The treatment and supervision of drug-dependent offenders

A review of the literature prepared for the UK Drug Policy Commission

Tim McSweeney
Paul J. Turnbull
and Mike Hough

Institute for Criminal Policy Research
King’s College London

March 2008
# Contents

<table>
<thead>
<tr>
<th>Acknowledgements</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summary</td>
<td>5</td>
</tr>
<tr>
<td>Report structure</td>
<td>11</td>
</tr>
<tr>
<td>Chapter 1: Aims and objectives</td>
<td>12</td>
</tr>
<tr>
<td>Chapter 2: The nature and extent of illicit drug use among known offenders</td>
<td>15</td>
</tr>
<tr>
<td>Chapter 3: Drug treatment and the criminal justice system</td>
<td>19</td>
</tr>
<tr>
<td>Chapter 4: Current community-based responses and evidence for their effectiveness</td>
<td>25</td>
</tr>
<tr>
<td>4.1 Interventions to identify drug-misusing offenders and encourage entry into treatment</td>
<td>25</td>
</tr>
<tr>
<td>4.2 Interventions aimed at increasing engagement and compliance with drug treatment</td>
<td>28</td>
</tr>
<tr>
<td>Chapter 5: Prison-based responses and evidence for their effectiveness</td>
<td>39</td>
</tr>
<tr>
<td>Chapter 6: What other factors influence outcomes?</td>
<td>44</td>
</tr>
<tr>
<td>Chapter 7: Policy implications</td>
<td>50</td>
</tr>
<tr>
<td>References</td>
<td>53</td>
</tr>
<tr>
<td>Annex A: Papers included in the review</td>
<td>72</td>
</tr>
</tbody>
</table>
Acknowledgements

This review was conducted for the UK Drug Policy Commission (UKDPC). We are very grateful for the funding, support and feedback received throughout the lifetime of this research. The views expressed in this report are those of the authors and not necessarily the UKDPC.

We would like to express particular thanks to Zelia Gallo for her invaluable assistance in scoring the evidence presented as part of this review. We are also grateful for the comments received from peer reviewers.

Tim McSweeney
Paul J. Turnbull
Mike Hough

March 2008
Summary

The main findings from this review show that some interventions can be effective in reducing illicit drug use and offending behaviours with some drug-dependent offenders. In terms of identifying the most effective strategies, the strongest evidence seems to favour the use of therapeutic communities, interventions modelled on the drug court approach and substitute treatments such as methadone maintenance.

By contrast, there is very little evidence for the effectiveness of drug testing and intensive forms of supervision. This is an important finding as many recent developments in England and Wales targeting drug-using offenders have incorporated these features.

**Drug treatment effectiveness**

A consistent finding to emerge from numerous reviews and summaries of the international research evidence is that a range of treatments can be effective, to varying degrees, in reducing illicit drug use and improving aspects of social functioning (which can include reducing offending behaviour). Effective treatments include:

- pharmacotherapies (e.g. methadone, heroin, buprenorphine, naltrexone);
- psychological approaches (e.g. motivational interviewing), 12-Step treatments, residential rehabilitation; and
- therapeutic communities.

By contrast, the evidence base for treating stimulant use (particularly crack and cocaine) and supporting the growth of some common treatment modalities in the UK, such as structured day programmes, is less well developed.

Evidence provided by the National Treatment Outcome Research Study (NTORS) has been instrumental in establishing the effectiveness and cost-effectiveness of drug treatment in Britain. Findings from NTORS, and more recently the Drug Outcome Research in Scotland (DORIS) study, have revealed substantial reductions in self-reported acquisitive crime following treatment.
However, this review has shown that uncertainties about treatment effectiveness for drug-dependent offenders are still compounded by the range of ongoing conceptual, ethical and practical challenges presented by attempts to deliver such treatment within a criminal justice context.

**Evidence for the effectiveness of current community-based responses**

Despite the implementation of testing on both arrest and charge, required assessments and the roll-out of restriction on bail across England (also referred to as ‘Tough Choices’), contemporary UK research remains largely equivocal about the impact of drug testing at different points in the criminal justice system on illicit drug use and offending behaviours, and on engagement with treatment services. For example, within the criteria set by a recent systematic review, there was no positive research evidence to be found from the few studies that have considered the effectiveness of testing, either as a stand-alone form of routine monitoring or when used in combination with treatment interventions.

Despite some methodological limitations, recent studies seeking to assess the impact of the Drug Interventions Programme (DIP) have reported some successes in terms of delivering improved rates of engagement with drug treatment and sustaining high rates of retention. One study in particular reports a 26 per cent reduction in the overall volume of recorded offences among a cohort of 7,727 arrestees in the six months following their contact with DIP. However, more than half the cohort showed similar or increased levels of offending following DIP entry.

The national evaluation of Criminal Justice Integrated Teams (CJITs) (those responsible for delivering DIP services) across 20 sites has also reported significant reductions in drug use and offending behaviours among a sample of those taken onto CJIT caseloads \( (n = 703) \). These CJITs were successful at ensuring that a very high proportion of those assessed and taken on to the CJIT caseload accessed treatment, and those engaging with treatment reported reductions in illicit drug use and offending. However, the investment and start-up costs in developing and implementing DIP were heavy and the evaluation concluded that the cash savings achieved in the 20 CJITs that it examined were offset by the costs of providing the service.

By contrast, the recent evaluation of ‘restriction on bail’ pilots in three English sites concluded that their success in retaining defendants in treatment and their impact on illicit drug use and offending was unclear.

Since the introduction of drug treatment and testing orders (DTTOs) in Britain as pilot schemes in 1999 there have been a number of studies and commentaries examining their processes and effectiveness. Despite some considerable implementation problems, all of the studies focusing on outcomes indicate that
while many drug-dependent offenders fail to complete DTTOs (and the most recent figures suggest less than half do), those who are successfully retained on programmes report statistically significant reductions in illicit drug use and offending behaviours, and improvements in other domains (for the few studies that measure these). Recent research also suggests that those ‘coerced’ into community-based treatment via DTTO arrangements reported larger reductions in illicit drug use and offending behaviours than ‘volunteers’ entering the same services, but with no significant differences in retention rates and other outcomes. Reconviction rates for DTTOs remain high, however: 82 per cent for the 2004 cohort.

Several reviews of the evaluative evidence in support of drug courts in the USA have reported positive results, with drug court participation and completion being linked to reduced drug use and lower rates of re-arrest and recidivism. Some schemes have also been shown to be cost-effective and offer value for money. Most evaluations in other jurisdictions – including Scotland – have also reported encouraging findings. Attempts to introduce drug courts in Britain have, to date, largely been built on pre-existing DTTO arrangements.

Prolific and other priority offender (PPO) schemes aim to identify and select prolific offenders and engage this group using proactive, targeted police disruption activities and, where appropriate, brokering rapid access to drug treatment and other support services (61% of PPOs have been assessed as having a drug misuse issue). Historically, evaluations of these schemes have produced mixed results and have been hampered by the use of weak methodologies. One of the most comprehensive assessments of the impact of English and Welsh PPO schemes on offending recently described a 43 per cent reduction in offending among a sample of 7,800 PPOs identified during the two months following implementation in September 2004. Despite some caveats, the results are considered promising and consistent with qualitative data from interviews with PPOs, which indicate that many of the small number of offenders interviewed reported having reduced their offending or desisted from crime following engagement with these programmes. Most attributed changes to the enhanced support and interventions they had received, including access to drug treatment.

**Evidence for the effectiveness of current prison-based responses**

In the UK, research has provided evidence in support of methadone and lofexidine for the effective management of opioid detoxification in a custodial setting. Evidence from Australian randomised control trials of prison-based methadone maintenance therapy also indicates that retention in such treatment is associated with reduced reincarceration rates, hepatitis C infection and mortality. By contrast, there have been very few studies undertaken to date on the use of other pharmacotherapies, such as naltrexone, specifically with criminal justice populations.
A number of recent systematic reviews have produced strong evidence for the effectiveness of prison-based therapeutic communities (TCs) in reducing illicit drug use and/or recidivism. However, there are only a handful of TCs currently operating in British prisons.

RAPt (Rehabilitation of Addicted Prisoners Trust) delivers an abstinence-based model developed along 12-Step programme lines in nine English prisons. Graduates from RAPt have been shown to achieve significant and sustained reductions in drug use and offending, and their reconviction rates were lower than the predicted two-year rates (actual 40%; predicted 51%), and lower than for a matched comparison group (RAPt group 40%; comparison group 50%).

With the exception of the RAPt programme, there has been very little evaluative work to assess the effectiveness of most British prison-based interventions, for example CARAT (Counselling, Assessment, Referral, Advice and Throughcare) and drug-free wings.

**Where are the gaps in our knowledge and understanding?**

Interpretation of the research evidence on effective interventions with drug-dependent offenders is complicated by the impact of programme selection effects and methodological problems, most notably around sample sizes and the limited use of matched comparison groups. There remains a need for more rigorous and robust evaluations of programme effectiveness. However, assuming that higher internal validity (more accurately measuring the relationship between an intervention and its outcomes) could be achieved through greater use of randomisation in studies – and this is far from certain given the range and intensity of interventions that a drug-dependent offender might receive – the external validity of such findings (the extent to which the results could be applied to other settings, for example) is likely to be weak. A balance needs to be struck between intelligent and explicit theory testing using well-designed evaluations (to more accurately assess which interventions are effective for whom) and qualitative studies (to better understand why a particular approach is effective).

We were consistently unable to locate certain evidence within the confines of our search strategy as part of this review. Important gaps in our knowledge and understanding include the cost-effectiveness and value for money offered by most UK criminal justice-based interventions.

There also appears to be a dearth of routinely published data on throughputs for different community-based responses (e.g. PPO schemes, conditional cautioning and Intervention Orders) and many prison-based interventions, together with information about the characteristics of those exposed to them and their effectiveness. Based on
the findings from this review, more work also needs to be done on mapping provision for drug-dependent offenders in Northern Ireland and demonstrating the effectiveness of current responses there.

**What other factors influence outcomes?**

Both the criminological desistance and recovery literature describe the mechanisms by which people recover from dependent drug use and desist from offending as processes and not events that can easily be orchestrated. This is evidenced by the fact that in the UK, most drug-dependent offenders fail to complete treatment (as indeed do most people who enter drug treatment) and reconviction rates are high – but often at a rate commensurate with the predicted risk of reoffending as measured by the Offender Group Reconviction Scale.

Despite considerable investment and improvements in the UK during recent years, the quality, availability and approach to treatment for drug-dependent offenders in both community- and prison-based settings remains variable and inconsistent. For example, the availability and use of residential treatment is limited, despite evidence from British studies such as NTORS and DORIS demonstrating its effectiveness. At the same time, in parts of the UK, concerns have been raised about some fundamental aspects of methadone treatment, such as inconsistencies in practice and the variable quality of service being provided. In the context of prison drug treatment, provision is often also patchy and uncoordinated.

Treatment and supervision are human processes. The wider context in which interventions are delivered and the characteristics of those receiving them are almost certainly as important in shaping outcomes as the particular treatment approach adopted. Scotland, for example, has greater flexibility in its approach to the treatment and supervision of drug-dependent offenders. There is less emphasis on performance management, greater flexibility in guidelines regulating the nature and extent of contact with offenders subject to probation supervision, and the courts have more scope for discretion in responding constructively to non-compliance. Qualitative data from interviews with sentencers and practitioners in Britain suggests that those in Scotland have fewer concerns about political interference, penal populism and being influenced by punitive rhetoric than their counterparts in England and Wales. These factors may have contributed to improved outcomes for some criminal justice interventions north of the border. At the same time, there is some evidence to suggest that those referred into treatment via the criminal justice system are a more intractable group, who are likely to be harder to engage and retain in treatment.
The adequacy of aftercare provision in the UK and the limited use of innovative strategies such as contingency management to promote engagement and behaviour change reduces the effectiveness of interventions aimed at treating and supervising drug-dependent offenders.

Both the criminal justice system and drug treatment services are limited in their capacity to tackle the wider social and environmental factors that can facilitate and perpetuate problematic patterns of drug use and offending (e.g. housing and employment needs).

Much of the evidence on the effectiveness of recent British initiatives was gathered during the piloting process or the early stages of implementation. Clearly their long-term viability will need to be judged on the outcomes that are achieved once they have become more established and have had the opportunity to learn from experience.

