### The drug treatment outcomes research study (DTORS): baseline report

Andrew Jones Samantha Weston, Alison Moody, Tim Millar, Laura Dollin, Tracy Anderson and Michael Donmall

The Drug Treatment Outcomes Research Study has been designed to update existing knowledge on the effectiveness of drug treatment in England. Within the context of changing patterns of drug use and an expansion in criminal justice referrals, this study aims to measure the outcomes experienced by those seeking drug treatment. The study comprises of three key elements, operated over a three-year period, namely: a quantitative study of outcomes; a qualitative study of treatment-related issues; and a cost benefits analysis. This report describes the findings from the quantitative study baseline interviews. The sample of drug treatment seekers in this study is broadly representative of all drug treatment seekers in England.

Many (39%) recently committed acquisitive crime in the four weeks before interview and 49 per cent of these stated that they had done so in order to obtain drugs. Shoplifting, trading in stolen goods, and drug selling were common, but more serious offending (such as vehicle theft, burglary, robbery) was less usual. This suggests that addressing drug use has a higher potential population impact on less serious forms of crime. Criminal justice system (CJS) referral schemes encourage criminally more active drug users, with more entrenched and chaotic problems, into treatment, although most (73%) have been treated before.

So, whilst not strictly a route whereby 'hidden' users are diverted into treatment, CJS referral does re-initiate treatment contact for a 'difficult' group. Depending on the outcomes experienced by this group and questions of cost effectiveness, this could support the desirability of continued investment in CJS referral.

Most (77%) treatment seekers were unemployed and more than one-third (38%) had left school before 16. This highlights the need to consider employment and education issues in any process of rehabilitation.

Almost 80 per cent of opiate users report concurrent use of other drugs that are associated with overdose risk. There is an ongoing need for educational and practical initiatives to reduce overdose risk.

Crack use is common (44%), associated with higher levels of criminality, poorer health, and recent psychiatric treatment, and apparently associated with ethnic group. These findings reinforce the original aim of the Drug Treatment Outcomes Research Study to include a focus on outcomes among crack users and criminal justice referrals.

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# Criminal justice system Offending Risk behaviour Drug injecting

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### The drug treatment outcomes research study (DTORS): baseline report

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#### **Context**

The Drug Treatment Outcomes Research Study has been designed to update existing knowledge on the effectiveness of drug treatment in England. Within the context of changing patterns of drug use and an expansion in criminal justice referrals, this study aims to measure the outcomes experienced by those seeking drug treatment. The study comprises of three key elements, operated over a three-year period:

- a quantitative study of outcomes;
- a qualitative study of treatment-related issues; and
- a cost benefits analysis.

This baseline report describes the findings from the quantitative study baseline interviews. Further reports, based on the follow-up quantitative study, will explore the outcomes from treatment, including for whom treatment works best and in what context.

#### **Approach**

- A sample of 1,796 adults seeking treatment for a drug problem were recruited to the study from 342 treatment facilities across 94 Drug Action Team areas.
- CJS referrals included those who had received a drug test in custody; were subject to a Drug Rehabilitation Requirement; and those who were attending treatment as a condition of bail.
- Baseline interviews were conducted as soon as possible after a treatment seeker's assessment for a new episode of structured community-based (Tier 3) or residential (Tier 4) treatment.
- Outcome measures, which will be repeated at the followup interviews, included levels of drug use; offending; social circumstances; health; and risk taking.

• The resulting data have been weighted to be representative of adult drug treatment seekers in England.

#### Results

#### Social context

- Treatment seekers were predominantly male (73%), aged between 25 and 44 (72%) and White (89%).
- The partner of 38 per cent of treatment seekers who had a partner also used drugs. Women were particularly likely to have a drug-using partner. Around half of the treatment seekers had children aged under 16, yet three-quarters did not live with them.
- Forty per cent of the sample had been living in unstable accommodation for at least some of the time in the previous four weeks; over one-third (38%) had left school before the age of 16, and most reported being unemployed (77%).

#### Treatment contact

- Nearly half (43%) of the sample reported lifetime contact with mental health services; 23 per cent had previously been diagnosed with a mental health condition.
- Criminal justice system (CJS) workers were involved in the referral of 35 per cent of treatment seekers; 36 per cent of these received a drug test in custody; 55 per cent were subject to a Drug Rehabilitation Requirement; and 32 per cent were attending treatment as a condition of bail.
- CJS referrals were found to have more complex offending patterns, higher levels of crack use, unstable accommodation and were more likely to be separated from children. They were also more likely to be from Black and Minority Ethnic groups.

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 Seventy-one per cent of all treatment seekers and 73 per cent of CJS referrals had some previous experience of Tier 3 or 4 services.

#### Drug use

- In the four weeks prior to interview 62 per cent reported using heroin, 44 per cent crack, 25 per cent benzodiazepines and 50 per cent alcohol.
- The median value of drugs used in the four weeks prior to interview was £706.

#### Offending

- Over a third (39%) of the sample acknowledged committing acquisitive crime in the four weeks prior to interview. Usual levels may be much higher, as 44 per cent of these say they had reduced their offending rates in these four weeks.
- Current offenders reported making an average (median) of £130 from acquisitive crime in the past four weeks (£200 among CJS referrals).
- Nearly a quarter (22%) of the sample reported offending in order to buy drugs in the past four weeks and 18 per cent reported offending under the influence of drugs.

• In the past 12 months, 73 per cent of treatment seekers reported committing an offence.

#### Risk-taking behaviour

- A large proportion (37%) of respondents reported injecting drugs recently, and nearly half (48%) of injectors admitted to sharing equipment in the past four weeks.
- Seventy-six per cent of opiate users reported poly-drug use in combinations associated with heightened overdose risk (with other opiates, benzodiazepines or alcohol);
   37 per cent of these also reported this poly-drug use in combination with injecting; one in ten (9%) reported experiencing an overdose in the past three months.

#### Motivation

 High levels of motivation for treatment (mean of 22 out of 25) and 'readiness for treatment' (mean of 31 out of 35) were recorded across groups within the sample.

#### **Implications**

Results suggest that CJS referrals may present with specific needs. This could, dependent on outcomes and cost effectiveness, support continued investment in CJS referral initiatives. Other results highlight a need to address education and training. There is an ongoing need to include initiatives to reduce overdose risk.

