm reduction messages should cover the risks associated with different water sources as outlined in Figure 3.

Figure 3: *Hierarchy of water risk*

5.2.12. Foil

All IEPs should provide this

Foil should be provided in sealed packs containing sheets of foil which have specifically been manufactured for the smoking of street drugs.

It will be manufactured in a different way from domestic foil, which comes with a layer of oil on the surface. The foil we provided should be oil free.

The most common drug to be smoked from foil is heroin. Heroin is a very powerful and dangerous drug to take, smoked or not. However, it is widely agreed that the most harmful way to administer heroin is to inject.

People should be encouraged to move from injecting to smoking[204,205]. This is called **route transition.**

By encouraging the habit of smoking – rather than injecting heroine – as a route, it is intended to:

- stop the risk of all injecting related blood born viruses;
- stop the risk of injecting related complications;
- reduce the risk of death through overdose; and
- reduce the need for a person to have needles in the house or on their person.

5.2.13. Sharp Bins

All IEPs should provide this

The sharps disposal bins provided should be secure and lockable.

A range of bin sizes will help people dispose of their injecting equipment and return for appropriate disposal (see section 3.2.1).

All people accessing IEP should be encouraged to take sharps bins with their injecting equipment. When providing sharps bins people should be informed of the following:

- Syringes and needles should be placed into the sharps bin immediately after use.
- All injecting paraphernalia can be placed in these bins; however, this will reduce the bins capacity.
- Smaller sharps bins have a 2 stage locking mechanism – stage 1 is ‘partial lock’. This allows more needles and syringes to be added whilst the stage 2 ‘full lock’ mechanism secures for transportation and return.

- Sharps bins should never be filled above the marked “fill line”
- Any public discarding of injecting equipment puts the programme at risk.
- All sharps bins should be stored in a safe place before returning to their chosen IEP outlet.

5.2.14. Packs

Pack sizes are likely to vary from area to area. Some areas provide large packs of 20 or more needles and paraphernalia whilst others work solely with a range of single use packs. Pack choices should be carefully considered to meet the need of the target injecting group – i.e. those people injecting outdoors or homeless are unlikely to be able to store large packs whilst those injecting steroids this may be more beneficial.

Regardless of pack size, ‘sterile packs’ should contain all the equipment needed to prepare and inject most street drugs once.

- The equipment in all packs should be designed for single use only. Nothing in these packs should be shared or reused.
- It is important to note that people injecting powder cocaine, NPS or hormones will not require an acidifier which may be included in the pack. This should be made clear to the client at assessment stage.
- People using the 2ml blue single-use pack for injecting steroids will not need the spoon, filter or citric and would be better placed accessing the specialist steroid pack or individual items.

5.3. Supporting services and interventions

Wound care

Many people who inject drugs experience a range of associated problems. This ranges from simple pain at point of injection to serious life-threatening conditions such as botulism or anthrax. Early identification of these complications and wounds is essential as it can limit the further medical response needed.

Many people who inject drugs are not fully engaged with drug services and may not have access to regular health checks. Therefore, it is important that those services providing IEP can identify injecting related wounds and complications at point of transaction. This allows them to either treat onsite or refer to a specialist service or hospital for treatment.

Wherever possible wound identification and first aid should be a low threshold service. The launch of “Pharmacy First” in Scotland promotes pharmacy as the first

port of call for minor ailments and includes a small range of basic dressings. This provides opportunity to engage people who inject drugs, treat where appropriate and link in with services such as primary care where further assessment is required. The role of the pharmacy in identifying and addressing this often hidden harm should be considered. It is possible that larger pharmacy IEPs may make space available for specialist services to run wound care clinics at key times or days.