**Policy responses**

We conclude that policy responses to the problems associated with the treatment and supervision of drug-dependent offenders that emerge from the evidence considered as part of this review could be improved in at least three ways. In addition to the need for facilitating more rigorous and robust evaluations of programme effectiveness, other issues include: improving the management of expectations about what these interventions can deliver and achieve; offering greater consistency in policy making; and contributing towards changing the rhetoric and tone of this particular debate. This would involve promoting the notion that the targeted supervision and treatment of some drug-dependent offenders can be a constructive and effective form of intervention and a vehicle for promoting and facilitating positive change. In the current climate there is a danger that the provision of treatment for drug-dependent offenders is justified as yet another surveillance tool to monitor compliance and manage risk.

---

Fox et al. (2005: 1) refer to aftercare as “the package of support that needs to be in place after a drug-misusing offender reaches the end of a prison-based treatment programme, completes a community sentence or leaves treatment”. This includes brokering access to further drug treatment services as required and non-drug specific services, such as housing, employment and education, in an attempt to facilitate integration back into the community and ensure continuity of care.
Report structure

This report sets out the findings from a review of the literature on the effective treatment and supervision of drug-dependent offenders. The report was commissioned by the UK Drug Policy Commission and prepared by the Institute for Criminal Policy Research, School of Law, King’s College London.

We begin in Chapter 1 by setting out our aims and objectives, and describe how we have assembled and assessed the evidence gathered as part of this review. Chapter 2 then briefly explores the nature and extent of dependent drug use among known offenders in Britain. Chapter 3 considers different drug treatment approaches and the evidence for their effectiveness – both in general terms and as a crime reduction measure – and outlines some contemporary themes and issues relevant to the treatment and supervision of drug-dependent offenders. We then present the evidence gathered as part of this review for the effectiveness of current UK community (Chapter 4) and prison-based (Chapter 5) criminal justice responses. In doing so we also aim to highlight the main gaps in our knowledge and understanding. Chapter 6 considers the range of factors that are thought to impact on effectiveness and set these within a broader policy and practice context.

Finally, our views on the policy responses to the problems associated with the treatment and supervision of drug-dependent offenders that emerge from the evidence considered as part of this review are set out in Chapter 7.
Chapter 1: Aims and objectives

The main literature searches for this review were conducted during July and August 2007. In the available time, it was impossible to mount an exhaustive review of the literature on the effective treatment and supervision of drug-dependent offenders. However, by adopting a ‘quasi-systematic’ approach we have sought to ensure a high degree of transparency in how the evidence we report on has been identified and selected. The hope is that someone using the same basic approach and reviewing the same evidence would arrive at similar conclusions. Our review could therefore be considered to be a systematic one in the sense that we have been transparent about our selection and inclusion criteria, and it is thus replicable (Greenhalgh, 1997). Where we have not been ‘systematic’ – or highly structured – is in summarising the results of each study into a standardised format.

With these issues and constraints in mind, it was important for us to be very specific about our search strategy, the terms used to identify material and the criteria adopted for rating studies. In drawing together the evidence, the review aimed to answer four broad questions:

- What is the nature and extent of the problem?
- What are the current UK responses?
- What are effective strategies for dealing with these issues?
- Where are the gaps in our knowledge and understanding?

Search strategy

We utilised the following seven sources as part of our search strategy:

- DrugScope library;
- Medline;
- Embase;
- Home Office RDS;
- Scottish Executive;
- Northern Ireland Office;
- Northern Ireland Statistics and Research Agency.
Our search terms were as follows:

- “DIP”, “drug interventions programme”, “CJIT”, “criminal justice integrated team”,
- “CJIP”, “criminal justice intervention programme”, “RoB”, “restriction on bail”,
- “PPO”, “prolific offender”, “DTTO”, “drug treatment and testing order”, “DRR”,
“drug rehabilitation requirement”, “drug court” and “CARAT”.

Using these terms provided us with 438 ‘hits’ or matches following electronic searches of the DrugScope library (222), Medline (68), Embase (89) and a manual trawl of online Home Office RDS (45) and Scottish Executive (14) publications. Although drug-dependent offenders in Northern Ireland certainly have access to some forms of criminal justice intervention, such as drug arrest referral schemes, probation-linked treatment and prison-based support (NDACT, 2005), our searches failed to locate any published data or studies on these interventions in Northern Ireland. The scope of our analysis and conclusions is therefore confined to Scotland, England and Wales. Of course, many of the issues raised will have wider relevance.

**Inclusion/exclusion criteria**

In reviewing the evidence for the effectiveness of current community- and prison-based responses for adult (18 years and over) drug-dependent offenders, our outcome criteria were reductions in illicit drug use and/or offending behaviours. We only considered English language literature which had been published between 1995 and 2007. There was a particular emphasis on highlighting lessons from recent UK evidence (though in the case of approaches such as drug courts, for example, the UK evidence base is clearly limited) and utilising previously published systematic reviews on the subject.

In our efforts to assess research quality, quantitative evaluative research studies were graded by adapting the Scientific Methods Scale, with the inclusion of an additional category below the scale for expert opinion/policy analysis. Studies for inclusion in the review were generally limited to those which reported on ‘before and after’ measures of drug use and/or offending, with no comparable control conditions (level 2 of the Scientific Methods Scale) or higher. While level 2 studies are likely to have questions raised about their internal validity, we feel justified in

---

2 Including correspondence with researchers at Queen’s University Belfast, the Health Research Board in Ireland and the Drug and Alcohol Information and Research Unit (DAIRU) in Northern Ireland.

3 Parker (2005) recently reviewed Northern Ireland’s alcohol and drug strategies and observed that “the delays in commissioning studies into drugs–crime relationships in NI is unfortunate... but there is currently no monitoring data” collected (ibid.: 39). This is perhaps to be expected given that the “far lower rates of problem drug use and associated crime in NI do not require the emphasis given to the drugs-crime agenda found in Scotland and particularly England where crime reduction is now their strategy’s primary focus” (ibid.: 58).
including them for two reasons: the available evaluation evidence (particularly in the UK) is limited; and, in our view, the cumulative value of level 2 studies can often be greater than the value of a single level 4 study (e.g. the growing body of UK DTTO studies).

Furthermore, the evidence that has to be considered in a review of this sort runs far wider than evidence just from evaluations, and this requires different approaches for assessing its quality. We therefore used our professional judgement to exclude studies at the lower end of the scale when higher rated evidence was available, and also included expert opinion papers and policy analysis where better quality evidence was lacking. For qualitative studies or descriptive research, the only inclusion criterion that we applied was that the study should have been published in a peer-reviewed journal.

After filtering for mismatches and duplicate hits, our search strategy yielded 93 publications that were considered suitable for inclusion. Most related to evidence on the effectiveness of drug courts \(n = 40\). Inevitably there were many studies that the searches failed to pick up. We have assembled an extensive collection of studies and papers over the years which evaluate these and similar schemes. These ‘on file’ studies were also included for consideration to supplement the results from our searches, as were other relevant studies drawn to our attention during the study period. Annex A provides full details of the papers referred to in Chapters 4, 5 and 6 of this review and our attempts to assess research quality using an adapted version of the Scientific Methods Scale recently used by Harper and Chitty (2005).
Chapter 2: The nature and extent of illicit drug use among known offenders

There remains some debate about the scale of the linkage between illicit drug use and crime, the direction of causality between drug use and crime, and the certainty of our knowledge about the links (see e.g. Stevens, 2007). There are also concerns about the assumptions underlying some of these claims (Garside, 2004). Some facts are well-established, however:

- Studies using sample surveys of the general population (Budd and Sharp, 2005), convicted offenders (Home Office, 2001: 116) and drug treatment populations (Stewart et al., 2000) consistently indicate that a small proportion of offenders are responsible for a disproportionate amount of crime.
- While the causal links between some forms of drug use and certain types of crime remain debatable, dependent use of drugs such as heroin and crack cocaine tends to amplify the offending of those whose circumstances may predispose them to crime.
- Substance misusers have a disproportionate level of contact with the criminal justice system (Seddon, 2006; McSweeney and Hough, 2005).

Taken together, these facts point to the potential benefits of creating opportunities to engage this group at key stages in the criminal justice process (Kothari et al., 2002).

Arrestees

The latest sweep of the Arrestee Survey (Boreham et al., 2007) interviewed just over 8,000 arrestees during 2005/06 across 72 sites. This represents an overall response rate of 23 per cent and constituted one-third (33%) of all eligible arrestees across the 72 research sites. As was the case with the earlier NEW-ADAM survey (Bennett 1998, 2000; Bennett et al., 2001), there is a considerable risk of bias in the most recently interviewed cohort, which cannot claim to be fully representative of the wider arrestee population, although in the Arrestee Survey information on non-responders was used to weight the data to compensate, as far as possible, for non-response.
Respondents to the most recent sweep of the Arrestee Survey were predominately white (86%) and predominately male (84%). Two-fifths were younger than 25 years of age (43%). Half (51%) were unemployed at the time of interview (this figure rose to 90 per cent for regular users of heroin or crack cocaine). A similar proportion (52%) had been arrested at least once during the previous year, although only 16 per cent had been in prison during the same period (with a further 22% having been imprisoned at some earlier time).

Over half (52%) reported taking at least one illicit drug in the month before interview. Cannabis (41%) was the most commonly used drug, with fewer reporting use of heroin (13%; down from 18% in 2003/04), crack cocaine (11%; down from 15% in 2003/04) or powder cocaine (13%; up from 10% in 2003/04). In total, one in four (26%) arrestees interviewed in 2005/06 said they had used heroin, crack or cocaine (HCC) in the previous month. Reported last month use of heroin and crack (HC) was most prevalent among arrestees aged 25–34 years.

The vast majority (85%) of those using heroin during the previous year were considered dependent (as measured by the Severity of Dependence Scale). This was higher than the level of dependency observed amongst crack (55%) and powder cocaine users (23%).

Those who took HC regularly (at least weekly) were more likely to report having committed an acquisitive crime during the previous year (81%) than those who did not (30%). This group were also more likely to report having raised money through crime (77%) than those who did not use HC regularly (23% of whom reported an income from crime) and the amounts they made tended to be larger (one in three said that they had made £5,000 or more during the previous 12 months compared with one in 20 of those who did not use regularly). Shoplifting was the most common offence reported by all arrestees (15%), followed by selling (13%) or buying (11%) stolen goods. Regular users of HC were more likely to report committing these and other offences in the four weeks prior to their arrest than other respondents. However, they were slightly less likely to report committing an assault in the past 12 months than other offenders.

Among those who had ever taken heroin, nearly three-fifths (57%) had received treatment at some time and just under one-third (30%) said they were in treatment at the time of interview. The study also indicated some substantial unmet need for heroin treatment: while 32 per cent of frequent users – those who took heroin on five or more days a week – were currently in treatment, the majority of the remainder (60%) said they would like to receive this kind of support. There was also unmet need among crack users: only 9 per cent of those who had taken crack at some time had ever accessed treatment while 56 per cent of frequent users indicated that they would like treatment for their crack use.
Probationers and prisoners

Findings from the 2000 Prisoner Criminality Survey of inmates entering prison revealed high levels of drug use by 1,884 male prisoners in the 12 months leading up to their incarceration: 73 per cent had used an illicit drug during this period and more than half of those (55%) said that they could link some of their offending to their use of illicit drugs, usually arising from the need to generate cash in order to buy drugs (Liriano and Ramsay, 2003). A similar pattern emerges from the accounts of Scottish prisoners (Scottish Prison Service, 2006). Drug use also persists during periods in custody – albeit at reduced rates. Around one in five prisoners report having used opiates in their current establishment (Singleton et al., 2005).

The 2002 Community Penalties Criminality Survey showed slightly lower rates of drug use among those commencing community penalties than among those in the Prisoner Criminality Survey mentioned above. However, prevalence rates were nonetheless substantial, with 63 per cent of male probationers reporting any drug use in the previous 12 months, 40 per cent reporting Class A drug use and one-third (33%) having used heroin, crack or cocaine (Budd et al., 2005: vii).