## The drug treatment outcomes research study (DTORS): baseline report

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#### Context

Current UK drugs policy places an emphasis on maximising treatment contact for problem drug users. This is based on an underlying assumption that 'treatment works' in terms of reducing drug use and offending. There is good evidence for this assumption, in particular from the National Treatment Outcome Research Study (NTORS) (Gossop, et al., 1997), a five-year longitudinal study of drug treatment outcomes carried out between 1995 and 2000. NTORS, in addition to other key drug treatment outcome studies, Drug Abuse Treatment Outcome Study (DATOS) (Hubbard et al., 1997), Australian Treatment Outcome Study (ATOS) (Teeson, et al., 2005), and the Drug Outcome Research Study in Scotland (DORIS) (McKeganey, et al., 2006), found significant reductions in both drug use and criminal activity at follow-up. These findings were more prominent for those that had been retained in treatment for three months or more (Hubbard, et al., 1997). The increased government spend on drug treatment in recent years and the widespread introduction of pro-active referral schemes, in particular the Drug Interventions Programme, has introduced greater heterogeneity amongst drug services' clients than that present a decade ago. This group of drug services' clients may present particular challenges to treatment services, by virtue of the seriousness of their drug problems (Stewart et al., 2000). Therefore, it is important that the evidence base is updated, in particular to establish more detail about the impact of treatment, for whom treatment works best and in what context. This is especially important in the context of the expansion of criminal justice system (CJS) referral schemes and the rise of crack use.

The Drug Treatment Outcomes Research Study (DTORS) aims to renew the existing evidence base on drug treatment in England. The research aims to answer the following questions:

How does drug treatment impact on outcomes, specifically:

levels of drug and alcohol use;

- offending behaviour;
- physical and mental health; and
- wider social outcomes?

How does this vary by:

- different referral sources (specifically CJS/non-CJS);
- different pathways through drug treatment;
- drug use (including poly-drug use and alcohol); and
- individual characteristics (including individuals' perceptions and attitudes)?

This report describes the results of the findings from the quantitative study baseline interviews. Further reports based on the follow-up quantitative study will explore the outcomes from treatment, including for whom treatment works best and in what context.

#### **Approach**

The Drug Treatment Outcomes Research Study (DTORS) is a longitudinal study designed to follow drug treatment seekers over a period of up to 12 months.

#### Overview of sampling strategy

The study's respondents were recruited via drug treatment agencies within England. One hundred of the 149 Drug Action

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Teams (DATs) in England were initially selected to take part in DTORS. This large number was chosen in order to minimise the burden on each individual DAT and to increase the power of the sample. DATs were split into three groups, based on the percentage of agency referrals received from the criminal justice system, and 33 - 34 were selected randomly from each group. Within each selected DAT, all agencies providing structured community treatment (Tier 3) or residential treatment (Tier 4) or referral were eligible to take part, as were all adults presenting with a drug problem (other than alcohol) for a new episode of drug treatment within a sampling window of between four and seven weeks. Participation was voluntary. Consent was obtained prior to any contact details being passed to the research team by agency staff. Participants were free to take part either when first approached, or at a later date, or even to decide later. Interviewers were instructed to provide a standardised explanation of the study to potential respondents, which emphasised the voluntary nature of the study, and signed consent was obtained prior to the interview commencing.

The final sample represents 1,796 drug treatment seekers interviewed at 342 treatment facilities across 94 DATs; the sample broadly represents the drug treatment-seeking population in England. This sample size has the power to detect a £25 difference in the change in drug spend between CJS and non-C|S clients before and after treatment. Original power calculations were highly cautionary, resulting in a higher target baseline. Of those identified as eligible by agencies, 64 per cent were interviewed. There were a number of reasons why the remainder were not interviewed. Most commonly they refused to participate (11% of eligible drug treatment seekers refused when approached by agency staff and a further 8% refused when approached by the interviewer). Other reasons included noncontact (8% broke appointments with interviewers and could not be contacted after this; and interviewers were unable to make contact with a further 3% using the details provided). The remainder (8%) were unproductive for other reasons including where the agency staff had forgotten to ask the treatment seeker to participate or had advised the interviewer that the treatment seeker should not be approached for safety reasons.

Not all drug treatment seekers had an equal chance of being included in the study as the length of the sampling window varied between agencies. Furthermore, not all agencies, nor all eligible treatment seekers, agreed to participate. Indeed, there is evidence to suggest that some differences do exist between the profile of DTORS respondents and the drug treatment seekers recorded on NDTMS in terms of age, ethnicity, referral source and main drug (although it should be noted that NDTMS data are not always directly comparable with DTORS data and that not all treatment seekers identified by DTORS were included on NDTMS). Because of these issues, weights were calculated and applied to take account of these potential biases, enabling the analysis to provide a representative picture of drug treatment seekers in England. The data have been weighted to provide a representative sample of drug treatment seekers in England.

Even after weighting, the DTORS sample are still more likely to have been referred via the criminal justice system and to cite

crack cocaine as their main problem drug than may be expected based on NDTMS data. This is likely to be due to the different ways in which this information is acquired and recorded by the two data sources.

#### **Data** collection

The baseline questionnaire aimed to deliver two main types of information: baseline outcome measures (i.e. types of behaviour and states of health) and factors having a potential impact on outcomes. The questionnaire, which included both interviewer-administered and self-completion sections, covered:

- demographics, accommodation, employment, relationships, dependent children;
- treatment pathways, treatment history, motivation and goals;
- drug use;
- risk-taking behaviour (overdose, unprotected sex, sharing injecting equipment);
- offending behaviour; and
- mental and physical health.

#### Recruitment

Once selected, DATs were contacted and invited to take part in the study before any contact was made with individual agencies or Trusts. Where a DAT refused involvement in DTORS, a replacement DAT was selected at random from the same tertile as the original DAT.

Access to National Health Service (NHS) drug treatment services was dependent upon approval from Mental Health Trusts (MHTs) and Primary Care Trusts (PCTs) responsible for substance misuse services. As a result of applications being withdrawn and umbrella organisations processing approval for more than one NHS MHT/PCT, research and development negotiations were undertaken in a total of 54 NHS Trusts.

