Government and Public Sector Consulting

Report to the Department of Health and Ministry of Justice

Review of Prison-Based Drug Treatment Funding

Final Report, December 2007 (Published March 2008)

This report has been prepared for and only for the Department of Health and Ministry of Justice in accordance with the terms of our engagement letter dated 13th September 2007 and for no other purpose. We do not accept or assume any liability or duty of care for any other purpose or to any other person to whom this report is shown or into whose hands it may come save where expressly agreed by our prior consent in writing.

© 2008 PricewaterhouseCoopers LLP. All rights reserved. "PricewaterhouseCoopers" refers to PricewaterhouseCoopers LLP (a limited liability partnership in the United Kingdom) or, as the context requires, the PricewaterhouseCoopers global network or other member firms of the network, each of which is a separate and independent legal entity.



Contents

Sec	ction	Page
Acł	knowledgements	3
Exe	ecutive Summary	4
1	Introduction	10
2	Summary of findings	13
3	Implications for service provision	21
4	Commissioning, Funding and Performance management	29
5	Conclusion and next steps	42
App	pendix 1 – Summary of issues identified during the course of review	45
App	pendix 2 – List of participants in the Review	46
App	pendix 3 – Evidence of drug treatment effectiveness	51
App	pendix 4 – Local stakeholder consultation report	58
App	pendix 5 – Economic framework: outline of key issues	75
App	pendix 6 – Economic Modelling Framework	85

Acknowledgements

We would like to thank the members of the Steering Group, Expert Panel, and all those who took part in focus groups and interviews as part of this Review. (Please see Appendix 2 for details of participants.)

Executive Summary

Introduction

There are over 81,000 people in prison (annual turnover estimated to be 135,000 per annum), with over half of these thought to be misusing drugs according to interviews with senior prison staff. A subset of this group is defined as 'Problem Drug Users' (PDUs) i.e. those with a heroin or crack addiction according to the Home Office definition. Prison-based drug treatment caters for all types of drug misuse. The Secretary of State for Health and the Home Secretary agreed to an urgent review of how existing resources for drug treatment in prisons could be used more effectively. (The Home Secretary's responsibilities for prisons/probation passed subsequently to the Ministry of Justice.)

PricewaterhouseCoopers LLP (PwC) was appointed to undertake the review. The scope is described below.

Scope:

- The extent to which the present drug services provided for substance misusers in prison meet their treatment and reducing reoffending needs throughout their time in custody and in preparation for release.
- What options exist for ensuring all prisons are able to provide the minimum required standard of care for prisoners who need drug treatment
- What realistic, achievable and measurable outcomes could be set for the provision of drug treatment in prisons
- How current funding and arrangements for commissioning and delivery of prison drug treatment could be improved to ensure the provision of minimum standards within all prisons and maximise positive outcomes within existing resources
- Arrangements for the performance management of drug treatment within prisons and at a partnership, regional and national level.

Therefore to examine:

- The extent to which current service models, funding and commissioning arrangements are fit for purpose
- Whether addressing any identified deficits in current provision is essential (in terms of need and the legal requirements placed on PCTs and the prison service) or merely desirable (in terms of best practice)
- What range of existing service models appear to work best in terms of quality and cost-effectiveness
- Is any realignment of budget and target setting mechanisms necessary, and if so what would best support the use of these service models and any other recommendations arising from this review.
- What would be the optimum commissioning arrangements to ensure that services are coordinated and complementary and fit with NHS commissioning requirements and the new commissioning environment of NOMS
- How greater consistency and continuity between prison and community based provision can be achieved.

It was agreed that the review would include the mainstream estate and high security prisons, prisons for young offenders (aged 18-21 years), and women's prisons, but exclude juvenile offender services (for those aged 15-17 years) since treatment arrangements are the responsibility of the Youth Justice Board and fall outside of the National Offender Management Service (NOMS) drug treatment remit. Welsh prisons were also excluded except in relation to arrangements for prisoner transfers, since NHS Wales / the Welsh Assembly were not signatories to the review.

1. Approach

PwC began its work at the end of August 2007 and submitted the final report on 12th December 2007 as required. The team reported to a joint Steering Group, and also consulted a panel of experts identified by Department of Health (DH) and Ministry of Justice (MoJ). During the course of our work we produced a number of outputs which were shared with the Steering Group and experts who met or were consulted at a

number of pre-agreed points.