Several related analyses also support a link between drug use and acquisitive crime. Among the 48,000 prisoners assessed by CARAT (Counselling, Assessment, Referral, Advice and Throughcare) teams during 2004/05, two-fifths (40%) were less than 25 years of age. The ethnicity of most prisoners is described as white (86%) and they were predominantly males (88%). The most common offences were theft/handling (24%) and burglary (17%) (May, 2005). These findings are broadly consistent with data from the Offender Assessment System (OASys) used by adult correctional services in England and Wales, which suggests that those convicted of burglary, robbery, drug offences and theft have above average drug problems. Drug misuse is also one of the strongest predictors of reconviction (Howard, 2006). May (2005: 4–5) described the range of drugs used by prisoners seen by CARAT services during recent years. Those who had been assessed in 2004/05 and reported buying Class A drugs regularly were spending around £600 a week in the period immediately prior to imprisonment, while the highest weekly expenditure (£1,100) was reported by users of crack cocaine.

Table 2.1 compares self-reported drug use prevalence among the general population and different criminal justice groups.
Table 2.1: Comparison of self-reported drug use prevalence in the general household and offending populations in England and Wales

<table>
<thead>
<tr>
<th>Source</th>
<th>Sample</th>
<th>Percentage reporting use during the previous year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Any drug</td>
</tr>
<tr>
<td>British Crime Survey 2005/06</td>
<td>Household population aged 16 to 59 (n = 29,631)</td>
<td>10.5</td>
</tr>
<tr>
<td>Arrestee Survey 2005/06</td>
<td>Arreestes aged 17+ (n = 7,758)</td>
<td>59</td>
</tr>
<tr>
<td>Community Penalties Criminality Survey 2002</td>
<td>Probationers aged 16+ (n = 1,561)</td>
<td>61</td>
</tr>
<tr>
<td>Prisoner Criminality Survey 2000</td>
<td>New male prison admissions aged 16+ (n = 1,884)</td>
<td>73</td>
</tr>
</tbody>
</table>

* Refers to use of heroin, crack or cocaine only.
Chapter 3: Drug treatment and the criminal justice system

Evidence for the effectiveness of drug treatment

Since the late 1990s there has been a greater political focus in Britain on increasing the numbers and widening the range of offenders in treatment, and in demonstrating the effectiveness of interventions aimed at reducing criminality among drug users. This commitment and enthusiasm has been fuelled in part by the consistent findings from reviews and summaries of the international research evidence that a range of treatments can be effective to varying degrees in reducing illicit drug use and improving social functioning (e.g. Prendergast et al., 2002; Gossop, 2006; Stevens et al., 2006; Digiusto et al., 2006). Effective treatments include:

- pharmacotherapies (e.g. methadone, heroin, buprenorphine, naltrexone);
- psychological approaches, 12-Step treatments, residential rehabilitation; and
- therapeutic communities.

Perhaps the one caveat here is that the evidence base for treating stimulant use (particularly crack and cocaine) is less well developed (Harocopos et al., 2003; Arnull et al., 2007; Weaver et al., 2007a; EMCDDA, 2007). This is particularly important given that recent data show that between 11 and 15 per cent of arrestees report having used crack during the previous month (Boreham et al., 2007: 53) and baseline data from the Drug Treatment Outcomes Research Study (DTORS) indicates that referrals to drug treatment via the criminal justice system are more likely to report problematic use of crack (55%) than referrals from other sources (42%) (Jones et al., 2007, appendices: 19). Crack use, in turn, is “associated with higher levels of criminality, poorer health, unstable accommodation, living apart from children and recent psychiatric treatment than other forms of drug use” (Jones et al., 2007: 12). At the same time, the evidence supporting the use and development of some common treatment modalities in the UK, such as structured day programmes, is also limited (Hunt, 2007).

Drug treatment as an effective crime reduction measure

Evidence provided by the National Treatment Outcome Research Study (NTORS) has been instrumental in establishing the effectiveness and cost-effectiveness of drug treatment in Britain. The authors have concluded that self-reported reductions in
crime were among the most striking findings to emerge from the study (Gossop et al., 2003: Gossop, 2005a). Subsequent analysis of conviction records supports the overall finding that levels of crime fall consistently after admission to treatment (Gossop et al., 2006). While clearly not all of the observed reductions can be attributed to treatment, it nevertheless contributes towards producing some considerable social and economic benefits. For example, there was a reduction in convictions (for all offences) of 24 per cent after one year, 29 per cent after two years and 50 per cent after five years (ibid.: 2) compared with the year prior to entry to the study.

More recently, the Drug Outcome Research in Scotland (DORIS) study has also observed substantial reductions in self-reported acquisitive crime following treatment. (McIntosh et al. (2007) concluded that drug treatment reduces the need for individuals to engage in acquisitive crime by moderating their use of illicit drugs. The results from NTORS and DORIS will in time be complemented by emerging findings from the ongoing DTORS work.

Two recent reviews (Holloway et al., 2005; Perry et al., 2006) have sought to summarise the evidence base for the effectiveness of drug treatment as a crime reduction measure in a more systematic manner. Holloway and colleagues reviewed 55 published studies (45 of them originating from the USA) which considered the effectiveness of different interventions aimed at reducing criminality amongst drug users in a range of settings. Results of the meta-analysis revealed that most drug treatment programmes are effective in reducing crime; although some more than others. Methadone treatment, heroin prescribing, therapeutic communities and psychosocial approaches were all shown to be effective crime reduction measures. Criminal justice interventions such as drug courts and probation and parole supervision were also considered effective. From the small number of studies considered as part of the review, there was little evidence found to demonstrate the effectiveness of (largely pre-trial) routine monitoring drug testing (six studies) or supervision and aftercare in combination (e.g. receiving additional treatment in either a recovery or residential rehabilitation unit at some point following discharge from supervised detoxification) (two studies).

Importantly, outcomes were influenced by subtle differences in the characteristics and profile of those exposed to treatment (men appear to do better than women and younger people seem more responsive than older clients) and by the intensity and quality of the interventions provided (more intensive4 programmes produced superior results).

---

4 Programme intensity was related to dosage levels, whether the programme was continuous or interrupted, time in treatment, completion rates and whether treatments were combined in some way (e.g. detoxification plus aftercare) (Holloway et al., 2005: 58).
This optimistic assessment contrasts sharply with the findings by Perry et al. (2006), who adopted tighter and more rigid inclusion criteria for a Cochrane systematic review. From 8,000 publications examining the impact of interventions for drug-using offenders under criminal justice supervision, they selected 24 studies using randomised control trials. Using this approach the authors concluded that there was little solid evidence about the effectiveness of programmes carried out in court and community settings. The little that could be said was that therapeutic community interventions followed by aftercare were promising. The inability to draw stronger inferences was largely attributed to methodological shortcomings in the RCT (randomised controlled trial) studies concerned, particularly with regards to attrition at follow-up and failing to adequately account for differences between experimental and control groups at baseline. Information on costs and cost-effectiveness was also limited and the interventions were biased towards adult male offenders. One might reasonably ask whether in assessing methodological quality Perry and colleagues set too high a bar. In doing so they ignore a great deal of what the descriptive and ‘less than perfect’ evaluative literature from both the criminological and substance misuse fields can intelligently contribute to our understanding of the processes and mechanisms that produce these positive outcomes.

In relation to the pursuit of methodological rigour, the recent evaluation of the impact of prolific and other priority offender (PPO) schemes (Dawson and Cuppleditch, 2007) also demonstrates how the use of a theoretically robust matching process will not always guarantee that a valid comparison can be made. Others are also increasingly questioning the feasibility and utility of using randomisation in studies, both generally (Cartwright, 2007) and in the context of criminal justice settings (Hollin, 2008; Hedderman, 2007; Hedderman and Hough, 2005).

**Criminal justice-based drug treatment**

Despite arguments about the quality of evaluative evidence, the theories and principles of effective drug treatment – and supervision more generally (Taxman, 2002; McNeill et al., 2005) – for criminal justice populations are now fairly well established (National Treatment Agency, 2007; Friedmann et al., 2007; National Institute on Drug Abuse, 2006; Bull, 2005; Mears et al., 2003), and we can be confident that some interventions work for some people under some circumstances. However, our understanding of the constituent components of effective interventions and how to assess precisely what works best with whom and under what circumstances is still developing.

---

5 ‘Aftercare’ in this instance has not been explicitly defined.
A great deal can be gleaned from the criminological ‘what works’ literature and the development of effective practice in the correctional services during recent years – not least about the following issues:

- Adhering to the principles of risk, responsivity and need. These principles are concerned with the appropriate assessment and management of risk, delivering responsive and tailored interventions which promote engagement and behaviour change, and providing holistic support which addresses more than just substance misuse issues.
- Ensuring there is sufficient emphasis on situational and environmental factors, multi-modal intervention and effective reintegration – for example, by addressing any education, training and employment needs, and brokering access to appropriate accommodation.
- The need for robust evaluations of programme effectiveness and cost-effectiveness.
- Being mindful of the difficulties encountered when attempting to implement programmes effectively. Pitfalls to avoid include the rapid expansion of programmes and inappropriate targeting, thereby increasing programme attrition rates (Harper and Chitty, 2005; Goldblatt and Lewis, 1998; Vennard et al., 1997).

However, uncertainties about treatment effectiveness for criminal justice populations are still compounded by the range of ongoing conceptual, ethical and practical challenges presented by attempts to deliver drug treatment within a criminal justice context (Stevens et al., 2005; Wild, 2006; Seddon, 2007; McSweeney et al., 2007; Pritchard et al., 2007; UNODC, 2007). Conceptually, for example, there are no clear or universally agreed definitions of ‘coerced’ treatment. Instead, terms such as ‘involuntary’, ‘incentive-based’, ‘legal referral’ and ‘compulsory’ treatment have been employed interchangeably – often without any effort to directly assess the client’s subjective perception of the referral process. Ethical concerns, by contrast, might focus on the extent to which drug dependency undermines the ability of such offenders to offer their informed consent to participate in treatment or consider how ‘coercive’ – and, increasingly, compulsory – forms of treatment might be disproportionate and encroach upon notions of self-governance and autonomy. On a practical level, the impact of criminal justice-based treatment has raised particular concerns about a range of issues, such as:

- the prioritisation of crime reduction over public health and harm reduction;
- system capacity and the sustainability of current funding levels;
- the responsiveness of criminal justice-led treatment to different user types (i.e. stimulant users);
- the impact of these developments on information sharing, confidentiality and the client–therapist relationship;
• the scope for flexibility within criminal justice interventions to respond constructively to lapses and relapses; and
• the ability to sustain effective partnerships between health, criminal justice and ancillary services, such as housing and employment.

Despite these ongoing uncertainties, legislation introduced in Britain since the late 1990s has expanded the scope for the criminal justice system to ‘coerce' drug-dependent offenders into treatment. Consequently there is now an array of options available to the police and the correctional services that involve diversion from punishment, court-mandated treatment or treatment in custodial settings. Increasingly, these measures seek to exploit the coercive potential of the criminal process: those who fail to comply can be sanctioned through the imposition of additional requirements, fines and custodial sentences.

**The Drug Interventions Programme**

The Drug Interventions Programme (DIP) is a key part of the Government’s strategy for tackling illicit drug use and drug-related crime. It aims to bridge both community- and prison-based initiatives in an effort to ensure continuity of care and end-to-end case management. DIP began in 2003/04 across 25 high drug/crime areas as a three-year pilot programme to develop and integrate measures for intervening at every stage of the criminal justice system in order to engage and retain offenders in drug treatment.

The programme is continuing and evolving beyond its original pilot period, with the aim of gradually ensuring that the approach becomes the established way of working with drug-using offenders across England and Wales. In the community, DIP is delivered by Criminal Justice Integrated Teams (CJITs): specialist criminal justice, healthcare and social-care teams responsible for case-managing offenders. The CJITs facilitate referral to treatment, wraparound and follow-on services. According to recent figures, as many as 3,500 drug-misusing offenders a month are entering treatment through DIP compared with just over 400 in March 2004 (HM Government, 2007: 20).