Difficulties in ensuring contracts for fieldworker staff resulted in 40 NHS agencies based in seven NHS trusts being unable to participate in the study.

#### Results

#### Social context

Treatment seekers entering through the criminal justice system were more likely to be male, to have left school early, to be out of work and be in unstable accommodation than non-CJS referrals. However, they were less likely to be in poor health or to have received psychiatric treatment recently. Those who had previously received Tier 3 or 4 treatment tended to be older, and were more likely to be single, in unstable accommodation, to have left school early and be unemployed due to long-term sickness. They were also more likely to rate their health as poor.

#### Gender and age

The gender and age profile was similar to that expected from a drug treatment group (73% male, 27% female, 20% 16 to 24 years, 45% 25 to 34 years, 27% 35 to 44 years, 7% 45 years and over) but differed according to referral source; there were more (31%) female non-CJS referrals than CJS referrals (20%). Female treatment seekers were also more likely to be in the younger age group (32% of those aged 16 to 24 were female; 26% of those aged 25 to 34 and 24% of those aged 35 and over) (Appendix Table 2a).

Figure 1 shows the gender and age profile of drug treatment seekers.

#### **Ethnicity**

The vast majority of treatment seekers were White (89%); four per cent were of Mixed ethnicity, three per cent were Black, three per cent Asian, and the remainder (2%) were designated as 'Other', which includes Chinese (Appendix Table 4).

There were variations in recent drug use and primary problem drug by ethnicity. Those for whom crack was their primary problem were less likely to be White (77%) and more likely to be Black (12%) than those whose primary problem drug was

heroin (91% White, 2% Black), or any other drug (88% White, 3% Black) (Appendix Table 5a). Looking at recent drug use, those who used crack but not heroin were most different in terms of ethnicity, with ten per cent Black and 79 per cent White compared with those who used both crack and heroin (2% Black and 88% White).

CJS referrals are more likely to be from Black ethnic minorities (4% compared to 2%), especially among those new to treatment (11% compared to 3%).

#### Relationships

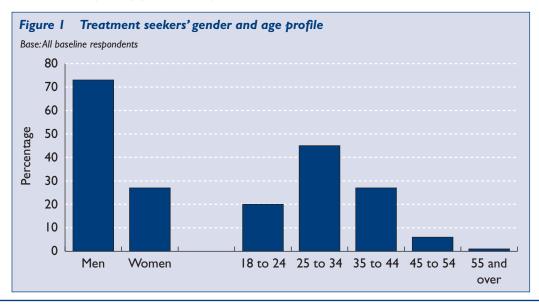
Thirty-eight per cent of respondents had a partner; of those with partners, 38 per cent had a partner who took drugs (14% of all treatment seekers). This was far more common among women (61% of women with partners have partners who took drugs compared with 25% of men with partners) (Appendix Table 8a). Recent heroin use and heroin problems were associated with an increased likelihood that a treatment seeker's partner also took drugs. Treatment seekers who recently used heroin were more likely to have a partner who took drugs (51% and 42% of the two heroin groups (Appendix Table 8a).

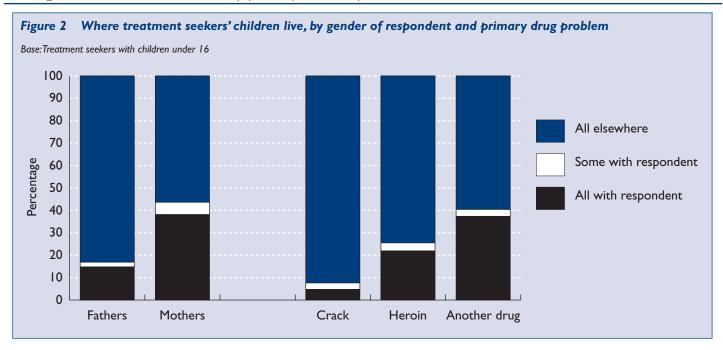
#### Children

Just under half of treatment seekers (49%) had children under the age of 16 (Appendix Table 9a). More female than male treatment seekers report having children (58% compared with 46%).

Three-quarters of these parents lived apart from all their children under 16 (75%), or from some of them (3%). Fathers were less likely than mothers to have at least one of their children living with them - 17% compared to 44 per cent of mothers (Appendix Table 10).

Treatment seekers with crack as their primary problem were the most likely to be apart from their children (92% as opposed to 74% for heroin and 60% for other primary drugs) (Appendix Table 9a).





#### Accommodation

Altogether, 60 per cent of treatment seekers stayed only in stable accommodation (whether one or more than one type) in the four weeks prior to the interview (Appendix Table 12a). A further 18 per cent stayed in a mix of stable and unstable accommodation, and the remaining 21 per cent stayed in unstable types of accommodation only. <sup>1</sup>

Treatment seekers who were new to drug treatment were more likely to be in stable accommodation only (73%) compared to those who had previous experience of treatment (55%) (Appendix Table 12b). Likewise, those who were referred to drug treatment through non-CJS sources were more likely to be in stable accommodation only (65%) than their CJS counterparts (52%). Treatment seekers with a primary crack problem were the least likely to be in stable accommodation (46%) (Appendix Table 12a).

#### **Educational attainment**

Over a third (38%) of the treatment seekers left full-time education before the age of 16, with a further 49 per cent having left full-time education at age 16 or 17 (Appendix Table 13a).

Drug treatment seekers referred by the criminal justice system were more likely to have left school before 16 (46%), than those from other referral sources (34%) (Appendix Table 13b).

#### Working status

Only one in ten (9%) of treatment seekers were in employment, one per cent were in training and one per cent in education (Appendix Table 14). The majority of treatment seekers were

I Stable = accommodation that you own or rent, accommodation owned by friends or family (stay rent free), accommodation owned by friends/family (where you pay rent), in a hostel (residential).

Unstable = in in-patient or drug or alcohol treatment, in prison or other custody, slept rough on the streets, in a park etc. (without a roof), in a squat, other medical establishment, in a hostel (night drop-in centre), in a mobile home or caravan.

not in work, whether unemployed and looking for work (28%), unable to work due to long-term sickness or disability (25%), or unemployed but not looking for work (24%). Other non-work or training activities, such as looking after the home and family, attending residential treatment or temporarily unable to work accounted for ten per cent of treatment seekers.