The work undertaken comprised:

- A review of documentary and research evidence and description of current service provision and commissioning arrangements to ensure the review team understood the complexities involved prior to making recommendations.
- An extensive stakeholder consultation exercise:
 - At national level we held interviews and group discussions with forty people identified with the Steering Group and designed to provide an overview of the issues from a variety of angles;
 - At regional level we held focus groups and interviews with a range of stakeholders in five prison areas selected with the Steering Group to provide a range of perspectives (Kent and Sussex, London, West Midlands, North West, and Yorkshire and Humberside).
 - At local level we visited eleven prisons across the five areas, and two high security prisons, meeting
 with a cross-section of prisoners, prison staff and senior management. We also held focus groups
 with ex-prisoners in three locations, and held telephone interviews with a range of local stakeholders
 including families and carers, primary care trusts, and the Probation Service.
 - A report of themes and findings was presented to the Steering Group and experts.
- The development of an economic framework, from a review of the literature from academic and
 government sources, to assess the costs and benefits from drug treatment for prisoners in relation to the
 economy, health, social and criminal justice systems. The results were fed into the wider project to guide
 the selection of commissioning, process and prioritisation options fro drug treatment programmes in
 prisons.
- An analysis of the additional or incremental costs that a PDU incurs over their lifetime in comparison to the average person. This indicates the potential savings, therefore, if intervention were immediately effective in reducing or eliminating problem drug use. Figures are provided for males and females at different ages.
- · Production of a final report.

2. Summary of findings

2.1 Strategic planning and commissioning

The government is currently revising its overarching drugs strategy. There is a NOMS drugs strategy, and an offender health strategy is currently out for consultation. However, we identified the need for a more focussed strategy for dealing with prisoners and offenders with problem drug use which balances the objectives and priorities of the Department of Health (DH), Ministry of Justice (MoJ) and Home Office (HO) and which sets out a framework for commissioning and performance. Commissioning arrangements are complex, with multiple agencies involved at regional and local level. There is no one body or individual holding overall responsibility and accountability for the treatment of drug users in prisons. Information systems and funding streams are not joined up, and there are constraints on how funding can be used to meet needs and achieve desired policy outcomes.

Our analysis indicates the need for a single, more focussed national strategy covering prisoner and offender related drug treatment of all types in both prison and the community. The strategy will need to clarify and prioritise the required outcomes, and introduce revised commissioning arrangements to facilitate the coordination of drug treatment services and ensure that best practice is followed. Funding streams should be reviewed to see if simplification or unification would better support effective commissioning. A national performance framework is needed which will require fit for purpose information and ideally a single information system. The Public Service Agreement published in 2007 forms the basis for this strategy.

Table: Drug treatment commissioning arrangements in the community and in prison

		Commissioning	Performance	Funding (£m)		
	,	responsibility	management	2006/7	2007/8	
Prison-based service	ces (main estate)					
CARATs	NOMS	NOMS	Area Manager/ NDPDU	25.7m*	25.7m*	
Intensive psychosocial drug treatment progs	NOMS	OMS NOMS		19.4m	19.4m	
Clinical (non IDTS)			Strategic Health Authority NOMS	11.3m	11.3m	
IDTS – clinical	DH	PCTs & DATs	IDTS Regional Steering Groups	11.2m	12.7m	
IDTS – non-clinical NOMS		NOMS NDPDU (feeding performance management information through to regional IDTS groups)		5m	6m	
Community-based t	reatment services					
Tier 1,2,3, 4 (Clinical and psycho-social interventions)	4 PTB/mainstream DAT nd funds (PCT and partnerships/PCTs/cial Local Authority Social Services		NTA /Strategic Health Authority / Government Offices/ROMS	PTB**: 385m Mainstream: 200m Total: £585m	PTB:398m Mainstream: 200m Total: £598m	
DIP delivery of enhanced Tier 2 level interventions including case management, prescribing (for tier 3) by CJIT staff	anced Tier 2 I interventions uding case nagement, scribing (for tier		NTA through quarterly reviews	178m***	149m***	

- * Excluding IDTS costs
- ** PTB = Pooled Treatment Budget

2.2 Service provision

With regard to service provision there has been considerable investment in case management and psychosocial provision over the past 10 years, including the development of pathways of care, and improved contract management. These services are valued by prisoners and demand exceeds supply. However, we found evidence of a lack of continuous joined up care within prisons. Variation in the volume and type of service, as well as different clinical practices causes difficulties in providing continuity and consistency of care both within and between prisons. We found evidence of a lack of effective targeting of programmes due in part to perverse incentives caused by Key Performance Targets (KPTs).