Figure 3.1 illustrates how DIP operates at key stages of the criminal justice process in an effort to encourage adult offenders “out of crime and into treatment” (Home Office, 2007b: 10–11).
**Figure 3.1: How the Drug Interventions Programme operates**

We now offer an overview of these various provisions and present the evidence we were able to assemble within the confines of our review for the effectiveness of both community-based and prison-based initiatives.
Chapter 4: Current community-based responses and evidence for their effectiveness

4.1 Interventions to identify drug-misusing offenders and encourage entry into treatment

Testing on arrest or charge, required assessment and restrictions on bail (Tough Choices)

The Drugs Act 2005 introduced provisions for testing on arrest and required assessments which were originally implemented in three English police force areas in December 2005 (under previous legislation for testing on charge) and expanded in March 2006 to cover another 14 areas. The measures target adults (aged 18 and over) arrested for a specified trigger offence (or for an offence where a police officer of Inspector rank or above suspects that use of a specified Class A drug caused or contributed to the offence). The test, an oral swab, is for the recent (24–48 hours) use of specified Class A drugs (i.e. heroin or cocaine/crack). Failure to comply with either testing or the required initial assessment with a suitably qualified drugs worker (in order to assess the individual’s dependency or propensity to use specified Class A drugs and identify whether they could benefit from further assessment, treatment or support) without good cause is an offence in its own right. Any further follow-up appointments or activities beyond the initial required assessment will only occur with those wishing to voluntarily access treatment and support. During 2007, a total of 175 police custody suites were conducting drug testing on arrest or on charge. Nine of these, across seven police forces in England and Wales, test only on charge rather than on arrest. Three sites in Scotland (Aberdeen, Edinburgh and Glasgow) are currently piloting arrangements for the mandatory drug testing of arrestees. The pilots will run until June 2009, with a view to informing the wider implementation of mandatory testing of arrestees across Scotland.

The Criminal Justice Act 2003 amended the Bail Act 1976 to provide for a restriction on bail (RoB) for adults who have tested positive for heroin or cocaine/crack. At an initial bail hearing a defendant can be asked to undergo an assessment of their drug problem (a relevant assessment) and will have to agree to participate in any follow-
The treatment and supervision of drug-dependent offenders

up recommended by the assessor. If the defendant agrees, they will, in most cases, be released on conditional bail. However, if they refuse, the normal presumption for bail is reversed and the court will not grant bail unless satisfied that there is no significant risk of a further offence being committed whilst on bail. In March 2006, RoB was extended to cover all areas in England.

Evidence for the effectiveness of drug testing in the criminal justice system

Contemporary UK research is equivocal about the impact of drug testing at different points in the criminal justice system on illicit drug use and offending behaviours, and on engagement with treatment services (Turnbull et al., 2000; Mallender et al., 2002; Deaton, 2004; Matrix and NACRO, 2004; Singleton et al., 2005; Ramsay et al., 2005; Shewan et al., 2006; Matrix and ICPR, 2007; McSweeney et al., 2008). For example, Singleton and colleagues (2005) found that fear of detection by random drug testing was only one of many factors affecting drug-using behaviour in prisons. A study to examine the processes and impact of on-charge drug testing found no significant direct effects between testing and changes in drug consumption or offending behaviour (Matrix and NACRO, 2004: xi).

The systematic review of the evidence by Holloway et al. (2005) also found no evidence for the effectiveness of testing either as a stand-alone form of routine monitoring or when used in combination with treatment interventions. This uncertainty is compounded by the fact that different methods of testing each have their own relative merits and shortcomings (Dolan et al., 2004). There is some evidence that testing can have a role to play in motivating and reinforcing good progress for those already engaging with criminal justice interventions. However, in the view of many professionals involved in drug treatment and testing order (DTTO) provision, for example, regular testing was considered expensive and destructive to the motivation of those reducing their levels of drug use and of limited value to practitioners as it fails to accurately detect different patterns of use (such as reductions in the quantity or frequency of use, or changes to patterns of injecting behaviour) (Turnbull et al., 2000: 37; Eley et al., 2002: 65).

Evidence for the effectiveness of Tough Choices

A recent Home Office study has examined the extent to which Tough Choices and the broader DIP intervention identified, directed and engaged Class A drug users into treatment following arrest or charge (Skodbo, 2007). It also considered recorded offending levels in the period before and immediately after identification by DIP. The main findings to emerge from the study were as follows:

- There was a 26 per cent reduction in the overall volume of recorded offences against a cohort of 7,727 arrestees in the six months following contact with DIP.
• Just under half (47%) of the cohort showed a decline in offending of around 79 per cent during this six-month period. However, more than half showed similar (25%) or increased (28%) levels of offending following DIP entry.
• Levels of attrition from DIP appeared to be lower under the more ‘coercive’ arrangements for testing on arrest and mandatory assessments.
• Levels of retention in treatment at 12 weeks for the testing on charge cohort (79%) and the testing on arrest cohort (74%) were comparable with those referred to treatment from non criminal justice routes (76%).
• There was some evidence of net-widening as arrangements for testing on arrest appeared to identify proportionally fewer “high crime causing users”.

However, methodological limitations – namely the absence of a suitable comparison group – meant that the authors were unable to say with any certainty how much of the observed changes in offending behaviour might be attributable to Tough Choices and DIP.

In a similar vein, the evaluation of RoB pilots in three English sites between May 2004 and October 2005 concluded that their success in retaining defendants in treatment and their impact on illicit drug use and offending was unclear (Hucklesby et al., 2007). While the measures had been effectively implemented, those exposed to them were significantly less likely to be retained in treatment for 12 weeks than those already in treatment or referred from other routes (although it is unclear whether these groups are comparable). The RoB group were also less likely to comply with their treatment conditions. The RoB sample largely comprised those specialising in shop theft and there was little evidence to suggest that the bail restrictions had altered the frequency or timing of such offences.

This is not to say there were no benefits derived from RoB: most (84%) of the 1,315 defendants exposed to it went on to engage with treatment, and a significant proportion of those that did (70%) were not in contact with services at the time RoB was imposed. There were also lower than expected rates of breach for non-compliance with RoB conditions (37%). However, these benefits may have been offset by a number of other concerns. These included: problems discriminating between recreational or controlled users (particularly of powder cocaine) who were inappropriate for intervention or did not want it; the process of up-tariffing some defendants with additional bail conditions; and increasing the likelihood that some defendants would be remanded into custody (although in the pilot sites at least, RoB had only a marginal impact on the prison population). The evaluation also lacked an economic component so nothing can be said about the value for money offered by RoB.
4.2 Interventions aimed at increasing engagement and compliance with drug treatment

Criminal Justice Integrated Teams

The objectives of DIP are to be met through a number of interventions: an assessment of needs, rapid referral to treatment and appropriate throughcare and aftercare.

“Throughcare is the system which seeks to promote continuity of approach from arrest to sentence and beyond. Aftercare is the support which allows clients to access further drug treatment services as required and non-drug specific services such as housing, employment and education, sometimes known as wraparound services, in an attempt to ensure integration back into the community and continuity of care. The throughcare and aftercare element of DIP is delivered by Criminal Justice Integrated Teams (CJITs). The policy guidance suggests that CJITs allocate a case manager after a drug-misusing offender has been assessed and taken onto the CJIT caseload. The CJIT worker will then develop a care plan with the offender for the delivery of, or referral to, appropriate services. The nature of a CJIT worker’s involvement depends on the approach taken to case management and, to some extent, the needs clients present with” (ICPR, 2007: 3).

Evidence for the effectiveness of CJITs

The national evaluation of CJITs across 20 pilot sites has reported significant reductions in drug use and offending behaviours within a sample of those taken onto CJIT caseloads (n = 703), but with reductions in offending being less marked than those for illicit drug use (ICPR et al., 2007). Fieldwork for the process evaluation was undertaken between December 2004 and January 2006, at a time when the schemes were in the early stages of implementation and development.

Over half the referrals to, and contacts with, CJITs were made via police custody suites compared with only six per cent from prisons. (Other referral routes such as the courts and probation were still very much in the developmental stage throughout the evaluation period.) While CJITs were contributing towards increasing the number of people accessing treatment, during the study period it emerged that the proportion of initial contacts resulting in assessments (43%) and actual treatment starts (37%) were comparable with previous arrest referral arrangements (see Oerton et al., 2003). More recent findings reveal a much more favourable comparison with previous arrest referral arrangements, however, and indicate that the provisions for testing on arrest and required assessments have improved engagement rates (Skodbo, et al., 2007: iii). That said, efforts to improve other referral routes, notably those from prisons, will undoubtedly yield a greater level of contact and increase the
numbers accessing treatment. The arrangements for continuity of care between prison CARAT teams and CJITs, observed as part of the national evaluation, varied considerably. They often proved fragile and were considered by some staff to be ineffective. These mirror concerns about a lack of cooperation and integrated support that have recently been identified in relation to some CARAT schemes (Harman and Paylor, 2005) and more specifically with regards to drug service provision for black and minority ethnic (BME) prisoners (Fountain et al., 2007).

There was considerable variation too in the practice and approach to the delivery of CJITs across the 20 sites examined. Team and management structures, service organisation and delivery, the type of staff involved and their institutional background: all differed according to local circumstances, pre-existing service configurations and needs. Many areas chose to build on existing arrest referral or treatment agency structures as a basis for developing CJITs locally, with practice developing rapidly over a very short period of time (see the findings from a rapid appraisal of the Liverpool DIP as an example of early local implementation issues: Khundakar, 2005). Challenges presented by efforts to develop effective approaches to inter-agency working (between health, social care and criminal justice agencies, and statutory and voluntary sector providers), information sharing and continuity of care (particularly during the transition from custody and the community, and vice versa) all impacted on the ability of CJITs to provide an integrated service.

The role envisaged for case management within CJITs was integral to the DIP model of delivering end-to-end services for problematic drug users who come into contact with the criminal justice system. Case managers were to assume responsibility for coordinating all aspects of support: from assessing needs, developing care plans to meet those needs and brokering access to services, though to monitoring and reviewing progress. In reality there was considerable variation in case management approaches between areas and, on occasions, between individual workers at the same sites, but greater consistency in practice emerged over time. This experience was entirely in keeping with the findings from a review of the effectiveness of different case management approaches used in a range of settings (drug treatment, mental health and criminal justice) undertaken as part of the CJIT evaluation. It found limited evidence about existing practice and emerging models, and none about effectiveness. It also uncovered a lack of fidelity to any one case management approach (ICPR and CRDHB, 2004; Keetley and Weaver, 2004).

CJITs were successful at ensuring that a very high proportion of those assessed and taken on to the CJIT caseload accessed treatment. Those engaging with treatment also reported reductions in drug use and offending. However, the investment and start-up costs in developing and implementing CJITs was heavy – £0.5 billion over the first three years – and the evaluation concluded that the cash savings achieved in the 20 CJITs that it examined were offset by the costs of providing the service.
The findings from the CJIT evaluation were less definitive and more equivocal than expected due to a range of methodological problems. Future research on the impact of DIP and CJITs will need to ensure the use of sufficient sample sizes and appropriate controls in order to more accurately measure the effects of such interventions.

**DTTOs, DRRs and drug courts**

Drug treatment and testing orders (DTTOs) were introduced by the Crime and Disorder Act 1998. As a criminal justice intervention, their main aim was to reduce drug-related offending by using structured treatment to tackle substance misuse. The approach built on the promising results from earlier probation-led treatment interventions (Sibbitt, 1996; Ramsay, 1997; Hearnden and Harocopos, 1999), which suggested that some drug-dependent offenders could be encouraged to access treatment as part of a court order and benefit from these arrangements. But unlike previous measures, the DTTO made regular use of drug testing and court reviews in an effort to promote compliance and behaviour change. Provisions of the Criminal Justice Act 2003 have since subsumed the English and Welsh DTTO under a new community order. These generic penalties now enable the courts to impose a community order with a drug rehabilitation requirement (DRR). Essentially, the DRR is equivalent to a DTTO, but with a greater degree of flexibility when it comes to supervision and management: attendance requirements now range from one contact to 15 hours of supervision each week depending on the needs, risks and seriousness of an offence (the DTTO set a blanket 20-hour a week requirement during the early stages of the order).

In Scotland those entering treatment through the criminal justice system continue to be supervised by workers from local authority Criminal Justice Social Work (CJSW) services. They have at their disposal a range of interventions aimed at diverting drug misusers to treatment. These include:

- diversion from prosecution schemes;
- probation orders with a condition of treatment; and
- drug treatment and testing orders.