Those aged 16 to 24 were more likely to be in employment, education or training (18%) (Appendix Table 15a), as were treatment seekers new to Tier 3 or 4 treatment (18%) and those not referred through the criminal justice system (14%, compared with 6% of CJS referrals) (Appendix Table 15b).

#### Drug use profile

Very detailed information about drug use was collected, covering all drugs ever used, all drugs used in the last four weeks, all drugs considered to be a problem by the treatment seeker and the drugs considered to be the primary problem. For each drug used in the last four weeks, further details were collected relating to the nature and extent of use.

CJS referrals were found to be more likely to have used crack in the last year, to report crack or heroin as a current problem drug or to record crack as a primary problem drug. However, among heroin users, CJS referrals were less likely to use the drug on a daily basis than other treatment seekers.

#### All drugs used

Treatment seekers reported using a mean average of three drugs in the four weeks prior to interview. Heroin was the most commonly (62%) reported drug of use in the four weeks before the baseline interview (Appendix Table 16a). Roughly half of all treatment seekers reported use of crack, cannabis or alcohol. Benzodiazepines were used by 25 per cent, other opiates' by 22 per cent, unprescribed methadone by 18 per cent and cocaine

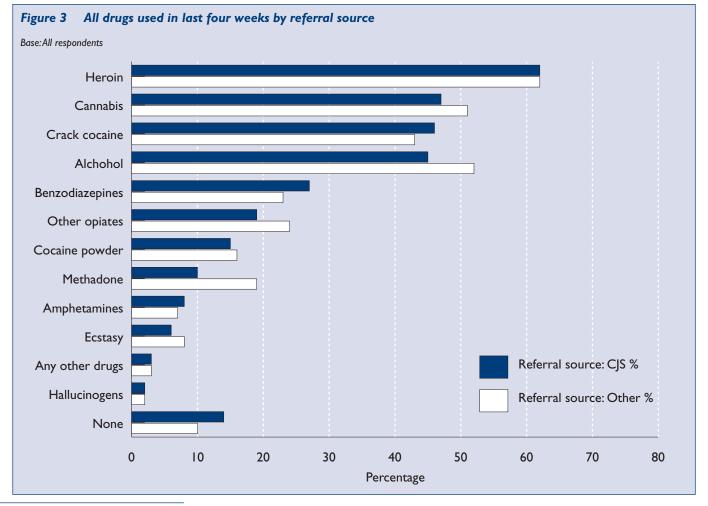
powder by 15 per cent. Much smaller proportions reported use of any other drug. Eleven per cent reported no use of illicit drugs in the last four weeks. Of these, 31 per cent reported receiving substitute prescribing but 69 per cent reported no drug use at all.<sup>2</sup>

Treatment seekers referred via the CJS route were less likely to have used non-prescribed methadone, 'other opiates', or alcohol (Appendix Table 16b). Older age groups were more likely to have used crack; younger age groups were more likely to have used cannabis, ecstasy or alcohol (Appendix Table 16a). Users of heroin who had not used crack were more likely to have also used other opiates and benzodiazepines, whereas crack users who had not used heroin were more likely to have used cocaine powder or alcohol. Treatment seekers assessed at residential units were less likely to have used heroin (Appendix Table 16b).

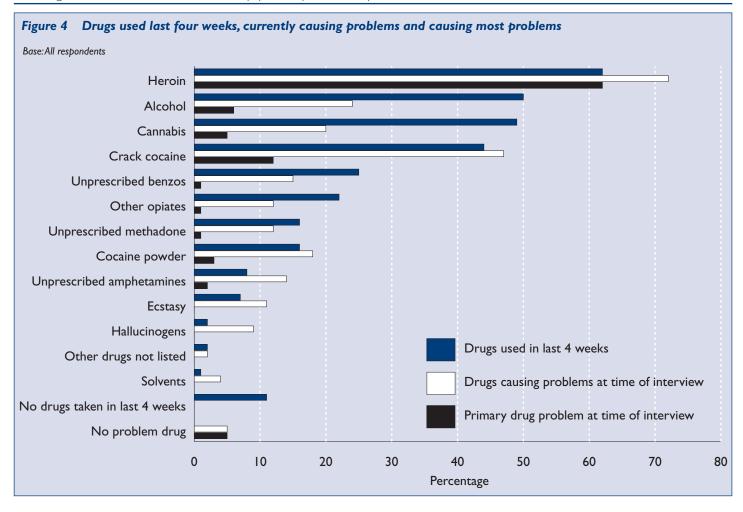
# referrals (Appendix Table 19b). Problematic use of many drugs (all opiates, crack, benzodiazepines and amphetamines) was more likely among those with previous treatment experience. All drugs other than heroin, cannabis and solvents were more likely to be considered problematic among treatment seekers assessed at residential services. Several drugs (including cocaine powder, amphetamines and cannabis) were more likely to be considered problematic among males (Appendix Table 19a).

#### Problem drug use

Treatment seekers were asked to state which drugs they considered to cause them the most problems (at the time of interview). This was not reliant on specific drugs actually being used in the past four weeks and some treatment seekers specified drugs as being a problem even after a period of abstinence. Heroin, crack and alcohol were most likely to be considered a problem (72%, 47% and 24% respectively) (Appendix Table 19a). Crack and heroin were more likely to be a problem for CJS



<sup>2</sup> Treatment seekers were interviewed as soon as possible after assessment for community treatment. All reported drug problems but several had apparently changed their drug-using behaviour in the period before interview.



#### Primary drugs

Treatment seekers were asked to define which of the drugs that they reported as causing problems, caused, in their opinion, the most problems at the time of interview. This form of definition may differ from clinical facility definitions that are most likely to focus on the main drug used at presentation for treatment.

Six per cent reported that no drugs currently caused them problems and six per cent reported alcohol as the primary problem despite use of other drugs (Appendix Table 20a). Twelve per cent of the sample defined crack as their primary problem.

