This product is part of the RAND Corporation technical report series. Reports may include research findings on a specific topic that is limited in scope; present discussions of the methodology employed in research; provide literature reviews, survey instruments, modeling exercises, guidelines for practitioners and research professionals, and supporting documentation; or deliver preliminary findings. All RAND reports undergo rigorous peer review to ensure that they meet high standards for research quality and objectivity.
Tackling problem drug use

Jonathan Cave, Priscillia Hunt, Sharif Ismail, Ruth Levitt, Rosalie Liccardo Pacula, Lila Rabinovich, Jennifer Rubin, Kristin Weed, Beau Kilmer

Prepared for the UK National Audit Office
The RAND Corporation is a nonprofit research organization providing objective analysis and effective solutions that address the challenges facing the public and private sectors around the world. RAND’s publications do not necessarily reflect the opinions of its research clients and sponsors.

RAND® is a registered trademark.

© Copyright 2010 RAND Corporation

Permission is given to duplicate this document for personal use only, as long as it is unaltered and complete. Copies may not be duplicated for commercial purposes. Unauthorized posting of RAND documents to a non-RAND Web site is prohibited. RAND documents are protected under copyright law. For information on reprint and linking permissions, please visit the RAND permissions page (http://www.rand.org/publications/permissions.html).

The research described in this report was prepared for the UK National Audit Office.
Executive summary

The National Audit Office (NAO) is conducting a value-for-money study on the UK Government’s 2008 drug strategy, *Drugs: protecting families and communities* (‘the Strategy’). The NAO study, *Tackling Problem Drug Use*, focuses in particular on local delivery authorities’ capacity and capability to effectively tackle problem drug use through delivery of local services. As part of its value-for-money study, the NAO commissioned RAND Europe to conduct two work streams:

- a literature review on problem drug use, and
- a review of the evidence base underpinning the Strategy.

This report presents findings from our work on these two work streams.

**Reviewing the broader literature on problem drug use**

The Strategy focuses on problem drug use (PDU), and aims to improve knowledge of what works in supply and demand reduction, and our understanding of how delivery of local services can be achieved. These local services include treatment, prevention and law enforcement to reduce supply or tackle drug markets and drug use. In doing so, the Strategy settles on a definition of problem drug *users* (our italics) as “those using opiates (e.g. heroin, morphine, codeine) and/or crack cocaine”, but does not provide a definition of PDU per se.

**Understandings of PDU have changed over the last few years**

We find evidence that there have been significant changes in the way PDU is conceptualised – particularly in the non-peer reviewed literature emerging from the UK – over the past few years (especially since 2001-2). This has included growing acceptance in the UK that definitions of PDU should include references to drug type.

In general, though, there remains a good deal of uncertainty over what the most appropriate definition and measures of PDU may be, partly reflecting the range of dimensions along which drug use may be considered to be “problematic”. These dimensions are: (1) the *type* of drug involved; (2) the *frequency* or *pattern* of use; (3) *harms* or *outcomes* associated with drug use; and (4) *demographic* considerations associated with drug use (e.g. prevalence among youth populations).
There is little consensus in the international peer reviewed literature on what constitutes PDU
Each of the four dimensions of ‘problematic’ drug use listed above is a subject of debate in the international peer-reviewed literature, both within and between disciplines. In this study, we focused on research in the fields of criminal justice, economics, public health and epidemiology because they cover the areas the Strategy seeks to address (law enforcement, drug markets, treatment and prevention).

Understandings of what is problematic about PDU in the peer-reviewed literature are not uniform. There is no consensus on the types of drugs that should be included; in addition to those drugs explicitly considered under the Strategy, the peer reviewed literature includes references to cannabis, tranquilisers, amphetamines, psychotropics, alcohol and, in a few cases, tobacco. Frequency and pattern of use do not seem to be consistently regarded as criteria for defining PDU. Harms also do not appear to be decisive indicators of PDU - for some authors, any psychoactive drug use is viewed as problematic.