Around 60,000 DTTOs/DRRs have been imposed by the courts in England and Wales since 2001 (National Probation Service, 2007b: 23). Commencements increased from 4,842 in 2001/02 to 15,799 in 2006/07. By contrast, about 2,250 DTTOs were imposed by the Scottish courts between 2003/04 and 2006/07 (Information Services, 2006; Scottish Government, 2007). Based on mid-2006 population estimates for the UK (National Statistics, 2007) the incidence of DTTOs per 10,000 of the adult population (aged 16 and over) during 2006/07 was 1.7 in Scotland and 3.6 in England and Wales.
Drug courts emerged first in the USA in response to increasing numbers of drug-related court cases and spiralling prison populations (Bean, 2004). To date, there are in excess of 1,600 operational drug court programmes in the USA (Huddleston et al., 2005) and variants of the drug court model have been developed and evaluated in Australia (Freeman, 2003; Wundersitz, 2007), Canada (Fischer, 2003), Puerto Rico (Wenzel et al., 2001), the Republic of Ireland (Farrell, 2002) and Scotland (McIvor et al., 2003). Most evaluations have reported encouraging results.

The US National Association of Drug Court Professionals (NADCP, 1997) has identified four key components of the drug court model:

- review hearings before a judge in court to assess progress;
- mandatory completion of drug treatment;
- random and frequent drug testing; and
- the use of progressive negative sanctions for non-compliance and positive rewards for achievements.

Building on current DTTO/DRR arrangements, drug courts were introduced in two Scottish sites (Glasgow and Fife) during 2001/02, and in 2005 a pilot model for England was launched in Leeds and London. While both DTTO and drug court models involve the use of regular drug testing and judicial reviews in order to monitor progress and compliance with drug treatment, there is an expectation that in the latter there would be a much greater emphasis on ensuring consistency of sentencer at subsequent reviews hearings. The intention here is to provide more opportunities for the sentencer and offender to develop continuity of contact and dialogue where progress is rewarded and non-compliance sanctioned.

Evidence for the effectiveness of DTTOs/DRRs

Since their full roll-out across England and Wales during 2000 (there was a much slower and piecemeal implementation process across Scotland between 1999 and 2004) there have been a number of studies and commentaries examining the processes and effectiveness of DTTOs (Turnbull et al., 2000; Eley et al., 2002; Barker et al., 2002; Ricketts et al., 2005; Best et al., 2003; Falk, 2004; Finch et al., 2003; Hough et al., 2003; HMIP, 2003; National Audit Office, 2004; Turner, 2004; Powell et al., 2007). Despite some considerable implementation problems, all of the studies focusing on outcomes indicate that while many drug-dependent offenders fail to complete DTTOs (and the most recent figures suggest fewer than half do), those who are successfully retained on programmes report statistically significant reductions in illicit drug use and offending, and improvements in other domains. While reconviction rates remain high – 82 per cent for the 2004 cohort, against a predicted rate of 83 using the Offender Group Reconviction Scale (Cunliffe and Shepherd, 2007: 14) – evidence from the pilots in England and Scotland revealed that those completing orders were significantly less likely to be reconvicted than those not (Hough et al., 2003; McIvor, 2004a).
DTTO completion rates in Scotland have remained stable at 38 per cent during 2004/05 and 2006/07, with a small increase in 2005/06 to 40 per cent (Scottish Government, 2007: 58). The National Probation Service's latest annual report states that DTTO/DRR completion rates in England and Wales have improved from 28 per cent in 2003 to 44 per cent in 2006/07, with the proportion retained on an order for at least 12 weeks remaining consistently high (National Probation Service, 2007a: 11): 85 per cent according to a recent Ministry of Justice report (2008: 18). While optimists might interpret this as a reflection of increasingly refined working practice over time, sceptics might see it as evidence of net-widening: that is, the inevitable targeting of less serious and more tractable offenders for DRRs. Although the early signs are that the increasing use of the orders has not had a detrimental impact on some key measures of effectiveness (i.e. retention and completion rates), its effect on reconviction remains unclear, as figures for DRR reconvictions – which came into effect from 1 April 2005 – have yet to be published.

Leaving aside any differences in the type of offender being targeted, the scope for greater flexibility in the treatment and supervision of DTTOs in Scotland – which has less emphasis on performance management (e.g. commencement targets), less stringent guidelines regulating the nature and extent of contact with offenders, and affords the courts greater discretion in responding to non-compliance – may have contributed to their lower breach rates, and better retention, engagement, completion and reconviction rates when compared with the English pilot schemes (Turnbull et al., 2000; Eley et al., 2002; Ashton, 2003).

Recent English research also suggests that those ‘coerced’ into community-based treatment via DTTO arrangements report larger reductions in illicit drug use (Naeem et al., 2007) and offending behaviours than ‘volunteers’ entering the same services, but with no significant differences in retention rates and other outcomes (McSweeney et al., 2007). These findings are consistent with the results from a wider study (QCT Europe) examining the use of ‘coerced’ and ‘voluntary’ drug treatment options across 65 residential and community-based services in six European countries. The study revealed that the highest rates of reduction in illicit drug use were to be found among those who received in-patient forms of treatment (Uchtenhagen et al., 2006). In Britain, however, the availability and use of such residential treatment is extremely limited, both north and south of the border (McKeganey et al., 2006; Scottish Executive, 2007; Best et al., 2005).

The accumulating evidence seems to suggest that the context in which the DTTO/DRR is applied is crucial in shaping the outcomes that have been observed to date at local, regional and national levels (Hough et al., 2003; HMIP, 2003; National Audit Office, 2004; House of Commons Committee of Public Accounts, 2005; McSweeney et al., 2007). Factors that can explain variations in outcomes include:
• area-level differences in the profile of those being sentenced to the orders;
• treatment quality, availability and delivery;
• setting (whether community-based or residential);
• treatment orientation (whether abstinence-based or controlled use);
• responsiveness of interventions (e.g. to the needs of crack cocaine users); and
• enforcement practices.

For example, in relation to treatment orientation the experience from the English DTTO pilots illustrated the inherent risks associated with abstinence-based approaches for this particular target group whereby an expectation “to be completely drug-free in a matter a weeks is pushing them too far too fast” (Turnbull et al., 2000: 85). At the same time, Gossop has recently observed that when it comes to decisions about whether community or residential-based support is most appropriate, “little is known about how most effectively to allocate individual clients to one or other treatment setting” (2005b: 8). In the context of DTTOs and DRRs, concerns have been expressed that sentencers may often appear to prefer residential placements because of the ‘surveillance’ aspect offered by these options rather than any considerations of clinical need (McSweeney et al., 2006).

The average cost of a DTTO has been estimated to be around £6,000 (National Audit Office, 2004; House of Commons Committee of Public Accounts, 2005). During 2002/03, the National Audit Office estimated that this equated to between £25 and £37 per day, compared with a cost of custody of £100 per day (2004: 7). While these figures include the cost of probation supervision, treatment and testing, they do not include court costs (reviews and any breaches), the price of any residential rehabilitation placements and expenditure on social housing and benefits.

We are not aware of any research currently being undertaken into the processes and impact of the new DRR arrangements.

Evidence for the effectiveness of drug courts

Several reviews of the evaluative evidence in the USA (Henggeler, 2007; Cosden et al., 2006; Rodriguez and Webb, 2004; Fielding et al., 2002; Guydish et al., 2001; Spohn et al., 2001) and Australia (Wundersitz, 2007) have reported promising results, with drug court participation and completion being linked to reduced drug use, rates of re-arrest and recidivism. Drug court participants have also shown superior outcomes to comparable groups of offenders who have not been exposed to the intervention (Galloway and Drapela, 2006; Gottfredson et al., 2005; Gottfredson and Exum, 2002; Brewster, 2001) or have been supervised by other courts (Henggeler et al., 2006). Although few studies have considered the physical and/or psychological health benefits arising from participation in drug courts, those that have generally indicate significant and sustained health improvements.
for those retained on programmes (Freeman, 2003). The approach has also been shown to be effective for different groups of drug offenders (e.g. dual-diagnosis) (Kleinpeter et al., 2006).

While some drug court evaluations have reported mixed results over the long term (Henggeler, 2007; Wolfe et al., 2002), the accumulating evidence suggests that drug courts offer more intensive levels of supervision and support than conventional community programmes. This approach is also said to generate cost savings and offer value for money (Roebuck et al., 2003; Shanahan et al., 2004; Wundersitz, 2007) and can facilitate greater cooperation and partnership working between criminal justice and health services (Wenzel et al., 2001; Wolfe et al., 2004). Marlowe et al. (2003) concluded recently that “drug courts outperform virtually all other strategies that have been attempted for drug involved offenders”.

There are, however, fundamental variations across jurisdictions that have served to curb enthusiasm for their widespread adoption. Differences in how drug courts have been implemented and delivered have been shown to impact upon their effectiveness (Bouffard and Smith, 2005; Goldkamp et al., 2001). Outcomes also vary according to the offender groups targeted and the treatment approaches used. For example, in contrast to court-based treatment in the UK, Australia and other jurisdictions, the US drug court model targets low-level or first-time offenders. The vast majority also operate abstinence-based treatment philosophies (Bean, 2004); historically, US drug courts have made little use of cognitive behavioural therapy approaches (Bouffard and Taxman, 2004) or methadone maintenance (Peyton and Gossweiler, 2001). While US drug courts appear to have enjoyed a greater degree of success in engaging and retaining offenders, like court-ordered treatment completion rates in Britain and elsewhere there is considerable variation in drug court graduation rates: from 27 to 66 per cent (Government Accountability Office, 2005: 62).

Drawing on the US evidence, Wolf et al. (2003) and Miller and Shutt (2001) have identified a range of factors associated with drug court completion including:

- age (being older);
- staff characteristics (e.g. ethnicity);
- main drug (not being a crack user); and
- having fewer previous convictions.

By contrast, correlates of recidivism for those having completed drug court programmes include age (being younger), expressing dissatisfaction with aspects of support offered and having limited social attachments (being unemployed and living alone) (Sung and Belenko, 2005).
Much of the early research of drug courts has been criticised on methodological grounds: sample sizes tended to be comparatively small; few tracked programme failures and drop-outs successfully; and fewer still employed comparison groups or consider other factors which might influence treatment outcomes. Selection effects – fewer than 5 per cent of eligible offenders are thought to be engaged in drug court programmes (French, 2005) – as well as sampling and response bias all complicate our interpretation and understanding of the research evidence (Government Accountability Office, 2005; Rodriguez and Webb, 2004).

Most of the positive outcomes that have been observed are confined to periods while offenders are retained on programmes, however (Belenko, 1998, 1999, 2001; Huddleston et al., 2005; Government Accountability Office, 2005), and some have expressed concerns about the level of throughcare and aftercare support offered (Marlowe et al., 2005a). Therefore, little can be said with any certainty about the effectiveness of drug courts over the longer term in tackling substance misuse and improving individual and social functioning (Anderson, 2001; Belenko, 2002).

As noted above, attempts to introduce drug courts in Britain have, to date, largely been built on pre-existing DTTO/DRR arrangements (Bean, 2002; McSweeney et al., 2008). In Scotland, drug courts were introduced in Glasgow and Fife during 2001/02 and 355 orders (around three-quarters of them DTTOs) were imposed across the two sites by October 2004. Methadone prescribing and structured day programmes constituted the main forms of treatment provided. Completion rates ranged from 30 to 47 per cent across the two sites. Consistent with findings from drug court evaluations in other jurisdictions, researchers found that participation and completion were linked to reductions in reported drug use and offending behaviours, and in official rates of reconviction. The Scottish pilots also encountered a number of operational difficulties in establishing and running their schemes. Challenges arose in relation to joint-working arrangements, inflexible prescribing regimes, limited options for dealing with non-compliance and tackling cocaine use (McIvor et al., 2006).

In December 2005, a pilot dedicated drug court model for England was launched in Leeds and West London magistrates’ courts. While the full results from the evaluation were unavailable at the time of writing, the early indications are that while there have undoubtedly been considerable benefits for some drug-dependent offenders, the performance of these schemes has also been hampered by problems associated with implementation and partnership working (Philips, 2006; Jenkins, 2007).
The treatment and supervision of drug-dependent offenders

Prolific/persistent offender schemes

Implemented in September 2004, prolific and other priority offender (PPO) and intensive supervision and monitoring (ISM) schemes are part of a broader strategy to catch, convict, rehabilitate and resettle a core group of persistent offenders thought to be responsible for a disproportionate amount of crime (Narrowing the Justice Gap, 2002). These schemes require local Crime and Disorder Reduction Partnerships and Community Safety Partnerships to identify and select offenders whom they consider to be the most prolific (definitions vary as to what constitutes a persistent or prolific offender) and to devise, coordinate and deliver a range of protocols, procedures and programmes to engage this group. This includes the use of proactive police disruption and targeting activities and, where appropriate, brokering rapid access to treatment and other support services. Drug treatment clearly forms an integral part of this strategy. The Home Office (2007a: 21) has reported that 80 per cent of PPOs testing positive for drugs while subject to a custodial licence go on to engage in drug treatment.