Crack use was much less likely (7%) to be defined as a primary problem among 18- to 24-year-olds (Appendix Table 20a). Treatment seekers with previous treatment experience were more likely than others to define heroin as a primary problem whereas the proportions between these groups were equal for crack (Appendix Table 20b).

#### Nature of use

Heroin was used daily or most days by 63 per cent of primary users (Appendix Table 21), in comparison with 30 per cent for crack and only 11 per cent for cocaine. Forty-nine per cent of primary heroin users reported injecting it in the last four weeks and 28 per cent injecting it every day, or most days. Twenty-four per cent of primary crack users reported injecting the drug within the past four weeks, as did 39 per cent of primary amphetamine users.

#### Value of drugs used

Treatment seekers were asked to provide details of the value of the drugs that they had personally consumed in the week prior to interview. In addition, the value of drugs used in the last four weeks was calculated on the basis of the number of days used in the last 28 and the average value of daily use. Crack users displayed a greater difference between mean and median values, suggesting a greater number using extreme values of drugs (Appendix Table 17a). Values for the last week were generally only 10 to 15 per cent of those for the last four weeks, suggesting considerable changes in drug-use behaviour in the period immediately prior to interview/start of treatment. Indeed 40 per cent of treatment seekers stated that they had used a lesser quantity of drugs in the previous four weeks than normal. This effect was heightened among CIS referrals, presumably a result of CJS/Drug Interventions Programme (DIP) intervention and/or incarceration prior to interview, and among those assessed at residential services (Appendix Table 17b).

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Table I Average value of drugs used (last four weeks and last week)

	Referral source					
	CJS		Other		Total	
	Mean <sup>a</sup> £	Median £	Mean £	Median £	Mean £	Median £
Last 4 weeks	1,172	616	1,359	748	1,296	706
Last week	178	68	200	94	193	81
Unweighted base	531		1,054		1,585	

#### Notes:

suggesting considerable changes in drug-use behaviour in the period immediately prior to interview/start of treatment. Indeed 40 per cent of treatment seekers stated that they had used a lesser quantity of drugs in the previous four weeks than normal. This effect was heightened among CJS referrals, presumably a result of CJS/Drug Interventions Programme (DIP) intervention and/or incarceration prior to interview, and among those assessed at residential services (Appendix Table 17b).

#### Offending profile

#### Introduction

The history of recent offending behaviour was collected in a self-completion section of the interview to encourage honest and accurate responses in this sensitive area, but it is, therefore, self-reported rather than fully verified and the usual caveats apply with respect to self-reported data on offending. Treatment seekers were asked whether they had committed a range of different offences in the last 12 months and the last four weeks, with the focus on acquisitive crimes, <sup>3</sup> as these may be used to fund drug use. Almost half (43%) reported committing an offence in the previous four weeks (73% in the previous year). CJS referrals were more likely to report shoplifting, house burglary or bag snatching and earned significantly more from their offending.

#### Offences committed

Figure 5 shows the self-reported offending behaviour of DTORS treatment seekers over the four weeks and 12 months prior to the baseline interview. Around two-fifths of the DTORS treatment seekers (43%) reported committing one or more of 15 different offences during the last four weeks (Appendix Table 26a). Shoplifting was the most common offence (26%), followed by buying or selling stolen goods (20%), selling drugs (10%) and stealing something else (8%). In the past 12 months,

the percentage of treatment seekers reporting committing an offence was 73 per cent, with 49 per cent reporting shoplifting, 43 per cent buying or selling stolen goods, 25 per cent stealing something else and 25 per cent dealing drugs (Figure 5).

#### Opportunities to offend

In relation to the last four weeks, 44 per cent of treatment seekers reported committing fewer offences than normal, 24 per cent reported committing more offences and 32 per cent reported that their offending was about the same as normal (Appendix Table 24a).

CJS referrals were more likely to report having committed fewer offences than normal compared with other referrals (49% to 41%) (Appendix Table 24b). This may be because CJS referrals had less opportunity to commit offences because of incarceration. Indeed, 36 per cent of CJS referrals had been in prison or custody, or both, compared to just eight per cent of those from other referral routes (Appendix Table 25b).

#### Likelihood of offending by sub-groups

Figure 6 shows that a treatment seeker's recent history of heroin and crack use was a key determinant of the likelihood of them reporting offending behaviour in the last four weeks. Those who used both heroin and crack, and those who used crack only, were significantly more likely to report committing an offence (59% and 51%) than those who used heroin only (39%) or those that used neither (24%) (Appendix Table 26a).

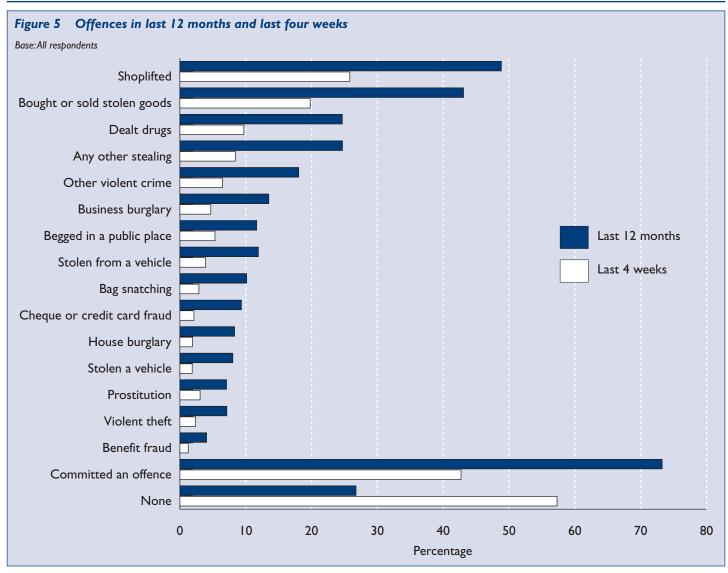
#### Proportion committing acquisitive offences in the last four weeks

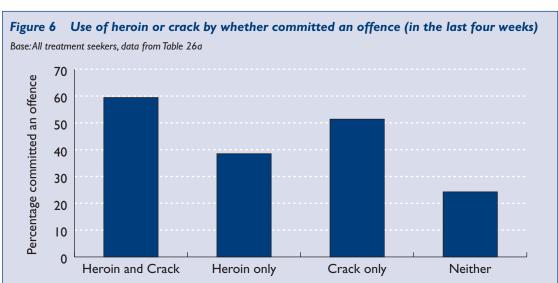
Around two-fifths (39%) of treatment seekers reported committing an acquisitive offence over the last four weeks, and around one-tenth (9%) committed more than one offence a day (Appendix Table 28a). Recent use of heroin and crack was again linked to the likelihood of having committed an offence. More than half (55%) of those using heroin and crack reported committing an acquisitive offence, compared to around one-fifth (21%) of those using neither. Of those using both heroin and crack, 17 per cent reported committing more than one offence a day.