5.4. Assessment

All people using an IEP service should have access to an assessment which is designed to record:

- Drugs injected
- Frequency
- Needle and paraphernalia sharing
- Needle and paraphernalia reuse
- Anatomical injecting location
- Geographic location where drugs are prepared and injected

5.4.11. Assessment of injecting risk (AIR)

Clients should be encouraged to take part in a specialist assessment of injecting risk which would be carried out by trained staff. There is currently an AIR tool available through the national data collection system (currently neo360) which helps and guides staff through the assessment process. This tool is more advanced in nature and designed to cover the following topics in addition to those covered in the basic assessment including:

- All drugs used and methods of administration
- Overdose risk and Naloxone
- Needle choice
- Hand and site cleaning
- Use of acidifier, water and paraphernalia
- Injecting site health
- Complications and harms
- Batch preparation
- BBV testing and vaccination.

The development of the AIR tool has allowed further innovation through use of IT. This has supported frontline staff to improve the quality and efficacy face to face interventions. E.g. WAND initiative as described in section 4.4.

Section 6 - Training: Improving the quality and consistency of IEP services through education, training and awareness raising for service providers and service users of IEP Services

High quality staff training is essential if we are to increase the skills and competence of the workforce and **provide our clients with the best possible service**. The days of treating everyone who visits an IEP 'the same' should be long gone. There has never been a wider range of drugs injected by very diverse groups, all of whom require specific information relating to the drugs they are injecting, the injecting method and known risks and harms.

The National Needle Exchange Surveillance Initiative (NESI) and more recently an evaluation of IEP services in Tayside found a lack of consistency in services as well as gaps in staff knowledge and training[206-207].

This section of the guidelines gives an overview of the need for training to ensure quality and consistency of IEP services and describes levels of training required for all staff. **Training must be compulsory prior to staff undertaking any duties relating to IEP,** this is to ensure quality and consistency of IEP services across the county.

6.1. The essentials

As a minimum, all individuals involved in the provision of injecting equipment should receive **appropriate training prior to providing a service** or during induction in relation to:

- Understanding drug use
- How to engage with people who use drugs
- Risk associated with injecting practice
- Correct, single person use of injecting equipment
- Needs of different sub-populations of injectors, including those who are in treatment, women, different ethnicities, non-English speaking individuals and those using IPED's.
- Reduce transmission of HCV, HIV, other blood-borne viruses and bacterial infections
- BBV testing and/or referral to specialist treatment
- Overdose prevention and management
- Procedures regarding safe disposal of used injecting equipment
- Procedures for managing needles stick injury

- Contact details of other local relevant services
- Use of the approved electronic recording tool (currently neo360) and the need for direct entry of transactional data (see item 7.3)
- On-going supervision should be provided and training should be updated at least annually – although this might differ between different professions.

6.2. Training – When, what and where?

As well as it being a compulsory standard for all staff to undergo training prior to staff undertaking any duties relating to IEP, the following gives guidance as to **when**, **what** and **where** this can be achieved.

6.2.1 When training should be delivered?

- setting up a new IEP service
- new staff involved in IEP delivery
- ongoing updates on changes in trends and equipment
- training should ideally be updated annually – although this may differ between professions.

6.2.2 Where can training be undertaken?

NHS Boards and services delivering IEP should ensure that **relevant training is made available** to staff involved in the distribution of injecting equipment, including all staff in community pharmacy services, and that these individuals are given all necessary **support to attend** the training. This can be delivered in house or available through online platforms. For example:

- Frontier online e-learning (https://www.frontiersharpsafety.com/)
- IPEDS safer injecting resource (www.ipedinfo.co.uk)
- Scottish Drugs Forum (https://www.sdftraining.org.uk/online-learning)

6.2.3 What style of training?

- Training should be delivered in formats that are accessible and based on the principles of adult learning
- Training needs analysis will assist in identifying the training needs of the staff
- Training should be matched to both the service type and the role of the staff member (See diagram below)