We were, however, unable to locate any routinely published material on national PPO throughputs and the characteristics of those exposed to the schemes.

Evidence for the effectiveness prolific/persistent offender schemes

Homes et al. (2005) describe how previous research into the effectiveness of similar schemes in England, Holland and the USA have produced mixed results and been hampered by the use of weak methodologies, small sample sizes and (often) a lack of suitable comparison groups. The authors cite results from recent meta-analyses which question the efficacy of comparable Intensive Probation Supervision arrangements in North America (Gendreau et al., 2001). They also note that there is little evidence to demonstrate the effectiveness of intensive levels of supervision in isolation, but that reduced rates of recidivism were associated with schemes that employed some form of therapeutic intervention, such as drugs counselling (Gendreau et al., 1993; Petersilia and Turner, 1993). Similar conclusions have been drawn from the experiences of US drug courts: attending treatment has been shown to significantly decrease the risk of recidivism, but receiving criminal justice supervision had no additional benefit or impact (Banks and Gottfredson, 2003).

One of the most comprehensive assessments of the impact of English and Welsh PPO schemes on offending was published recently (Dawson and Cuppleditch, 2007). The study sought to assess the offending of PPOs before and after exposure to the programme and compare any changes with an appropriate control group (using Propensity Score Matching; PSM). The approach revealed a 43 per cent reduction in offending among a sample of 7,800 PPOs identified during the two months following implementation, but problems generating a strong counterfactual using PSM meant that the researchers were unable to say to what extent these changes
were attributable entirely to the intervention. Despite this caveat the results are considered promising and consistent with qualitative data from 60 interviews with PPOs, which indicate that most reported having reduced their offending or desisted from crime since engaging with the programme. Most also attributed these changes to the enhanced support and interventions they had received, including access to drug treatment.

These results are broadly consistent with an earlier evaluation of PPO schemes for the Policing Standards Unit (ICPR, 2004) which highlighted a range of strengths and weaknesses associated with the approach, but underlined how poorly developed local services reduced their effectiveness. Of particular concern was the limited availability of local drug treatment provision (many areas were experiencing lengthy delays accessing substitute prescriptions at that time) and appropriate housing. Similar issues and concerns arose during the course of the Street Crime Initiative (Tilley et al., 2004). Interim findings from the Home Office funded evaluation of PPO schemes raised identical concerns about the range of offender-related needs (61% of PPOs were assessed as having a drug misuse issue) and the capacity and involvement of local agencies to address them. The research called for increased partnership working and data sharing between agencies (Dawson, 2005).

In addition to the need for developing and maintaining good links and communication between all stakeholders, the findings from the evaluation of ISM provision (Homes et al., 2005) again identified the need for established links with local statutory and voluntary sector agencies to ensure swift access to appropriate drug treatment and housing. These should be complemented by offending behaviour programmes and adequate aftercare. These findings are also endorsed by the emerging lessons from partnership working arrangements with CJITs, which propose establishing dedicated PPO prescribing slots and securing input from housing specialists (in order to explore local options for rent deposit schemes and developing links with Registered Social Landlords) (Home Office, 2006a). Experience from other areas also highlights the importance of communication and clarity of roles together with a stronger focus on rehabilitation and resettlement, rather than an emphasis solely on enforcement and surveillance aspects (Millie and Erol, 2006; Merrington, 2006).

**Other community-based interventions**

Other community-based options include the use of conditional cautioning. Introduced by the Criminal Justice Act 2003, these measures mean that failure to adhere to the conditions of a caution might result in a defendant being charged with the original offence. Though these measures were intended to increase engagement with treatment services, early indications from the six early implementation pilot areas were that very few drug-using offenders were considered eligible for the schemes, due largely to the length of their criminal histories and the nature of
their offending (Home Office, 2006b). An examination of the early implementation of conditional cautions found that the option of a DIP condition was available in three of the six areas studied. These drug referral conditions formed part, or all, of the conditions in 39 cases (or 18% of the 221 conditional cautions administered). While DIP conditional cautions had the second highest proportion of completions (75%) when compared with other conditions, the evaluation was unable to say what impact these measures had on drug use and offending behaviours. However, it become apparent during the course of interviews with various stakeholders that a DIP condition was assessed to be more resource intensive because of the need to assess more fully the offender, and deliver the conditions, usually via specialist case workers (Blakeborough and Pierpoint, 2007). We were unable to locate any routinely published data on throughputs for these schemes.

Section 20 of the Drugs Act 2005 provides for an intervention order (IO) which can be made alongside an anti-social behaviour order (ASBO) when, for example, drug misuse has been identified as a cause of the behaviour that led to an ASBO being made. The IO can require participation in a specified activity (such as drug treatment) and require attendance at specific times. Treatment providers must inform the police or local authority if the defendant fails to comply with the conditions of an IO; if found guilty of breaching an IO, the defendant is liable on conviction to a fine. An IO cannot be imposed for longer than six months. We were unable to locate any published data on throughputs or effectiveness relating to the use of IO provision.
Chapter 5: Prison-based responses and evidence for their effectiveness

Prison-based interventions

The CARAT (Counselling, Assessment, Referral, Advice and Throughcare) service was established in 1999 to offer drug treatment in every prison establishment across England and Wales. Prisoners can be assessed by a CARAT team, given advice about drug misuse and referred to appropriate drug services. CARAT services are provided mainly by external drug agencies, prison officers and healthcare staff working collaboratively (May, 2005). Around 75,000 prisoners engaged with CARAT services in 2005/06 (HM Government, 2007: 21). In addition to a very small number of 12-Step treatment models \( n = 12 \) and therapeutic communities \( n = 5 \) (accessed by 930 and 300 prisoners respectively during 2006/07 (Hansard, 2008), a range of other services are also provided in some establishments, including the following:

- **Prison – Addressing Substance Related Offending (P-ASRO).** The Correctional Services Accreditation Panel describes P-ASRO as “a low intensity cognitive behavioural therapy intervention designed to assist prisoners address drug use and related offending, learn and enhance skills and thinking patterns required to reduce or stop drug misuse and offending” (NOMS, 2006: 20). It comprises four modules delivered over 20 sessions, each lasting two hours. P-ASRO is currently available in 42 establishments and was accessed by 3,780 prisoners in 2006/07 (Hansard, 2008).

- **Short Duration Programmes (SDPs).** These have developed in response to concerns that “many prisoners in custody for less than six months do not spend sufficient time in prison to benefit from longer-term intensive drug treatment programmes. There was a risk that many, without this intervention, would continue to misuse drugs and re-offend upon release” (NOMS, 2006: 23). SDP provision therefore aims to offer complementary support to more established clinical services offered in prisons (i.e. detoxification and CARAT services). The programme has different levels of intensity (high, moderate and low) and involves 20 sessions of 2.5 hours usually delivered over a 4-week period. SDPs operate in 44 establishments. During 2006/07 some 5,760 prisoners engaged with them in England and Wales (Hansard, 2008).
Similar provisions are offered in Scottish prisons via the Enhanced Addictions Casework Service, which was introduced in August 2005. We were unable to locate any routinely published data on throughputs for these different prison-based interventions and the characteristics of those exposed to them, however.

Over 50,000 prisoners were detoxified or placed on maintenance prescribing in England and Wales between April 2005 and March 2006 and around 11,000 entered intensive rehabilitation programmes. A total of 7,280 inmates completed other drug treatment programmes (Prison Reform Trust, 2007). In Scotland during the same period around a quarter of the 23,593 recorded entries into prisons were offered an addictions assessment. Over three-quarters of them completed an assessment, and just under 10,000 one-to-one motivational support sessions were delivered. Fewer than one in five (16%) Scottish prisoners were prescribed methadone during December 2005 (Information Services, 2006: 149). The impact and effectiveness of these interventions is not known. However, as Neale and Saville (2004: 213) have noted using DORIS data, “clients of community drug agencies experienced greater improvements than the clients of prison-based services. The former received a broader range of support than their imprisoned counterparts and rated the assistance that they received significantly more positively”.

While their impact is also unclear, there have been a number of important changes to the provision of prison-based drug treatment in recent years. Commissioning responsibility for the delivery of healthcare services for prisoners in England passed to local Primary Care Trusts in April 2006. More recently, the Integrated Drug Treatment System (IDTS) has been rolled-out across 49 prisons. The approach aims to expand and improve the provision of drug treatment within prisons by:

- increasing the availability, consistency and quality of services;
- diversifying the range of treatment options available;
- integrating drug treatment provided by prison healthcare with those services provided by CARAT teams; and
- strengthening continuity of care for drug users entering, moving between and exiting prisons (Hayes, 2007: 3).

**Evidence for the effectiveness of prison-based interventions**

There have been a number of recent systematic reviews which have sought to assess the effectiveness of interventions delivered within custodial settings that seek to reduce illicit drug use and offending behaviours. Pearson and Lipton’s review (1999) of 30 studies completed between 1968 and 1996 was able to identify strong evidence of effectiveness only for therapeutic communities (TCs) in reducing recidivism. More recently, Mitchell et al. (2006) have published findings from 66 independent evaluations (most of which were not included in Pearson and Lipton’s earlier review). Only one of these evaluations was conducted in Britain: Martin,
Player and Liriano’s studies of the RAPt (Rehabilitation of Addicted Prisoners Trust) intervention (2003). Developed along 12-Step lines, this well-established programme currently operates in nine English prisons and is abstinence-based.

Participation in the treatment programmes reviewed by Mitchell and colleagues was associated with modest reductions in post-treatment offending, but again TCs emerged with strong and consistent reductions in drug use and recidivism. Problems of low statistical power and weak methodological designs limited what could be said by the reviewers about the impact of substitute treatments. However, results from a randomised control trial of prison-based methadone maintenance therapy (MMT) in Australia revealed that retention in MMT (of eight months or longer) was associated with reduced reincarceration rates, hepatitis C infection and mortality (Dolan et al., 2005). A more recent review by Stallwitz and Stöver (2007) concluded that prison-based MMT can reduce offending, rates of reimprisonment and injecting risk behaviours. They noted that efforts to reduce illicit drug use and offending behaviours are further enhanced when these MMTs offer a sufficiently high dose (e.g. 60 mg) and provide treatment for the duration of the prison sentence.

In the UK, research has also provided evidence in support of methadone and lofexidine for the effective management of opioid detoxification in the prison setting (Howells et al., 2002). By contrast, there have been very few studies undertaken to date on the use of other pharmacotherapies, such as naltrexone, specifically with criminal justice populations (Patapis and Nordstrom, 2006).

Results from a different Cochrane review are more restrained in their enthusiasm for the effectiveness of TCs (Smith et al., 2006). While again subject to methodological limitations and restricted to the findings from seven studies, the authors concluded that there was little evidence that the approach offered superior benefits when compared with other forms of residential treatment, or that one type of TC is better than another.

TCs are few and far between in UK prisons: the consultation paper for the new drug strategy notes that there are only four in England and Wales (HM Government, 2007: 16). They are also expensive to run, and because of their duration and intensity they are usually only appropriate for long-term prisoners (Dolan et al., 2007).

Given the level of current investment – £77 million in 2006/07 (Prison Reform Trust, 2007) – there is surprisingly little published data on the impact of most forms of drug treatment delivered in UK prisons, particularly outcomes from CARAT interventions. The Home Office has previously published the results from an extensive programme of research that sought to assess the effectiveness of the Prison Service drug strategy – since replaced by the National Offender Management
Service drug strategy – which focused largely on the impact of treatment on subsequent reoffending (Ramsay, 2003). The combined results from these seven separate studies conducted in England and Wales showed that:

- there are high rates of drug use among prisoners (including females, BME groups and young offenders) in the period prior to custody compared with the general population;
- there is a reduction in drug use during periods of imprisonment (particularly for stimulants such as crack and cocaine);
- reviews of the English-language literature (though mostly US in origin) suggest that good quality drug treatment, of adequate length and which is responsive to the needs of different groups (women, BME and stimulant users) can be effective in reducing reoffending;
- graduates from RAPt achieved significant and sustained reductions in drug use and offending, and their reconviction rates were lower than the predicted two-year rates (actual 40%; predicted 51%), and lower than for a matched comparison group (RAPt group 40%; comparison group 50%);
- rates of drug use and offending after release from prison are generally high (see also Burrows et al., 2000); and
- appropriate aftercare on release from prison plays a crucial role in ensuring effectiveness and sustaining any progress made while in custody.