The mean value represents the sum of the values divided by the number of these values; the median represents the mid-point on the distribution of values. Value in last week was obtained directly from respondents, value in last four weeks was calculated on the basis of the 'number of days used in last 28' and the 'average value per using day'.

<sup>3</sup> Full list of crimes recorded = shoplifting (acquisitive), begging in a public place, buying or selling stolen goods (acquisitive), dealing drugs (acquisitive), prostitution (acquisitive), stealing a vehicle (acquisitive), stealing from a vehicle (acquisitive), house burglary (acquisitive), business burglary (acquisitive), violent theft (acquisitive), bag snatching (acquisitive), any other stealing (acquisitive), cheque or credit card fraud (acquisitive), benefit fraud (acquisitive), other violent crime.

<sup>4</sup> Questions about 'stealing something else' were asked after 'other offences', including theft of and from a motor vehicle, burglaries, robberies.

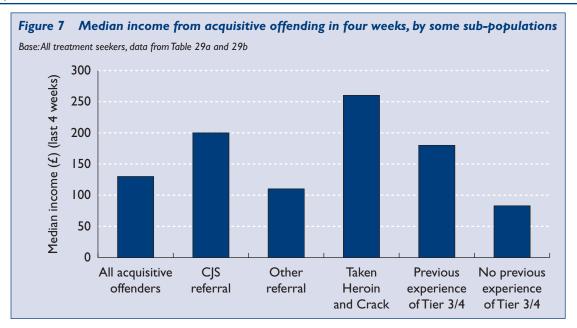




#### Illegitimate income made from acquisitive offences in the last four weeks

Amongst treatment seekers committing an acquisitive offence and providing this information, an average (median) of £130 was obtained via acquisitive offending over the last four weeks

(Figure 7). This figure rose among those using heroin and crack in the last four weeks (£260), CJS referrals (£200), and treatment seekers with previous experience of Tier 3 or 4 treatment (£180). Non-CJS referrals obtained an average (median) of £110.



#### Health and risk behaviour

Though relatively small numbers reported their health as being poor, a quarter of treatment seekers had been diagnosed with a mental health condition and worrying proportions were engaging in different types of behaviour which was risky to individual and public health. CJS referrals were less likely to report poor health or to have been diagnosed with or treated for a mental health condition. They were, however, more likely to have taken opiates again after a break without reducing the quantity used.

#### Physical and mental health

Most treatment seekers rated their health as fair (32%), or good (31%), with fewer reporting that their health was very good (14%) or excellent (6%) (Appendix Table 31a). However, 17 per cent reported poor health.

Older treatment seekers were more likely to perceive themselves as being in poor health: 24 per cent of those aged 35 and over, but only 14 per cent of those aged 25 to 34 and 13 per cent of those aged 16 to 24 (Appendix Table 31a). Treatment seekers not referred by the CJS were also more likely to say they were in poor health (19%, compared with 14% of CJS referrals) (Appendix Table 31b). Furthermore, those using crack (with or without heroin) in the past four weeks were more likely to perceive themselves as being in poor health than those not using crack (22% and 23% respectively compared with 14%) (Appendix Table 31a).

With regard to mental health, 23 per cent of treatment seekers had been diagnosed with a mental health condition at some time (Appendix Table 33a). Thirty-seven per cent had been referred to a psychiatrist, psychologist or other mental health worker at some point, and 28 per cent had received psychiatric treatment in the past, with 11 per cent of all treatment seekers doing so within the last three months.

Recent receipt of psychiatric treatment was associated with primary problem drug: those whose problem drug was crack

or something other than heroin were more likely to have been treated in the last three months than those with a heroin problem (17% compared with 8%) (Appendix Table 33a). Treatment seekers with a referral source other than the CJS e.g. self, GP, other drug team, were also more likely to have been treated than those referred by the CJS (14% compared with 7%) (Appendix Table 33b).

#### Overdose

Nearly one in ten (9%) treatment seekers reported an overdose episode in the preceding three months (Appendix Table 34a). This figure falls below eight per cent only for females and those treatment seekers using crack without using heroin. The proportion overdosing within the last three months was higher for those with treatment experience (11% compared to 4%) and especially those presenting to residential treatment services (17% compared to 6% presenting to out-patient treatment services) (Appendix Table 34b).

Risk taking among opiate users appeared to be relatively high. A total of 76 per cent reported taking opiates together with other drugs associated with increased risk of overdose in the past four weeks, specifically other opiates (60%), benzodiazepines (27%) and alcohol (42%) (Appendix Table 35a). This figure is lowest (66%) among those with no previous treatment experience (Appendix Table 35b). Injecting one or more of these combination drugs may exacerbate the risk of overdose and this was reported by 37 per cent of all opiate users (Appendix Table 37a). This figure was higher among treatment seekers with previous treatment experience (40%) (Appendix Table 37b).

#### Risk behaviour

Since the 1980s, there has been a greater awareness of the injecting practices of drug users and how these may put a user at risk of infection, particularly of blood-borne viruses (BBV). Such practices may involve the shared use of needles and syringes, and also indirect sharing, such as the sharing of filters, other paraphernalia and rinse water. This type of shared use among drug users is a major cause of many blood-borne viruses,

including hepatitis and HIV. Due to the high prevalence of such infection among drug users, especially in relation to hepatitis C (Alter et al., 1999), unprotected sex also presents a serious risk. Risk behaviour advice, including advice about potential overdose, has been the focus of various preventive interventions across drug treatment in the UK. Different types of risk behaviour were measured for the purpose of baseline data and will be measured for comparison at follow-up.