Measurement of PDU is a key area of contention
Definitional differences are reflected in the existence of varied approaches to measurement of PDU. Many of the peer-reviewed studies we looked at were prevalence studies. For US studies, the focus is on using health-related harms as proxies to help measure PDU – usually using data from nationwide surveys such as the National Survey on Drug Use or Health (NSDUH) and Monitoring the Future (MTF). For the UK peer-reviewed studies, the focus tends to be on data from agencies and bodies that regularly interact with drug users – Drug Action Teams (DATs), for example. Turning to the non-peer reviewed literature from the UK, there was broader acceptance of particular approaches to measurement – specifically the Multiple Indicator Method (MIM), and capture-recapture approaches for reaching populations less likely to be well represented in household surveys. Some recent studies have sought to combine the two methods in their analyses to validate prevalence estimates.¹

There is greater consensus on the definition of PDU in the grey literature from the UK
By contrast with the wider international literature, we find evidence of a significant convergence of academic opinion in the UK non-peer reviewed literature on PDU – namely, that PDU is defined in this literature by use of crack cocaine and/or opiates.² As with the international peer-reviewed literature, frequency and pattern of use are generally not regarded as central issues in these studies. However, in contrast to the international peer-reviewed literature, certain harms, and especially costly harms, from drug use are

¹ Triangulating data from a variety of sources to get a sense of “omitted” populations is likely to be the most robust approach currently. In particular, RAND’s Drug Policy Research Center has triangulated information from household surveys, treatment admissions, mortality data, and arrestees, adjusting for double representation across these data sets of some populations, to get a general estimate of the number of problem drug users in the US (as homeless individuals are represented in treatment data, arrestee data and mortality data, although not in the household survey; criminally involved are captured in arrestee data; and so on). A similar strategy using a variety of data systems that capture different “elements” of the problem could be used in the UK, as any one of these alone provides a glimpse of the problem among a particular type of user.

² The definition, however, does not specify if opiates include only illicit opiates or licit ones as well (such as morphine).
perceived as particularly important indicators of PDU. A number of the studies and reports reviewed identified the drugs whose use cause most significant and costly harms as opiates and crack/cocaine, which has led to a consensus that these drugs should be the focus of concern and strategy to tackle PDU. Those harms considered include mortality, mental health impacts and broader social impacts, including disrupted employment and education, and acquisitive crime.

The narrower focus in the UK on most significant harms may be useful, but also carries risks and drawbacks

The focus on harms and on the drugs that appear to generate the most harms is in many ways reasonable and in keeping with an approach supported by a scientific literature and increasing in profile in the field of drugs and substance abuse. That is, there is growing consensus for some around the need to focus resources on identifying and reducing harms, rather than pursuing a blanket approach to reducing drug supply or consumption. The clear emphasis on targeting a small number of high harm causing drugs or users could be a useful way of directing resources where there is most need, especially at a time when resources are scarce, in a field where delivery is complex and requires cross-departmental and multi-agency collaboration. However, there is a risk of circularity, whereby focusing on the drugs found to be associated with most significant harms and costs may risk excluding drug problems that have not so far been as well identified, recorded or quantified. This could be problematic if the excluded drugs and users cause harms that are as yet relatively unmeasured, in part through lack of attention to them. Further, the focus on these two types of drugs, and the associated health and criminal justice costs, may be more suitable for some departments than others, and for some local areas than others. While the Strategy explicitly notes that local areas need the flexibility to respond to local needs, and there are mechanisms in place for monitoring emerging drug threats, in the context of the narrow focus of the Strategy on PDUs it may be important to bear in mind these risks, protect flexibility and remain aware of the need to monitor potential new threats and harms.