It seems clear from the evidence that local management and implementation issues (McIntosh and Saville, 2006), as well as the combined effects of enforcement measures and appropriate detoxification programmes (approaches to which vary quite markedly between different establishments), can have an impact on prisoners’ drug use and access to support. However, recent research also suggests that appropriate follow-up and aftercare (for example, ongoing support around relapse prevention from CARAT staff following detoxification) is a component of prison-based drug treatment that must be given a far higher priority than at present (Penfold et al., 2005). Clearly there is much more still to be done in identifying the most effective forms and intensity of aftercare support (both while in custody following detoxification and post-release) (Pelissier et al., 2007; cf Fox et al., 2005). There is also a lack of evidence to support the use and development of other prison-based demand reduction strategies, most notably drug-free wings (Dolan et al., 2007).

A study of the availability and take-up of drug treatment in English and Welsh prisons (Ramsay et al., 2005) reported that three-fifths (61%) of those experiencing problems with drugs prior to imprisonment actually received some form of help in prison. While more than half the frequent heroin users in the sample (54%) had been detoxified during their time in custody, in most cases this help took the form of a low-intensity CARAT intervention which around only a third of problem users were able to access. Very few prisoners – only one in ten – were able to access an
intensive rehabilitation programme such as RAPt. Even when this support could be accessed, it seemed that many did not regard the input they received from CARAT services (53%) or more intensive rehabilitation programmes (61%) as being particularly helpful in their efforts to abstain from drugs or remain drug-free. The study, supported by findings from the 2003 sweep of the Resettlement Survey (Niven and Stewart, 2005), also revealed that although short-term prisoners were more likely to anticipate problems with their drug use on release they were less likely to receive treatment while in custody.

At the same time, procedures for making referrals to appropriate treatment following a positive mandatory drug test (MDT) seem underutilised (Singleton et al., 2005). Perhaps in acknowledgement that MDT programmes underestimate the level of drug misuse as reported by prisoners, the Scottish Prison Service scrapped MDT in 2005 and replaced it with the Addictions Testing Measure (ATM). The results from the ATM are anonymous and cannot be attributed to the prisoner tested. The ATM aims to better inform decisions about the type and range of interventions required for prisoners, rather than penalising continued use of illicit drugs (Information Services: 2006: 150).

It is well established that prisons are risk environments for the transmission of blood-borne viruses (Strang et al., 1998); and on release inmates are at particular risk of dying from drug-related causes (Singleton et al., 2003). Despite this, the United Kingdom Harm Reduction Alliance, in its recent submission to the European Commission on the implementation of interventions aimed at preventing and reducing drug-related harms associated with drug dependency, stated that, in its view, the availability, accessibility and provision of substitute treatments and vaccination programmes in British prisons were inadequate to meet current levels of demand (needle and syringe exchange programmes do not currently operate across the prison estate) (van der Gouwe et al., 2006).

Although there has been considerable investment in prison drug treatment provision during recent years, there remains considerable scope for improving access to a wider range of treatment options and harm-reduction strategies within prisons and ensuring greater equivalence and continuity of care, especially to the relatively large number of short-term prisoners processed by the correctional services, both in the Britain and elsewhere (Lewis et al., 2003; May, 2005; Dolan et al., 2007)\(^6\).

---

\(^6\) Reports last year that the budget for the Integrated Drug Treatment System (which aims to improve the quality of clinical drug treatment services in prisons, bringing them closer in line with services available in the community) is to be cut by almost 60 per cent would certainly undermine such efforts (DrugScope, 2006).
Chapter 6: What other factors influence outcomes?

As with previous reviews, the evidence we have assembled suggests that treatment and supervision are human processes, and that outcomes are shaped as much by the characteristics of those receiving and delivering these interventions as they are by the particular treatment approach adopted (McNeill et al., 2005; see Heather et al., 2006, for a similar discussion in relation to alcohol treatment). The context in which these interventions are implemented and delivered is therefore crucial. Acknowledging this is important if we are to develop a better understanding of the most effective approaches to treatment and supervision. Contemporary English evidence suggests that in both community and residential settings, service characteristics predict a significantly greater proportion of the variance in drug treatment retention rates than (a limited number of) client characteristics – including referral source (Millar et al., 2004; Meier, 2005). And while there are some regional variations which illustrate how rates of drop-out can be significantly higher for those referred to treatment via the criminal justice system (Beynon et al., 2006), it is acknowledged that “a person’s preferred main drug may be confounding the observed relationship between referral source and treatment outcome if criminal justice referrals disproportionately consist of stimulant users (particularly crack users)” (ibid.: 6). Given the limited knowledge base for treating stimulant use, this too may have important implications for the effectiveness of criminal justice based approaches.

**The characteristics of those exposed to criminal justice interventions**

Baseline data from DTORS shows that criminal justice referrals are “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” (Jones et al., 2007: 4). These findings are consistent with more recent data (for March 2007), which indicated that in 108 DIP areas 36 per cent of all offenders tested following an arrest or charge for a ‘trigger’ offence were positive for crack or cocaine. Half of them – 18 per cent of all tested arrestees – were also positive for heroin. By contrast, four per cent

---

7 Recent analysis of National Drug Treatment Monitoring System (NDTMS) data suggested that clients attending the worst performing community-based service were 7.1 times more likely to drop out early than clients attending the best (Millar et al., 2004: 4). While the components of a good or bad community-based service are not made explicitly clear, in residential-based treatment aspects of provision, such as offering more individual counselling sessions, were found to be related to higher completion rates (Meier, 2005: 5).
registered a positive test only for heroin (Druglink, 2007: 3). Recent research on DTTOs in London also supports the contention that crack users are over-represented in probation caseloads (GLADA, 2004: 73) and that this particular client group present a range of specific challenges for staff attempting to engage and retain them (Fletcher, 2002; Turnbull and Webster, 2007). Furthermore, those referred into treatment via the criminal justice system have also been found to differ from ‘volunteers’ in a number of important ways; presenting with a wider range of needs which are likely to make it harder for them to be engaged and retained in treatment (McSweeney et al., 2007; Jones et al., 2007).

**TREATMENT QUALITY AND AVAILABILITY**

Despite the considerable investment in drug treatment provision during recent years, experience suggests that attempts to adhere to the principles of risk, responsivity and need by matching drug-using offenders to suitable forms of treatment can be determined as much by individual preferences, resources and treatment availability as by any shared or agreed model of good practice (Ashton, 2003: 14). More recent research suggests that in some areas such problems still persist in work with criminal justice populations (Falk, 2004; Eley et al., 2005; McSweeney et al., 2007). Problems also persist in key areas of mainstream provision. In Scotland, for example, a comprehensive review into the use of methadone as a treatment for opiate dependency by the Scottish Advisory Committee on Drug Misuse (SACDM) has recently highlighted concerns about some fundamental aspects of methadone treatment. This includes unease about:

- prescribing philosophies;
- the limited availability of treatment options in some areas;
- inconsistency in practice and the quality of services being offered; and
- the effectiveness of services in delivering harm reduction and recovery outcomes, crime reduction and improving the safety of children (SACDM, 2007).

At the same time, the availability and use of residential treatment is extremely limited in Britain\(^8\) (Best et al., 2005; McKeganey et al., 2006).

In the context of prison drug treatment, provision is often also patchy and uncoordinated. Penfold and colleagues’ (2005) recent study of prison drug markets, for example, observed how a wide range of opiate-detoxification regimes can operate across different establishments, reflecting a general lack of consistency in treatment across the prison estate. With the exception of RAPt and MDT, there has been very little evaluative work done to assess the effectiveness of prison-based interventions.

---

\(^8\) In making this point we are not advocating for the expansion of residential rehabilitation at the expense of other effective treatment modalities (see Ashton, 2008, for a discussion).
Criminal justice-based interventions – both drug-specific and more generally – have consistently been shown to exhibit a considerable degree of implementation failure (Turnbull et al., 2000; Raynor, 2004). More often than not this manifests itself in the form of limited capacity and commitment among the various agencies involved to work together effectively in order to make the endeavour a viable one (Jacobson, 2003; Hunter et al., 2005).

**Promoting compliance and facilitating change**

Some have been critical of the reliance on cognitive behavioural therapy and motivational interviewing to encourage drug-using offenders to address individual pathological deficits (what Kemshall, 2002, refers to as ‘responsibilisation’). The argument is that a focus on such programmes deflects attention from the equally important need to address the wider social and environmental factors that can facilitate drug use and crime and perpetuate other forms of social exclusion (Burnett et al., 2007). Efforts to ensure normative compliance both during and beyond the period of supervision are undermined by the limited capacity of the criminal justice system (Farrall, 2002) and drug treatment services (McSweeney and Hough, 2006; Weaver et al., 2007a) to nurture this by assisting drug-dependent offenders to establish meaningful social ties: in healing rifts and mending family relationships, for example, or brokering access to education, training and employment opportunities. This kind of advocacy and practical assistance can be instrumental in efforts to promote engagement and compliance in both criminal justice (Burnett and McNeill, 2005; McNeill et al., 2005) and drug treatment settings (Meier et al., 2006).

The adequacy of aftercare provision for drug-misusing offenders reaching the end of a prison-based treatment programme, completing a community sentence or leaving drug treatment (House of Commons, 2005; Fox et al., 2005; Audit Commission, 2004; Beynon et al., 2006) and the limited use of innovative strategies to promote compliance and behaviour change (e.g. the appropriate use of court review hearings and contingency management) (McSweeney et al., 2008) have also been raised as possible factors undermining the effective treatment and management of drug-dependent offenders in Britain.

In addition to the utility of using motivational interviewing techniques with substance-misusing offenders (Harper and Hardy, 2000), the research evidence from both criminal justice and substance misuse fields appears increasingly to encourage consideration of incentive-based strategies in an effort to secure compliance rather than an over-reliance on punishment-orientated ones (Hedderman and Hough, 2004; NICE, 2007). Historically, efforts to secure engagement and behaviour change with drug-dependent offenders have instead tended to be punishment-orientated in approach and involve imposing negative sanctions for non-compliance (see Marlowe, 2006, for a recent overview).
Despite the evidence supporting the effectiveness of contingency management strategies in drug treatment settings (Prendergast et al., 2006) that aim to reward compliance through a system of positive reinforcement – which can include clinical privileges, vouchers, monetary incentives and award draws – the approach is underutilised in UK drug treatment services. A recent national survey revealed that no English drug services currently apply contingency management models in a manner consistent with the evidence-based approaches adopted more routinely in the USA. Furthermore, the study suggested that any attempt to do so would represent a considerable change and challenge to the current culture of English services providing opiate substitution (Weaver et al., 2007b). The main barriers appear to be ethical and moral in nature as much as practical. Almost irrespective of the evidence demonstrating effectiveness (e.g. National Institute for Health and Clinical Excellence (NICE) guidelines), there is likely to be a fair degree of political resistance to any proposals put forward in Britain for adopting or developing innovative systems of incentives and rewards (also known as positive reinforcement) for drug treatment delivered via the criminal justice system.

Yet the correctional services do routinely use incentives and disincentives to secure forms of instrumental compliance from offenders (see Bottoms, 2002, for a discussion of the conceptual framework underpinning compliance). Perhaps the most notable recent example is the Incentives and Earned Privileges (IEP) scheme for prisoners. This enables inmates to earn additional privileges by demonstrating responsible behaviour and through participation in constructive activity. There are three broad levels of privilege: basic, standard and enhanced. In order to qualify for a standard level of privilege, for example, a prison or young offender institution could require prisoners to refrain from any involvement with controlled drugs and to cooperate with the MDT programme.

However, an earlier evaluation of the policy first introduced in 1995 focused on five establishments and found no significant overall improvements to prisoner behaviour and reductions in favourable perceptions of staff and regime fairness, relations with staff, consistency of treatment and progress in prison (Liebling et al., 1999). While there was some evidence that drug offenders (who were not themselves drug users) responded more favourably to IEP, organisational problems in the implementation of the scheme contributed to perceptions of unfairness, which served to undermine the legitimacy of IEP in the eyes of many prisoners.