Furthermore, there has been a lack of research to provide evidence of efficacy of some of the case management and psychosocial programmes. Performance management has focused on volume of activity rather than quality and outcomes, so it is difficult to demonstrate value. In contrast there has been much

^{***} The figures for DIP funding indicate the total sum, only a proportion of which is directly spent on case management and treatment oriented interventions.

less investment in clinical services (clinical assessment, detoxification and maintenance prescribing) until the last few years, but there is more research evidence to demonstrate efficacy. There is a need for more research evaluating care pathways and combinations of treatments.

Whilst there is a paucity of research showing effectiveness, what is known is that drug treatment should be focused on polydrug use rather than having programmes tailored to specific drugs. Better outcomes are reported for clients receiving a combination of treatments, and time in treatment and treatment completion are associated with better outcomes. Aftercare support including access to wraparound services is also important (e.g. access to education, housing and related support, debt management services and employment preparation). There is research evidence concerning effectiveness, both in terms of health outcomes and in reducing re-offending for pharmacological treatment of opiate addiction through detoxification and maintenance prescribing, which should be supplemented with psychosocial treatment.

With regard to the use of resources we conclude that where these are limited, an effective strategy for provision needs to be based on existing evidence of what works. Programmes that are proven to work in prisons should be prioritised, whilst those where there is evidence of no effect should be withdrawn. However, there are a number of programmes where the effectiveness is uncertain; in this case it is there is a pressing need to observe their effects on outcomes, and maintain close performance management as it is likely that their success is as dependent on the way in which they are delivered as the actual intervention itself.

3. Provision options

In relation to provision we provide an outline of what we consider must be done to provide a minimum standard of care for all prisoners, based on what is humane, and on current evidence of efficacy. We also outline services with a good evidence base which should be provided when resources are available, and services that could also be provided but for which there needs to be pragmatic research to establish their efficacy (that is introduced cautiously, on a pilot basis with careful monitoring of outcomes).

We recommend the principle of 'allocative efficiency' whereby resources are realigned to ensure first that a minimum standard of care is delivered to all before resources are spent on the other services. Building on the above we also propose a notional revised care pathway to demonstrate what services a prisoner might receive at different stages during their prison stay.

Delivery of the minimum standard of care in all prisons is not likely to be possible within existing funding, so we have outlined a number of areas where we believe existing resources could be freed up, together with an approach to prioritising longer-term psychosocial treatments for maximum impact on the individual and society, based on lifetime cost savings in relation to areas such as morbidity, lost economic output, criminal justice costs and social costs. We suggest this could be used to guide the commissioning process at the strategic level, and in supporting professional judgement at the front-line when allocating scarce resources to individual prisoners.

4. Commissioning options

In relation to commissioning we describe the 8 key functions (see figure below) that make up a best practice commissioning cycle. We then describe how commissioning arrangements for prison and community treatments compare against this.

Having put a number of options for commissioning to the Steering Group and experts, showing which commissioning functions might be undertaken at national, regional and local level, we agreed with them two fundamental foundations for a revised commissioning structure:

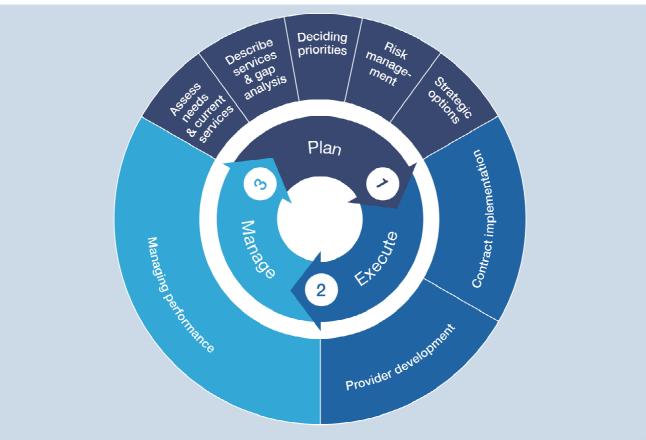
- The need for a National Strategy Group (NSG) for prisoner and offender drug treatment combining DH,
 MoJ and HO membership; and
- A strong regional performance management function to apply national strategy.