Reviewing the evidence base underpinning the Strategy

The provision of an evidence base in a government strategy document is unusual and to be commended

Neither the previous drug strategy (HM Government, 1998) nor the updated Strategy (HM Government, 2002) provides separate evidence bases to support the information and actions therein. Instead, in places they provide individual citations as references to support information and proposed actions. The provision of a broad-ranging separate evidence base drawing on robust research is to be commended, and could provide an extremely valuable resource for those involved in addressing drugs problems in the UK. However, it would be even more useful if the information and evidence base was provided alongside

---

3 The updated evidence base provides a separate brief reference list as a bibliography, and includes a section on updating the evidence base about work in progress to improve the state of knowledge.
important contextual details and the implications of the information for those seeking to address drugs problems.

There are some clear gaps in the UK evidence base where more work is needed as they are only partially filled by research from elsewhere

The need to draw on evidence from elsewhere is acknowledged in the Strategy, and it is clear that there are many areas in which further research is needed to improve the state of knowledge in the UK. There are important moves in this direction with the establishment of The Cross Government Research Programme on Drugs (CGRPD) in 2008, following the commitment under the Drug Strategy 2008 to improve the drugs evidence base. The CGRPD is supported by a Strategic Board, overseeing the programme, and a Delivery Group, tasked with developing the Cross Government Research Strategy on Drugs. The Cross Government Research Strategy on Drugs is being developed to aide collaboration within government, and between government and other stakeholders, in developing a robust scientific evidence base for long and short term government drug policy. The strategy provides the policy context for the Cross Government Research Programme on Drugs, and describes key challenges and priorities for drugs research, from a government perspective. This work should make a welcome contribution and provide the impetus to address evidence gaps that respond to policy needs.

The strategy draws on robust evidence on drug treatment and drug-related crime

There are areas of real strength in the analysis and incorporation of material in the evidence base. For instance, the Strategy draws on a robust evidence base in the areas of what works in drug treatment and what works in reducing drug-related crime. With respect to drug treatment, cited evidence includes a wide range of peer-reviewed empirical studies, as well as robust (in some cases systematic) literature reviews, four of which are Cochrane Reviews. With respect to drug-related crime, a number of the studies that the Strategy draws on are randomised controlled trials (RCTs). Robust research is drawn on to commend high-dose methadone treatment programmes, although the Strategy acknowledges that much of this research depends on self-reported data.

Some other evidence and information is weaker and would benefit from more detail and linking more closely to actions and implications

In some areas there is less robust evidence available, and the Strategy relies heavily on grey literature rather than independent evaluations and peer-reviewed research. For instance, policy recommendations on prevention of PDU in young people are based on evidence drawn from a variety of sources – none of which are apparently peer-reviewed. In other places peer-reviewed sources are referenced, but at times would benefit from further context or detail, and in places it is difficult to relate the evidence base to implications for intervention and delivery of services. This creates a risk that interventions may overlook

---

4 It is intended that the CGRPD research strategy is published later this year.
5 The Cochrane Collaboration provides systematic reviews of the effects of healthcare interventions with the aim of improving healthcare decision-making globally. Reviews are published in The Cochrane Library. For information or reviews see http://www.cochrane.org/index.htm
potentially important determinants of success, including environmental factors, the importance of age in some areas such as wraparound care and the significance of gender in certain outcomes and in programme design to optimise those outcomes.

With respect to drug supply and law enforcement, the Strategy usefully includes descriptive detail on current activities. However, further evidence would be useful here. For example, partnerships with local agencies are clearly regarded as key to the success of drug supply and law enforcement initiatives, but without further detail on the types of local partner organisations involved, and the length or nature of their involvement, this information would be difficult for local delivery bodies to use to inform their actions. Thus, without further detail, context and linking to further action, some aspects of Appendix 5 may miss the opportunity to optimally inform delivery bodies and those seeking to draw on the information to guide design and implementation of interventions.

Final remarks

These observations are intended to inform the NAO’s VfM study on the UK Government’s Drugs Strategy. These observations relate to the definition of PDU used in the Strategy, the evidence base underpinning the Strategy, and the implications of these for those seeking to draw on the Strategy and its evidence base. In doing so, this report seeks to respond to a subset of questions within the NAO’s broader examination of local authorities’ capacity to deliver on the aims of the Strategy with respect to PDU at the local level.