Regardless of which particular approach is taken to promote engagement and compliance, research suggests that in order to enhance effectiveness, both sanctions and rewards need to be proportionate and administered with certainty in a swift, equitable and consistent manner (Bean, 2004; Marlowe et al., 2005b).
When considering what factors might impact on effectiveness in the UK it is important to note that Scotland still largely retains its social welfare ethos as the guiding approach to supervising and working with offenders. As a consequence, the Scottish pattern of enforcement in their DTTO pilots, for example, was markedly different from that in England, with more flexibility and less prescriptive guidelines regarding supervision and treatment requirements in the former (Ashton, 2003). This almost certainly contributed to lower breach rates, and to better retention, engagement, completion and recidivism rates. There is some qualitative evidence to suggest that Scottish practitioners and sentencers generally express fewer concerns about political interference, penal populism and being influenced by punitive rhetoric (Mclvor, 2004b; also see Millie et al., 2007, for a recent discussion on how these factors have affected sentencing practices north and south of the border).

The broader policy and practice context

While the past decade has seen a much welcomed and substantial investment in the range and availability of treatment options for drug-misusing offenders (but, by contrast, limited provision for alcohol misusers) (HMIP, 2006), the impact of these changes is not fully understood. Although a range of practical, ethical and philosophical objections have been raised about the shift towards increasingly ‘coercive’ measures for tackling the issues created by problem drug use and drug-related crime (Stimson, 2000; Finch et al., 2003; Hunt and Stevens, 2004; Parker, 2004), both the immediate and long-term impacts of these developments are still far from clear.

At the same time that these fundamental shifts in drug treatment practice are occurring, there are parallel concerns within criminal justice circles about the future of probation work in light of the contestability arrangements envisaged for the National Offender Management Service (NOMS), the longer-term implications of provisions contained within the Drugs Act 2005 and Criminal Justice Act 2003 (with their increased emphasis on coercion, enforcement and compliance), and the broader shift in the ethos underpinning the work undertaken by the correctional services with offenders: from rehabilitation to punishment and public protection.

Many of these developments can be traced to the ‘resources follow risk’ principle that has been used to justify the unprecedented levels of funding for drug treatment in recent years and forms one of the key tenets of the new offender-management model espoused by NOMS. The upshot of this is that drug treatment and correctional services professionals may increasingly be dealing with a client group at greater risk of relapse and recidivism. The complexity and challenges of this work should not be underestimated (see Burnett et al., 2007).
What other factors influence outcomes?

With the exception of the national evaluation of CJITs (and to a lesser extent work by the National Audit Office on DTTOs), we were unable to uncover any evidence about the cost-effectiveness and value for money offered by most UK interventions aimed at drug-dependent offenders.

It is important to stress that the evidence presented here on many of these interventions (particularly DIP, RoB, PPO schemes and British drug courts) was gathered as part of a piloting process; a period often bedevilled by considerable implementation and delivery issues. Clearly, the long-term viability of these measures will need to be judged on the outcomes that are achieved once they have become more established and have had the opportunity to learn from their experiences.
Chapter 7: Policy implications

There are, we believe, at least three broad policy issues of relevance to the problems associated with the treatment and supervision of drug-dependent offenders that emerge from the evidence considered as part of this review.

Managing expectations

First, we need to urgently inject a degree of pragmatism into debates about these issues and our responses to them. Educating politicians, the media and the public about the nature and challenges of working with such an intractable group, and managing their expectations around this, are likely to be difficult and ongoing processes. Many might regard reductions in drug use and offending behaviours (as opposed to abstinence and desistance) as merely half measures and a poor return on the considerable investment in drug treatment and criminal justice initiatives in recent years (Reuter, 2001; Savage, 2007). Yet both the criminological desistance (McNeill, 2004) and recovery literature (Gossop et al., 2003) are increasingly inclined to present the mechanisms by which people recover from dependent drug use and desist from offending in this way as processes, and not events that can easily be orchestrated. For instance, despite most aspiring from abstinence when contacting services, fewer than 10 per cent of Scottish drug users were found to be drug-free almost three years after accessing treatment (McKeganey et al., 2006).

In the context of desistance from crime, one only needs to glance at reconviction rates to appreciate this: two-thirds (65%) of prisoners are convicted within two years of release and a half (51%) of those under probation supervision (Cunliffe and Shepherd, 2007). Three-quarters (74%) of the user-offenders who accessed treatment as part of NTORS were reconvicted within two years (Gossop et al., 2006). The figure for substance misusers supervised by the correctional services is also 74 per cent (Howard, 2006). The reconviction rate for the more prolific users sentenced to DTTOs and DRRs is 82 per cent (Cunliffe and Shepherd, 2007). But this is not a problem unique to the UK; drug-dependent offenders in the USA have equally high rates of relapse and recidivism (Marlowe, 2006: 135).

However rigorous, intensive or intrusive our responses become, we need to accept that we can never totally eliminate or control for the risk of relapse and recidivism. Given the levels of support and supervision actually offered to drug-using offenders – less than two hours a month or 19 hours a year based on data from 344 CJIT clients in one area (Best, 2007) – can we really expect intermittent contact with a few well-intentioned professionals to bring about lasting change? On the other hand, there appears to be scant empirical evidence to suggest that becoming more rigorous in our approach to supervision would make it more effective (Hearnden and Millie, 2004). This issue goes to the very heart of a fundamental tension that exists in the
treatment and supervision of drug-dependent offenders today: balancing the need for flexibility in responding to a ‘chronic, relapsing condition’ while maintaining the credibility, authority and legitimacy of criminal justice responses (Rumgay, 2004).

Our intention in highlighting these issues is less about lower expectations than managing them in the context of unprecedented and ongoing change to the organisation and delivery of drug treatment and criminal justice supervision in Britain, an escalating prison population and an increasingly retributionist penal agenda, fuelled by punitive-populism (Burnett et al., 2007). Indeed, the Chief Inspector of Probation has warned in his latest annual report that rising caseloads, constant organisational change and insufficient resources relative to demand are likely to further undermine efforts to deliver effective forms of treatment and supervision (Bridges, 2007).

**GREATER CONSISTENCY IN POLICY MAKING**

Second, there is arising from this a need for greater consistency in the Government’s approach to the sentencing and management of drug-dependent offenders. The Coulsfield Inquiry (Esmée Fairbairn Foundation, 2004) – and more recently Lord Ramsbotham (2006) – expressed concern at the way politicians and policy makers send out mixed messages to the public and the courts about sentencing priorities. Provisions contained within both the Criminal Justice Act 2003 and the Drugs Act 2005 continue this trend. The police have been given increased powers to detect (and in the case of Class A drug using suspects, test) and arrest more people more quickly; the courts feel increasingly compelled to sentence and deal with them more severely; and the correctional services are instructed to place an ever greater emphasis on enforcement and compliance. By any reasonable assessment, these measures are inconsistent with any serious attempt to reduce or contain the highest prison population in Western Europe.

**CHANGING THE TONE OF THE DEBATE**

Finally, we need to somehow change the tone of the debate about our responses to the treatment and supervision of drug-dependent offenders. It would seem that proponents of the crime-driven drugs agenda have in many respects made a rod for their own backs. They continually play on public fears and anxieties about the threat posed by drug-related crime, stressing the need for increasingly draconian laws and police powers to divert an ever growing number of criminally involved drug users into treatment, and thus ease the burden on a burgeoning prison population. At the same time, however, the focus on enforcement and compliance further erodes discretion for those responsible for treating and supervising drug-dependent offenders. It also limits the options available to them for responding constructively to the inevitable lapses and instances of non-compliance that will occur with such an intractable group presenting with a chronic, relapsing condition.
The implications for programme retention and completion rates are obvious – as are the consequences for those failing to comply: just under half (49%) of all English and Welsh DTTOs during 2004 were breached, resulting in an immediate custodial sentence in many cases (44%) (Home Office, 2005: 54).

The study by the RSA Commission on Illegal Drugs, Communities and Public Policy (2007) highlighted how policy on dealing with drug use and drug-related crime was driven by “moral panic” and concluded that the main aim of policy should be to reduce the harm that drugs cause, and not to embroil more people in the criminal justice system. Increasingly, these new measures overlook the complex, dynamic and interactive processes involved in recovery, desistance and effective integration. Yet when these options fail to deliver the ambitious outcomes and on the scale expected, confidence in both drug treatment and the criminal justice system is likely to be further undermined and a backlash is inevitable.

Weaver and McNeill (2007: 8) have called for a renewed emphasis on promoting behaviour change by developing people’s strengths (rather than concentrating on their deficits). This could be done through facilitating positive life transitions and establishing constructive social ties. This, they argue, might empower them to look beyond the label of ‘drug user’ or ‘offender’ and begin to believe in their own potential and recognise the possibilities for change. This also requires us, as a society, to have some faith in the capacity of drug-using offenders to change, and to actively assist and enable them to achieve this goal.

We need to continuously promote the notion that the targeted supervision and treatment of some drug-dependent offenders can be a constructive and effective form of intervention and a vehicle for promoting and facilitating positive change. In the current climate there is a danger that the provision of treatment for drug-dependent offenders is justified as yet another surveillance tool to monitor compliance and manage risk. The consultation process for the new drug strategy provided us with an ideal opportunity to challenge this. It remains to be seen whether we have capitalised on that opportunity.
References


Annex A: Papers included in the review

Here we provide more details of the papers and evidence referred to in Chapters 4, 5 and 6 of this review. As noted earlier, in an effort to make some assessment of research quality, quantitative research studies were graded by using an adapted form of the Scientific Methods Scale, with the inclusion of an additional category below the level for expert opinion/policy analysis and systematic reviews. These studies were therefore graded along the following lines:

- Level 5: Random assignment of intervention and control conditions to units.
- Level 4: Measures of drug use/offending before and after the intervention in multiple experimental and control units, controlling for other variables that influence outcomes.
- Level 3: Measures of drug use/offending before and after the intervention in experimental and comparable control conditions.
- Level 2: Measures of drug use/offending before and after the intervention, with no comparable control condition.
- Level 1: Correlation between an intervention and a measure of drug use/offending at one point in time.
- Level 0: Peer reviewed qualitative studies, expert opinion, policy analysis, etc.

Our original intention was that studies for inclusion in the review would ideally be confined to those which reported on ‘before and after’ measures of drug use and/or offending with no comparable control conditions (level 2 of the Scientific Methods Scale) or higher. In practice this proved more difficult than we had anticipated. Although the use of such a scale to assess research quality has some shortcomings (see Hope, 2005, for a discussion) we feel that the exercise nevertheless reinforces one of the key findings to emerge from this review: the need for more rigorous and robust evaluations of programme effectiveness and cost-effectiveness.
<table>
<thead>
<tr>
<th>Source</th>
<th>Adapted SMS score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source</td>
<td>Adapted SMS score</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Source</td>
<td>Adapted SMS score</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Source</td>
<td>Adapted SMS score</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Source</td>
<td>Adapted SMS score</td>
</tr>
<tr>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Gossop, M. (2005) Treatment Outcomes: What We Know and What We Need To Know. Treatment Effectiveness Series No. 2. London: National Treatment Agency for Substance Misuse.</td>
<td>0</td>
</tr>
<tr>
<td>Source</td>
<td>Adapted SMS score</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>-------------------</td>
</tr>
</tbody>
</table>

* One element of the study scored 1.
<table>
<thead>
<tr>
<th>Source</th>
<th>Adapted SMS score</th>
</tr>
</thead>
</table>

10 One element of the study scored 4.
11 One element of the study scored 1.
<table>
<thead>
<tr>
<th>Source</th>
<th>Adapted SMS score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source</td>
<td>Adapted SMS score</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------------------</td>
</tr>
</tbody>
</table>

12 Elements will have ranged from 0 to 5.
<table>
<thead>
<tr>
<th>Source</th>
<th>Adapted SMS score</th>
</tr>
</thead>
</table>

13 One element of the study scored 1.
<table>
<thead>
<tr>
<th>Source</th>
<th>Adapted SMS score</th>
</tr>
</thead>
</table>

Elements of these studies ranged from 0 to 3.
<table>
<thead>
<tr>
<th>Source</th>
<th>Adapted SMS score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source</td>
<td>Adapted SMS score</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Source</td>
<td>Adapted SMS score</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Source</td>
<td>Adapted SMS score</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Source</td>
<td>Adapted SMS score</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>-------------------</td>
</tr>
</tbody>
</table>