We agreed with the NSG that provided these are in place and operating effectively, the exact configuration of commissioning is less important.

5. Proposed next steps

- a) Establishing a National Prisoner and Offender Drug Strategy Group. The early tasks of this group, would be to establish the membership and terms of reference, and commission a series of projects to include the following:
- b) Articulating and agreeing the key outcomes for prisoners and on release; Demonstrate how the partner organisations will work together to successfully deliver those outcomes; Identify measures (key performance targets) which will help the partner organisations to understand how their performance contributes to the achievement of the outcomes and: Set out how current activities (initiatives) align with the key outcomes and design others to fill gaps. Initiatives would include:
- c) Establishing a set of National Minimum Standards and conducting a gap analysis to establish what is feasible within current resources, and to develop a plan for implementing the standards over the next 2-5 years.
- d) Identifying opportunities for achieving efficiency savings to invest in services. These may include, disinvestment in services not falling within the national minimum standards and provider development. A detailed business case should be produced to fully appraise the extent to which funds can be released, followed by consultation to ensure the potential impact of withdrawal and changes are fully understood before final agreement and implementation. The complexities in changing systems should not be underestimated. For example, existing contracts and TUPE requirements can make implementation a long term initiative.
- e) Examining the case for prioritising prisoners and offenders using the proposed economic framework. This assesses the impact on the individual and wider society of successful drug treatment for specific segments of the drug-misusing prisoner and offender population as an aid to commissioning at a strategic level, and to support professional judgement when allocating resources to an individual. The approach should be consulted on in localities, which may have different priorities.
- f) Developing the commissioning model at national, regional and local level. This would commence with a consideration of the roles for example of the Regional Partnership Board, support structures and skills required to support each level. A capability and capacity review and formal assessment by region would then be required, followed by an appraisal of the costs and value for money of adopting the local or regional commissioning model we proposed, and consultation on this. Governance structures and reporting arrangements will then need to be agreed.
- g) Developing a single health and a single criminal justice funding stream. In best practice commissioning, funding should follow commissioning; consequently the level at which these funding streams are aligned or merged will depend on whether a local or regional commissioning model is adopted. Funds should be merged to meet specific commissioning objectives.
- h) Agreeing how information sharing will be achieved to support both performance management and case management. The lack of a shared system, and the high costs and long lead in times to any future system, should not hold up progress in information sharing (i.e. it should not be on the critical path to improvement). Measures should be taken immediately to facilitate practical information sharing for example by issuing read-only rights to staff needing access to information on the same person, with suitable protocols for confidentiality.

Figure: Best Practice Commissioning



Plan Stage

Assess needs – through a systematic process that assesses and translates the needs of a resident population.

Describe services and gap analysis – Reviewing and defining the gaps of services through the perspective of areas of overuse, misuse or under use.

Deciding priorities – Using the available evidence of cost effectiveness and a robust ethical framework. Prioritise areas for commissioning.

Risk Management – Assessing the key risks facing the Commissioner and deciding on the strategy to manage it.

Strategic Options – Examine and appraise the options available to deliver the Commissioning priorities.

Execution Stage

Contract implementation – designing service specifications and contracts to put these strategic commissioning intentions into action.

Provider development – shape and support provider developments or introduce new providers to deliver the services required.

Performance Management Stage

Managing performance – monitor and manage the performance of providers against their contracts, especially against KPTs.

© PricewaterhouseCoopers

1 Introduction

There are over 81,000 people in prison (annual turnover estimated to be 135,000 per annum), with over half of these thought to be misusing drugs according to interviews with senior prison staff. A subset of this group are defined as 'Problem Drug Users'(PDUs) i.e. those with a heroin or crack addiction according to the Home Office definition. Prison-based drug treatment caters for all types of drug misuse, both for PDUs and for those misusing other drugs. PDUs tend to come into contact with the criminal justice system through committing crime in order to fund their drug habit. Dependence on heroin and/or crack cocaine is a chronic relapsing condition which can last a life-time. Consequently, although a custodial sentence provides an opportunity to treat the addiction, services should be provided end to end with continuity of care between community and prison. This is particularly important given high rates of suicide of PDUs on entry to prison, and of accidental overdose and death on release, as well as the potential to reoffend in order to fund a continuing drug habit.