Table 4. *Training topics and content for all IEP staff*

Training topics and content for all IEP staff			
Topic	**Core training required for all IEP staff**	**Additional Training for Enhanced IEP Activities**	**Training Content**
DATA COLLECTION			
IEP Data Collection	ü		• Overview of data collection system • The importance of direct entry at point of transaction • Using the system to its full potential • Using data to evaluate and improve the service
INJECTING EQUIPMENT PROVISION (IEP), SAFER INJECTING, ASSESSMENT & WOUND CARE			
Basic Principles of Injecting Equipment Provision (IEP)	ü		• Rationale for using a harm reduction approach • Understanding why people inject • Understanding and reducing stigma • National polices and guidance • How to deliver IEP safely • An overview of all the equipment provided • Importance of confidentiality, anonymity and sensitivity
Basic Principles of Safer Injecting Practise	ü		• The circulatory system (veins and arteries) • Types of injections – i.v., i.m. and subcutaneous • Accessing a suitable vein (including tourniquet) • Associated risks with different anatomical injecting sites • Importance of hygiene, think of the environment, hand washing and injecting sites • Environmental risk factors • Choosing the right size of needle and equipment appropriate to the injecting site and substance injected • Injecting related complications and bacterial infections • Preparing drugs for injection • Assessment of client's injecting practise and technique and how to promote safer injecting practise

Assessment of Injecting Risk (AIR)		ü	AIR is designed to assist experienced/specialist IEP staff to conduct an assessment of injecting risk. This assessment should be used in an interactive way to promote discussion and engagement. Staff should have training on the use of the tool and feel competent on its application.
Wound First Aid		ü	• Overview of the anatomy/structure of skin and tissue • Common injecting related wounds • How to properly check injecting sites • How to identify and monitor wounds and understand when to refer • Appropriate dressings and treatment • The need to encourage retention with specialist services • Advice on minimising wounds
DRUGS, HARM REDUCTION & OVERDOSE AWARENESS			
Basic Drugs and Harm Reduction Awareness	ü		• Range of drugs used, their effects, adverse effects and rationale for use • The wide range of harm reduction interventions available and when and how to use them e.g. behaviour change models, alternatives to injecting etc
Overdose awareness and naloxone	ü		• Rationale for Naloxone provision • Understanding signs and symptoms of overdose • Responding to overdose and administering Naloxone • Skills and knowledge to provide Naloxone
Image and Performance Enhancing Drugs (IPEDs)		ü	• Overview and prevalence • Motivations for use • Understanding how clients access information • Promoting use of validated sources e.g. Specialist clinics, www.ipedinfo.co.uk • Range of IPEDs used and injecting equipment required • Encouraging IPED users in to our service • Risks and harms • Reducing harms • IPED specific injecting advice

BLOOD BORNE VIRUSES, SEXUAL HEALTH AND CONTRACEPTION			
Key facts about Blood Borne Viruses (BBVs)	ü		• Overview of key BBVs associated with injecting • Transmission risks • Window periods • Encouraging regular testing • Basic understanding of treatment options
BBV testing. How to test, support, signpost and refer for treatment		ü	• Offering the Blood Borne Virus (BBV) test and initial discussion • How to conduct a BBV test • Overview of current prevention and treatment options • Encouraging regular testing • How to offer support and signposting
Sexual Health and Contraception		ü	• Importance of condoms as protection against Sexually Transmitted Infections(s) • Provision of appropriate contraception • Offering sexual health tests with discussion • How to conduct sexual health test(s) • Overview of current prevention and treatment options • Encouraging regular testing • How to offer support and signposting

6.3. IEP Service Standards

There is currently no standard training for people involved in the delivery of IEP services however there are published standards that can support the IEP workforce to ensure they are knowledgeable, skilled and confident in working with people who use IEP services. NHS Boards and those delivering IEP services have a responsibility to ensure that IEP staffs are adequately trained and skilled to be able to provide a high-quality service. In relation to this, it is worth noting that the National Quality Standards for Substance Misuse Services in Scotland require that:

- Workers (paid and unpaid) will be appropriately trained and supervised (Quality Standard 8, point 3)
- Services should employ and train their staff to treat clients with respect anddignity. (Quality Standard 3, point 2)