#### Unprotected sex

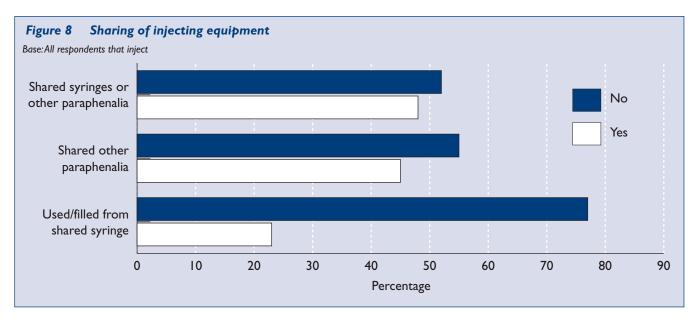
A total of 48 per cent of treatment seekers reported having unprotected sex in the past three months although 70 per cent of these cases involve regular partners only (Appendix Table 38a). Twenty-four per cent of treatment seekers reporting unprotected sex had engaged in this behaviour with someone other than a regular partner. This increased to 29 per cent among males, 30 per cent for primary crack users, 42 per cent for those using crack but not heroin and 29 per cent for those with a criminal justice referral (Appendix Tables 38a and b).

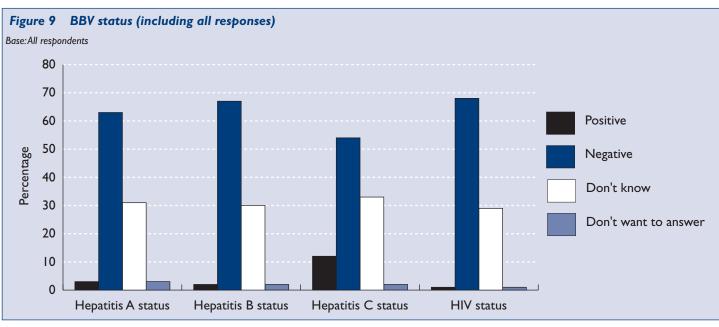
#### Sharing of injecting equipment

Thirty-seven per cent of respondents reported injecting drugs recently. The sharing of injecting equipment in the four weeks prior to interview was investigated over a set of seven questions, adapted from the Injecting Risk Questionnaire (Stimson et al., 1997). The results showed that among the current injectors in the sample, 23 per cent reported 'any sharing' of syringes or needles, 45 per cent reported the sharing of 'any injecting paraphernalia' and 48 per cent reported the sharing of 'any injecting equipment overall' (Appendix Table 41a).

#### Blood-borne virus (BBV) status

Approximately one-third of treatment seekers were unaware of their status in relation to any blood- borne virus (Appendix Table 39a). Where the status was known, 18 per cent reported a positive Hepatitis C status. This decreased to five per cent for Hepatitis A, two per cent for Hepatitis B and two per cent for HIV (Appendix Table 40a). This increased for Hepatitis C among those aged 35 or more (29%) and those using both heroin and crack within the last four weeks (26%).





#### Goals, motivation and treatment

#### **Treatment goals**

Most treatment seekers had previous experience of structured drug treatment and no significant differences existed in treatment experience between CJS and non-CJS referrals.

Respondents were asked about treatment goals in an open question format. Almost all (99%) were able to specify their goals (Appendix Table 42). The most common goal was to stop taking all drugs (72%), with smaller proportions looking to stop taking specific drugs (12%) or reduce their drug use (5%). Apart from a general desire to 'sort life out' (49%), other common goals included improvement of health (21%), improvement of employment chances (19%), improvement of relationships (17%), sorting out finances (11%), accommodation (10%) or child access (10%) or benefiting a family member (10%).

Among treatment seekers specifying one treatment goal as more important than all others (or only specifying one goal), the cessation of all drugs accounted for over a half (56%) followed by 'sorting life out' (17%) and cessation of use of specific drugs (8%) (Appendix Table 43). The next largest category involved access to children (4%). Only six per cent thought it unlikely that their treatment goals would be achieved by their three-month follow-up interview (Appendix Table 44).

#### Motivation

In assessing the impact of individual and service-based factors on uptake, retention and outcomes in treatment, it is increasingly seen as important to include the influence of an individual's actual motivation for engaging with treatment. The Circumstances, Motivation and Readiness (CMR) scale (De Leon et al., 1994) was adopted for this study due to its ease of application, specific referral to external (including legal) influences and its ability to predict retention across a range of modalities. It measures two concepts of circumstances: (1) external influences to enter treatment, such as legal and family pressure and (2) external influences that would inhibit retention in treatment, such as

relationships. It also measures levels of motivation (based on a recognition of the problems caused by drug use and the need to make changes) and a measure of readiness for treatment (i.e. a recognition of treatment being a necessary route in making changes to drug use and a willingness to enter).

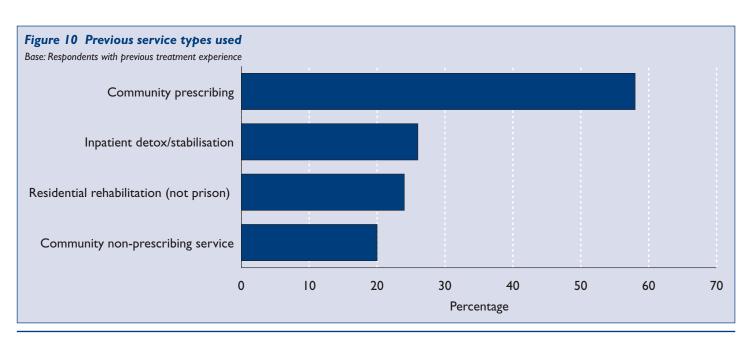
For treatment seekers, average scores for external influences to enter treatment (Circumstances I) ranged, between chosen subgroups, from 8.5 to 10.4 out of a maximum score of 15, showing relatively neutral levels of external pressures (legal and family) for treatment seekers to enter treatment (Appendix Tables 45a and b). Unsurprisingly, more pressure to enter treatment was recorded amongst criminal justice referrals. Scores for external influences to leave treatment (Circumstances 2) are reversed in the CMR calculation so high scores, ranging, between chosen sub-groups, from 12 to 12.4 out of 15, illustrate a low level of external influence to leave treatment.