Prison overcrowding, the consequent movement or 'churn' of prisoners between prisons, and the availability of illicit drugs within prison present challenges to providing a coherent drug treatment service in prison. Furthermore, the prison population is set to grow, and new policy initiatives, such as the introduction of indeterminate public protection (IPP) sentences, place further pressure on prisons. Such offenders cannot be released until they can prove they have addressed their offending behaviour within prison and thus reduced their risk to society.

A note on terminology: Throughout the report we use the term 'prisoner' to include those who are on remand and those who have been sentenced. Where we use the term 'offender' this relates only to those who have already been sentenced and can include offenders in prison or on community sentences. These terms are not applied consistently in the literature or in common parlance.

Over the past ten years there has been a significant increase in funding for drug treatments in prison. Case management and a range of accredited psycho-social programmes have been introduced in prisons to treat drug dependence, prior to which there was no real provision of this sort to treat drug addiction in a custodial setting. Responsibility for prisoners' healthcare, including the "clinical" aspects of drug treatment, transferred from the Prison Service to the Department of Health from April 2003. This led to a split between the commissioning and funding of interventions for drug treatment.

The process of devolving responsibility to NHS Primary Care Trusts (PCTs) was completed by April 2006, and is reported to have led to improved general healthcare in line with that provided in the community for those with long-term conditions such as asthma and diabetes. However, clinical practice in relation to drug misuse has been patchy, leading to clinical negligence claims being made by prisoners both before and after devolution of responsibility to PCTs. Clinical and psychosocial provision is also poorly joined up.

The Integrated Drug Treatment System (IDTS) went live in October 2007. It seeks to improve the volume and quality of drug treatment with a particular emphasis on the first 28 days in custody which reflects best practice and is better integrated with the community services to which most drug misusing prisoners will return. To date, 53 prison/PCT partnerships have received funding for enhanced clinical services during 2007/8 (out of a total of 149) and 29 have also received funding for enhanced case management and psychosocial care. However due to budgetary restrictions there are no plans as yet to roll out IDTS to all establishments, and across the prison service demand for both clinical and psychosocial services continues to outstrip supply.

Consequently, the Secretary of State for Health and the then Home Secretary agreed to an urgent review of the use of existing resources for drug treatment in prisons. The Home Secretary's responsibilities for

prisons/probation passed subsequently to the Ministry of Justice. There are considerable challenges to improving the delivery of services, including the diverse means through which drug treatment in prison and in the community is currently commissioned and delivered, and the wide range of interests and views on the subject.

PricewaterhouseCoopers LLP (PwC) was appointed to undertake the review. The objective of this review is to explore how existing resources can be utilised more effectively to ensure that services for people in prison meet their assessed needs matched to time spent in prison and that there is better integration between prison and community based treatment to ensure continuity of care for those entering and leaving the prison system. The scope of the review, as defined within the invitation to tender is given below:

Scope:

- The extent to which the present drug services provided for substance misusers in prison meet their treatment and reducing reoffending needs throughout their time in custody and in preparation for release.
- What options exist for ensuring all prisons are able to provide the minimum required standard of care for prisoners who need drug treatment
- What realistic, achievable and measurable outcomes could be set for the provision of drug treatment in prisons
- How current funding and arrangements for commissioning and delivery of prison drug treatment could be improved to ensure the provision of minimum standards within all prisons and maximise positive outcomes within existing resources
- Arrangements for the performance management of drug treatment within prisons and at a partnership, regional and national level.

Therefore to examine:

- The extent to which current service models, funding and commissioning arrangements are fit for purpose
- Whether addressing any identified deficits in current provision is essential (in terms of need and the legal requirements placed on PCTs and the prison service) or merely desirable (in terms of best practice)
- What range of existing service models appear to work best in terms of quality and cost-effectiveness
- Is any realignment of budget and target setting mechanisms necessary, and if so what would best support the use of these service models and any other recommendations arising from this review.
- What would be the optimum commissioning arrangements to ensure that services are coordinated and complementary and fit with NHS commissioning requirements and the new commissioning environment of NOMS
- How greater consistency and continuity between prison and community based provision can be achieved.