Other standards to be aware of:

- National Quality Standards for Substance Misuse Services in Scotland (mentioned above)
- The National Occupational Standard' AH32014 Supply injecting and other relevant equipment to individuals who use substances and facilitate safe disposal' (7.2.1.1)
- NHS Education for Scotland (NES) – Hepatitis C Workforce Education Development: An Outline of Requirements (7.2.1.2)
- NHS Education for Scotland (NES) National Trauma Training Programme (7.2.1.3)

Whilst local commissioners should ensure that services are given support to enable staff to attend training and to make relevant training available, it is the **responsibility of service *providers*** to ensure that all staff involved in the provision of injecting equipment are trained ***prior*** to delivering a service.

6.3.1 Other training to enhance an IEP service:

- Scottish Needle Exchange Workers Forum
- SDF online training[208]
- NHS Education Scotland (NES) distance learning package on "Pharmaceutical Care of the Substance User" [209].
- a basic training in child protection awareness
- a basic understanding of blood borne viruses (Hep B, Hep C and HIV) and bacterial infections
- a basic understanding of trauma informed practice (NHS Education for Scotland)[210].

6.4. The importance of record keeping and information systems in improving quality and consistency of IEP services.

In Scotland people are able to access the services of IEPs anonymously. This is intended to reduce perceived barriers which may prevent people accessing IEP services such as fear of IEPs sharing personal details with treatment services. However, non-identifiable core data is essential in supporting service delivery, development and improvement at service, at local and national level. It helps ensure that we **respond effectively to meet the needs** of people who use drugs in Scotland. It is therefore critical that this information is properly recorded and updated.

Substandard methods of data collection such as paper forms or batch submission of information each week or month is shown to offer limited client records and poor data quality, much of which cannot be used meaningfully. Furthermore, analysis of data proved to be labour intensive using manual methods.

6.4.1 The need for DIRECT ENTRY – Recording information at the moment a transaction (exchange/interaction) is taking place

6.5 Ensuring an IEP environment is welcoming for all

There are considerable challenges faced by people who inject drugs and use IEP services, including drug-related stigma and lack of access to health care. Drug-related stigma impacts on how individuals seek and use healthcare and IEP services.

Whilst having the right knowledge and skills is important in providing an IEP service the ***personal qualities of staff*** are also important in maintaining the quality of and access to IEP services.

In focus groups with service commissioners, service providers and pharmacists undertaken as part of the National Needle Exchange Survey, it was reported that **negative staff attitudes** — perceived to be linked to **inadequate staff training and support** — were identified as **two of the biggest barriers** to good practice in IEP services.19 There is evidence from qualitative research among injectors in the UK to indicate that **negative and judgemental staff** can act as a barrier to individuals accessing services. 70

6.5.1 Challenging stigma and improving access to and uptake of IEP services

- Service users must be treated with dignity and action must be taken to eliminate stigma and discrimination by people who use IEP services
- Staff training should therefore include information and the importance of sensitivity and confidentiality in delivering IEP services, and information on how best to liaise with other local services in relation to the needs of their clients.
- Services should consider the impact that their processes and premises may have on client experience. This might include privacy during transactions, the way in which the person has to ask for/identifies themselves as needing the service or a requirement to access through a different entrance or area (may have both positive and negative connotations). Requesting feedback from people accessing existing services, or seeking input during development of new services, is a good starting point in assessing whether any improvements can be made.

6.6. Service user education and training and feedback

This section highlights the importance of **education for clients** and how important **service user feedback** is in improving the quality and consistency of IEP service provision.

As a **minimum**, when providing needles and injecting equipment, IEP services should educate clients about:

- washing their hands and sites with soap and water before injecting
- the correct anatomical site for injecting
- the correct use of each item of injecting equipment
- the risks of sharing and reusing injecting equipment
- the correct methods of disposing of used injecting equipment.

