

3.0 Methods

The approach considers need as an individual's capacity to benefit from an intervention or services and takes account of Bradshaw's typology which classifies needs into felt, expressed, normative and comparative [7]. The standard practice of using epidemiological, comparative and corporate approaches was adopted for this needs assessment [8].

3.1 Epidemiological

Routine data on the characteristics of people who inject drugs in Edinburgh, and the services they use, was collected from local and national data sources. Several challenges were encountered with the extraction, analysis, completeness and reliability of a number of routine data sources used. Relevant chapters include a more detailed discussion of the limitations of data sources in relation to the interpretation of results.

Data sources

Needle Exchange Online (NEO) Database

NEO is used by Injecting Equipment Provision (IEP) services across Edinburgh. Data was analysed for the City of Edinburgh from August 1st 2015 to July 31st 2016. For the purposes of the assessment it was assumed that people using IEP services are current injectors, although it is recognised that in some instances people may be non injectors but collecting injecting equipment for others. People attending IEP services are given a unique identifying number which they can reuse at different sites and NEO records information on demographics, injecting behaviour and equipment dispensed. One of the challenges is duplication of 'unique' identifiers and analyses were conducted mainly for numbers that appeared five or more times (classified as 'regular attendees') and those appearing 50 or more times (classified as 'frequent attendees').

Needle Exchange Surveillance Initiative (NESI) 2015-16

NESI is a cross-sectional survey of people who inject drugs [1]. Of the 475 people surveyed in NHS Lothian, 87% were City of Edinburgh IEP users and for subsequent analyses it was assumed that the findings for the whole cohort were representative of Edinburgh. Health Protection Scotland conducted sub analysis for respondents who reported: (i) having been in prison in the last 6 months (70 individuals); (ii) having been in prison ever (385 individuals); (iii) homelessness in the last 6 months (156 individuals); and (iv) being on methadone in the last 6 months (279 individuals).

Scottish Ambulance Service (SAS)

NHS Lothian receives annual data, collected by SAS, on the number of callouts for suspected overdose and the number of occasions where naloxone was administered. Data reviewed was from April 2008 to March 2015.

Police Custody

The recording system for those admitted to police custody is ADAstra and Lothian Analytical Services extracted data on demographics and addictions from 1st August 2015 to July 31st 2016. The main challenge was the incompleteness of the data. Very often the questions relating to frequency and type of drug use were not recorded via the dropdown menus and free text analysis was not done. This means that for drug-related cases the data is not representative.

HMP Edinburgh

Routine data was reviewed from the Scottish Prison Service (SPS) Prison Survey 2015, NHS Lothian hepatitis C testing activity in Lothian prisons and SPS addictions prevalence testing (Scottish Public Health Observatory). Further information for 2016 was obtained from the VISION clinical system as part of another health needs assessment looking at out of hours work.

Qualitative information on the provision of harm reduction interventions in HMP Edinburgh and on liberation was gathered through meeting with healthcare, third sector and prison through-care staff, a survey monkey questionnaire for staff, and interviews with prisoners.

It was a challenge to access prisoners known to be injectors (especially female) because of logistical issues such as short notice release, transfer, court dates and the daily routine of the prison. Feedback on experiences of harm reduction during prison sentences and as part of liberation was also drawn from a number of the people who inject drugs who were interviewed in the community.

Further information was sought from the women's project, Willow. The service takes referrals for women who are resident in Edinburgh, or returning to Edinburgh from custody and all data is recorded on the SWIFT database. However, it was not possible to obtain this information within the timescale of the project.

Drug Testing and Treatment Orders (DTTO)

It was not possible to collect information on DTTO within the timescale of the project.

Homeless Database

City of Edinburgh Council records details of homeless individuals on the council's homeless database. This database was searched for those who had presented as homeless and were recorded as being a current drug user between 1st August 2015 and 31st July 2016. There is no standard question about drug use or blood-borne

virus (BBV) status and therefore a free text search was done which included the type of drug, route of administration, volume and frequency and self reported BBV status. Free text data was entered in many forms and so this approach produced limited information. A request was made to marry up the homeless data with data collected on Edinburgh Common Housing Outcomes (ECHO) database, but this was unable to be performed as data on a client's drug use is no longer collected on this database.

It was not possible within the timescale of the project to obtain historical data from Street Work, a third sector organisation working with the homeless population, because the recording system had recently been transferred over to a new one.

Accident & Emergency

TRAK is a live system used in NHS Lothian to record demographic and clinical information on patient admissions. It does not record information on people who are assessed in A&E but not admitted. Lothian Analytical Services, conducted a search of TRAK for in patient admissions between August 1st 2015 and July 31st 2016. The search included International Classification of Diseases (ICD10) diagnosis codes for 'Mental health and behavioural disorders due to use of *'psychoactive substances'*' and a search for 'cellulitis' was also carried out since there had been a large outbreak of skin and soft tissue infections in Edinburgh the previous year. The cohort was further analysed for possible injecting drug users by isolating admissions from those diagnosed with use of either opioids, cocaine, other stimulants or multiple/other psychoactive substances, along with those diagnosed with cellulitis.

Prior to this needs assessment, a previous analysis was conducted of admissions through A&E between April 2013 and December 2015 - which included the peak of novel psychoactive substance (NPS) use in Lothian. This cohort identified people using the same ICD10 codes, and included a free text search of TRAK for names of NPS substances.

Drug-Related Deaths (DRD)

The NHS Lothian DRD coordinator routinely reports to the National Drug-Related Deaths Database. Data is collected from the following sources: Police Scotland, NHS services (primary, secondary and community services), local authority social services, pathology and toxicology services, criminal justice, and third sector agencies working in the field of substance misuse. For the purposes of this assessment, data from 1st January to 31st December 2016 was analysed.