Further to this it was agreed that the review would include the mainstream estate and high security prisons, prisons for young offenders (aged 18-21 years), and women's prisons, but exclude juvenile offender services (aged 15-17 years) since treatment arrangements are the responsibility of the Youth Justice Board and fall outside of the National Offender Management Service's (NOMS) drug treatment remit. Whilst the Prison Service covers both England and Wales, DH covers England only, with health services in Wales being structured differently. NHS Wales / the Welsh Assembly had not signed up to the review, so PwC's report relates to England only, although we comment on the arrangements for prisoners transferred between prisons in England and prisons in Wales.

PwC began its work at the end of August 2007 and has undertaken a review of documentary and research evidence, an extensive stakeholder consultation exercise at national, regional and local level, developed an economic framework and conducted an options appraisal. The team reported to a Steering Group, and also consulted a panel of experts identified by DH and MoJ. During the course of our work we have produced a number of outputs which have been previously discussed with the Steering Group and experts, and which are included as appendices to this report.

This is the final report, in which we present a number of options for the commissioning and provision of prison-based drug treatment, in each case emphasising ways of strengthening partnership working which is vital to the successful treatment of PDUs. We would like to thank the Steering Group, Expert Panel, and all those who provided information, ideas and data during the stakeholder consultation (see Appendix 2 for list of those involved).

The review has been undertaken concurrently with a revision of the National Drug Strategy (NDS), which is led by the Home Office with the Ministry of Justice and other Government departments contributing. A further important development is the announcement in October 2007 of a new Public Sector Agreement (PSA 25) to 'Reduce the harm caused by alcohol and drugs'. Delivery of PSA 25 will be monitored through

five performance indicators which will be used to drive a reduction in harm to communities as a result of associated crime, disorder and anti-social behaviour.

The indicators will be supported by indicators housed within other PSAs that are crucial to reducing these harms. Within health and social care services, for example, the focus will be upon social inclusion with enhanced access and assertive outreach and retention within care. The PSA, together with the current revision of the National Drug Strategy, provides the policy context within which the recommendations of this report can be taken forward.

In a further development announced on 5th December 2007, three 'Titan' prisons, each holding 2,500 prisoners, are to be created, and by 2014 the total number of places in prisons in England and Wales will have risen to 96,000. This may provide opportunities to develop different ways of delivering drug treatment in prison, which we touch upon in the rest of the report.

2 Summary of findings

(See Appendix 1 for a summary of the issues presented in this section).

Strategic planning and commissioning

An examination of current planning and commissioning arrangements for prison-based drug treatment revealed that there is no overall strategy for dealing with prisoners and offenders with drug problems which balances the objectives and priorities of the Department of Health (DH), Ministry of Justice (MoJ) and Home Office (HO) and which sets out a framework for commissioning and performance.

As Table 1 below shows, commissioning arrangements are complex, with multiple agencies involved at regional and local level – however there is no one body or individual holding overall responsibility and accountability. There is a lack of formal authority to make decisions on commissioning priorities across the whole service pathway (from community, through prison and back into the community). Information systems are also fragmented (sometimes worsened by missing or lost records) which limits information sharing of the sort that is required to support commissioning decisions. Funding streams are fragmented and consequently there is lack of flexibility in how funding can be used to meet needs and achieve desired policy outcomes. There is no systematic approach to priority-setting given the resources available, nor is there agreement on whether reoffending or health outcomes take precedence.

Several different outcomes are used to assess drug treatment effectiveness. They tend to be grouped into three main categories:

- Drug misusing behaviour.
- Social functioning, including criminal behaviour.
- · Health, both physical and mental including risk behaviours.