Service providers and commissioners should consider the opportunities that involvement of service users/peer mentors/people with lived experience have to offer in delivering and taking part in local training alongside IEP staff. This joint working may help with engagement, enhance the knowledge of staff as well as create an environment where clients feel valued and listened to.

6.6.1 Feedback

Client feedback should be a regular activity to ensure services are responding to the needs of their service users, to identify gaps in staff knowledge and to continually improve the service provided. Ad hoc audits and mystery shopping approaches are useful tools that can support an ongoing quality improvement approach to service development and provision.

Appendix 1. The IEP checklist: does your service achieve all?

The overall aims of an IEP service are to:

- assist clients in remaining healthy and safe whilst using drugs
- reduce the risk of drug-related deaths (immediate death through overdose or tissue related infections and long-term e.g. through blood borne infections)
- reduce the rate of blood-borne infections amongst injecting drug users
- reduce the rate of skin and soft tissue infections amongst injecting drug users.
- engage service users into a broader range of health and social services

These aims can be achieved by IEP services by:

- offering a user-friendly, non-judgemental, client centred and confidential services
- reducing the rate of sharing and other high risk injecting behaviours by providing sterile injecting equipment and other support
- promoting safer injecting and where possible safer sexual practices
- providing focussed harm reduction advice and initiatives, including advice on overdose prevention (e.g. risks of poly-drug use and alcohol use)
- helping clients access appropriate treatment by referral to other health/specialist agencies (e.g. treatment services, genitor-urinary medicine, social care and family support services)
- facilitating access to primary care where relevant
- ensuring the safe disposal of used injecting equipment
- encourage the access and retention of all injectors, especially the highly socially excluded, through the low-threshold nature of service delivery and interventions provided
- discourage initiation into injecting and to encourage alternatives to injecting (provision of foil)
- Ensuring records are kept up to date and accurate for every transaction

At a community level an IEP service can:

- improve the health of local communities by preventing the spread of blood-borne viruses and by reducing the rate of discarded used injecting equipment
- reinforce the benefits of needle exchange and raise public awareness through information and education.

Appendix 2: Needle Colour Coding Chart

Colour	Gauge Size	Length	Suitability for	Drugs usually injected by needle	Available in One Hit Kit Format
Green	21g (0.8mm)	1½" (38mm)	Drawing oil based steroids Intramuscular (IM) injection of steroids (buttocks).	Oil Based Steroids	In Steriod Glasses Case
Blue	23g (0.6mm)	1¼" (32mm)	Intramuscular (IM) injection (buttocks) of steroids. Femoral (groin) injection (IV).	Steroids, Heroin, Cocaine and Amphetamine (if femoral vein accessed).	In Blue One Hit Kit (2ml) In Steriod Glasses Case
Blue	23g (0.6mm)	1" (25mm)	Intramuscular (IM) injection (buttock, thighs and shoulders) of steroids. Femoral (groin) injection (IV).	Steroids, Heroin, Cocaine and Amphetamine (if femoral vein accessed).	No - Access fixed site for Pick & Mix
Orange	25g (0.5mm)	1" (25mm)	Femoral (groin) injection (IV) Slightly deeper veins when the needle is prone to blocking.	Steroids, Heroin, Cocaine and Amphetamine (if femoral vein accessed).	In Orange One Hit Kit (3ml)
Orange	25g (0.5mm)	⅝" (16mm)	Slightly deeper veins when the needle is prone to blocking.	Steroids, Heroin, Cocaine and Amphetamine (if femoral vein accessed).	No - Access fixed site for Pick & Mix
1ML Fixed (LOW DEAD SPACE)	27g - 29g	½" (13mm)	Superficial veins, such as arms, hands, feet and legs (IV) Subcutaneous injection of some hormones.	Heroin, Cocaine, Amphetamine and NPS. IPEDS such as growth hormone, tanning agents and peptides.	In Black One Hit Kit (1ml)

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