Take Home Naloxone Provision

NHS Lothian collects and reports data according to the National Naloxone Programme. The naloxone coordinator and the NHS Lothian Primary Care Facilitation Team provided data on delivery and uptake of naloxone for the period 1st January 2016 to 31st December 2016.

Opioid Substitution Therapy (OST) Provision

For specialist services, data on numbers in treatment and their demographic characteristics was collected from SMR25a for the period 1st April 2015 to 31st March 2016. The SMR25a form is filled out for all drug users enrolling in specialist services. The data set is not complete although there have been marked improvements in the collection of this data in the last few years. Similar data for patients treated under the drug misuse National Enhanced Service (NES), was provided by the Primary Care Facilitation Team from the NES database.

Blood-Borne Virus (BBV) Testing

NHS Lothian virology provides routine updates on the number of tests for BBV each quarter. To determine the proportion of people newly registered with specialist drug services who have received a BBV test, data from SMR25a for the period 1st April 2015 to 31st March 2016 was linked by Community Health Index (CHI) to the NHS Lothian virology laboratory database for the same time period. People in the cohort who were tested for hepatitis C (HCV) in the same time period were identified as were people who had ever tested positive for HCV. Individuals with a negative HCV antibody test prior to 2015 were considered eligible for re testing in the year from last test. To determine the proportion of patients newly registered with the drug misuse NES, the Primary Care Facilitation Team provided data for January 1st to December 31st 2016 for those who were classified as current injecting drug users. These were linked using the CHI number as above. Not all samples have a linked CHI so it is possible that some positives may not be accounted for.

Blood-Borne Virus (BBV) Treatment

Data on referral, retention in treatment and treatment outcome was collected for people identified as 'current injectors' or 'ex injectors' from the HCV database at the Royal Infirmary of Edinburgh (RIE). This data base includes patients from the RIE and also community sites at Edinburgh Access Practice, Musselburgh and Howden. Data from the treatment database was used to construct a 'Piot-Fransen' model. This is a tool that helps identify losses to follow up in the patient journey from positive test to cure.

Discarded Needles

Data was collected on locations of the needle finds between August 2015 and July 2016 using:

- Edinburgh Council's databases APP Civica and Confirm. This covers all needles collected from public places, usually following a report from the general public.
- Data from the University of Edinburgh security team on needle finds from their routine patrols. This covers needles that were found on city centre university premises.
- Essential Edinburgh an organisation contracted to provide a cleaning service within the boundaries of the business improvement district.

Community Safety

Police Scotland drug dealing intelligence was reviewed and mapped for the period August 2015 to July 2016.

3.2 Corporate

Current injectors and people in recovery

Current injectors were consulted through 29 semi structured interviews in a variety of settings (Table 3.1). Participants were recruited via professionals working in the different settings. This was mostly opportunistic and therefore relied on participants being prepared to give up time in addition to that which they had already allocated for their appointment or whatever service they were attending. Participants were judged to have met the criteria for inclusion (current or recent injector) through being a user of the service where they were recruited. A £10 shopping voucher was offered to everyone who completed the interview. The length of time taken to go through the questions ranged from 10 to 50 minutes. This was due both to participant (e.g. difficulty in concentrating or remembering) and environmental (e.g. background noise, presence of a 'chaperone') factors. People in recovery were consulted through a focus group of four participants, recruited through Spittal Street Centre.

Table 3.1: Number of people who currently inject drugs interviewed in different settings

Setting	Number of interviews
Prison	3
The Access Practice and other GP practices	5
Hostel for homeless people	5
Specialist drugs services (North East Hub and Spittal Street Centre)	9
Pharmacy	3
Police custody	4

The interviews and focus group were carried out by two interviewers, a policy officer/researcher from Public Health and a Senior Health Promotion Specialist. Verbal consent was sought at the start of each interview and most were recorded and transcribed.

Homeless people

Thirty people took part in semi structured interviews as part of an undergraduate project. Interviews were carried out in four settings - Edinburgh Access Practice, The Access Point (Leith Street), Salvation Army day drop in service and the Streetwork Crisis Centre. All participants were at least 18 years old and had injected drugs at least once. All were currently homeless or in homeless accommodation or had been previously. All participants gave verbal consent and answers were written down.

Service providers

Service providers were consulted through an online survey (Appendix 1). The following groups were included: local authority (community safety), community partnerships (alcohol & drug partnerships, Inclusive Edinburgh), NHS (Substance Misuse Directorate, pharmacy, general practitioners, SAS, Edinburgh Access Practice, A&E), third sector providers (CGL, Turning Point, Streetwork), Police Scotland.

3.3 Comparative

The comparator used for this assessment is national guidance and recognised best practice for harm reduction and addiction services. The assessment aimed to identify how best to implement and improve upon this.

3.4 Analysis

Local epidemiological data was analysed by Lothian Analytical Services, data linkage was carried out by the NHS Lothian virology lab and the Primary Care Facilitation Team, and the Edinburgh sub analysis of the NESI survey was done by Health Protection Scotland.

The qualitative information gathered from interviews, focus groups and staff survey was analysed thematically.

The needs assessment core group reviewed all data for 'sense checking' and this was presented to the steering group so that conclusions and recommendations could be made.

3.5 Consultation

The draft recommendations were discussed at a 'conversation cafe'. Peer representatives of service users, and representatives of all staff groups working with injecting drug users provided feedback which has been incorporated into the report and is detailed in Appendix 2.