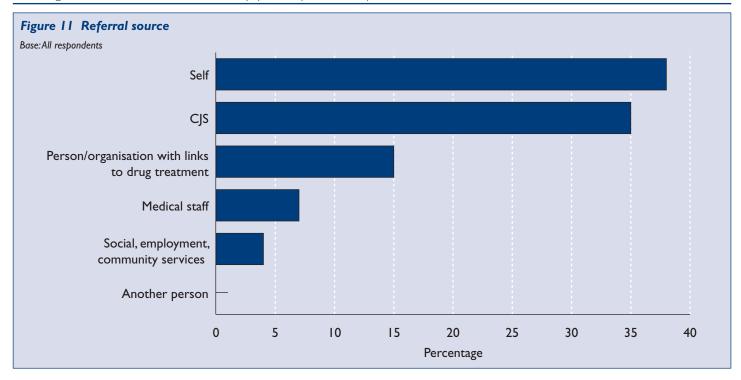
High average 'motivation' scores of 21 to 23, between sub-groups, (out of 25) suggested that the majority of treatment seekers were highly motivated and aware of the problems their drug use was causing. Average 'readiness' scores of 30 to 31, between sub-groups, (out of 35) also suggested that the majority of treatment seekers considered themselves ready for treatment. These figures differed very little between the sub-groups (gender, drug use, referral source, treatment experience, age, agency type).

#### Treatment history

The majority (71%) of treatment seekers reported some previous experience of Tier 3 or Tier 4 treatment (Appendix Table 46a). Among the key break variables, primary users of drugs other than heroin or crack, and users of crack not using heroin (past four weeks) are least likely (54% and 56%) to have previous treatment experience.

Although community prescribing services were the most likely to have been attended (59%), considerable proportions of the sample had experienced residential services (26% in-patients, 24% rehabilitation) (Appendix Table 47a).





#### Referral into treatment

Treatment seekers were asked to state which individuals and organisations had been involved in their referral to the agency at which they had been contacted for interview. If any criminal justice workers were involved then the referral was defined as CJS based. Thirty-five per cent of referrals were CJS based (Figure 11). More than half of these (55%) had received a Drug Rehabilitation Requirement (DRR), 17 per cent had received referral or advice from an arrest referral/Drug Interventions Programme (DIP) worker, 17 per cent from a probation officer and 15 per cent from a prison worker (Appendix Table 49).

Among those referred from within the criminal justice system, 36 per cent received a drug test in police custody prior to referral (Appendix Table 50). These tests were positive in 88 per cent of cases. A considerable proportion of CJS referrals (32%) were attending treatment as a condition of being granted bail.

#### **Implications**

The results of this study are relevant for commissioners and providers of drug services, all individuals involved in the criminal justice referral system and policy makers concerned with drugs or crime. The large sample and coverage of areas together with the use of weighting techniques allow these results to be generalised to the population of drug treatment seekers in England.

Criminal justice referrals encourage more criminally active drug users, with more entrenched and chaotic problems, into treatment, but most (73%) had been treated before. So, whilst not strictly a route whereby 'hidden' users are diverted into treatment, CJS referral does re-instigate treatment contact for a 'difficult' group. Depending on the outcomes experienced by this group and questions of cost effectiveness, this could support the desirability of continued investment in CJS referral.

Education and employment needs should be addressed as part of the rehabilitative process, given the high levels of unemployment and pre-GCSE school leaving.

There is an ongoing need for educational and practical initiatives to reduce overdose risk.

Crack use is common and associated with higher levels of criminality, poorer health, unstable accommodation, living apart from children and recent psychiatric treatment than other forms of drug use.

#### References

Alter, M.J., Kruszon-Moran, D., Nainan, O.V., McQuillan, G. M., Gao, F., Moyer, L.A., Kaslow, R.A., Margolis, H.S. (1999) The Prevalence of Hepatitis C Virus Infection in the United States, 1988 through 1994. New England Journal of Medicine, Volume 341(8) p.556-562.

Best, D., Noble, A., Finch, E., Gossop, M., Sidwell, C., Strang, J., (1999) Accuracy of Perceptions of Hepatitis B and C Status: Cross Sectional Investigation of Opiate addicts in Treatment. *British Medical Journal*, Volume 319, p.290-291.

De Leon, G., Melnick, G., Kressel, D. and Jainchill, N. (1994) Circumstances, motivation, readiness and suitability (the CMRS scales): predicting retention in therapeutic community treatment. *American Journal of Drug and Alcohol Abuse*, 20, 495–515.

Gossop, M., Marsden, J., Stewart, D., Edwards, C., Lehmann, P., Wilson, A., and Segar, G. (1997) The National Treatment Outcome Research Study in the United Kingdom: Six-month follow-up outcomes. *Psychology of Behaviours* 11(4), 324-337.

Hubbard, R. L., Craddock, S. G., Flynn, P. M., Anderson, J. and Etheridge, R. M. (1997). Overview of 1-year follow-up outcomes in the Drug Abuse Treatment Outcome Study (DATOS). *Psychology of Addictive Behaviours*, 11(4), 261-278.

McKeganey, N. D., Bloor, M., Robertson, M. and Neale, J. (2006). Abstinence and drug abuse treatment: Results from the Drug Outcome Research Study in Scotland. *Drugs, Education, Prevention & Policy*, 13(6), 537-550.

Stewart, D., Gossop, M., Marsden, J., and Rolfe, A. (2000). Drug misuse and acquisitive crime among clients recruited to the National Treatment Outcomes Research Study (NTORS). *Criminal Behaviour and Mental Health*, 10(10), 20.

Stimson, G.V., Jones, S., Chalmers, C. and Sullivan, D. (1997) A short questionnaire (IRQ) to assess injecting risk behaviour. *Addiction*, 93(3) 337-347.

Teeson, M., Ross, J., Darke, S., Lynskey, M., Ali, R. Ritter, A. and Cooke, R. (2005) One year outcomes for heroin dependence: Findings from the Australian Treatment Outcomes Study (ATOS). Drug & Alcohol Dependence, 83(2), 174-180.

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