Given limited resources, any strategy needs to be clear on the nature and priority of these outcomes in order to direct resources to their achievement. For example, if reduced reoffending by PDUs is the primary desired outcome, the case can be made for targeting further services on those most likely to reoffend. However, if the prevention of self-harm and of transmission of blood-borne viruses is the primary desired outcome, the case can be made for targeting further services on those most likely to self-harm regardless of impact on reoffending. In line with the lack of clarity of outcomes, the key performance targets (KPTs) used to manage the performance of drug treatment providers are based on volume of activity and not on quality and outcome which limits their usefulness. The recent Public Service Agreement (PSA), led by the Home Office and also covering MoJ and DH, gives a strong guide that the primary focus is on reducing re-offending rates:

PSA 25: to **reduce the harm caused by Alcohol and Drugs** which will drive further improvement in the level of effective treatment for drug users, for the first time extending this to focus on alcohol misuse, thereby reducing the harm to communities as a result of associated crime, disorder and anti-social behaviour.

Table 1: Drug treatment commissioning arrangements in the community and in prison

Table 1: Brag trea	Funding stream	Commissioning	Performance	Funding (£m)		
		responsibility	management	2006/7	2007/8	
Prison-based service	Prison-based services (main estate)				200170	
CARATs	NOMS	NOMS	Area Manager/ NDPDU	25.7m*	25.7m*	
Intensive psychosocial drug treatment progs			Area Manager / NDPDU	19.4m	19.4m	
Clinical (non IDTS)	DH	PCTs (public prisons) NOMS (private prisons)	Strategic Health Authority NOMS	11.3m	11.3m	
IDTS – clinical	DH	PCTs & DATs	IDTS Regional Steering Groups	11.2m	12.7m	
IDTS – non-clinical NOMS		NOMS NDPDU (feeding performance management information through to regional IDTS groups)		5m	6m	
Community-based t	reatment services					
Tier 1,2,3, 4 (Clinical and psycho-social interventions)	PTB/mainstream funds (PCT and Local Authority (social services) budgets)	DAT partnerships/PCTs/ Social Services	NTA /Strategic Health Authority / Government Offices/ROMS	PTB**: 385m Mainstream: 200m Total: £585m	PTB:398m Mainstream: 200m Total: £598m	
DIP delivery of enhanced Tier 2 level interventions including case management, prescribing (for tier 3) by CJIT staff	nhanced Tier 2 vel interventions cluding case anagement, escribing (for tier		NTA through quarterly reviews	178m***	149m***	

- * Excluding IDTS costs
- ** PTB = Pooled Treatment Budget
- *** The figures for DIP funding indicate the total sum, only a proportion of which is directly spent on case management and treatment oriented interventions.

Entry to and release from prison are high risk for PDUs. Drug-dependent prisoners are approximately twice as likely to commit suicide in the first week in custody as those who are non-dependent. Release from prison carries a risk of relapse as a person returns to their old social networks, and 1 in 200 (0.5%) of injecting drug users entering prison will overdose and die on release due to reduced tolerance to opiates. Therefore, any strategy needs to span community and prison provision, remove barriers to coordination on entry to and release from prison, and incentivise coordination through a performance management framework.

With the exception of clinical research, there has been a lack of research commissioned to examine which treatments and combinations of treatments are most effective in achieving health and reoffending outcomes for PDUs, and which represent best value for money (see also below). Consequently there is no agreement on the scale of need and unmet need for different types of service. Nevertheless there is a growing recognition that prison drug treatment needs to move away from a 'one size fits all' model to a more

personalised service that matches individual needs to treatment options. Drug misusing prisoners are not a homogenous group. Age, ethnicity and gender have all been found to have a significant impact not only on drug misusing behaviour but also on responsiveness during induction into drug treatment and effectiveness once in treatment (see Appendix 3). The recent NICE guidance on drug misuse (July 2007) provides some helpful indications which we have used in defining the options presented later in this report. However, it also brings into relief the gaps in evidence for treatments or interventions which has a strong face validity and are popular with prisoners, but for which there is ambiguity about effectiveness, and lack of supporting performance data to measure impact on outcomes. It is hard to justify continued investment in some of these interventions without further research and improved performance measures based on outcomes.

Our analysis indicates the need for a national strategy that clarifies and prioritises outcomes; revision of commissioning arrangements to facilitate coordination of drug treatment services within and outside prison and ensure best practice is followed; simplification or unification of funding streams; and a national performance framework supported ideally by a single information system, or by protocols to ensure effective information sharing.

It was beyond the remit of this review to examine the commissioning and provision of community services except in relation to transition arrangements into and out of prison. However, it is vital that the strategy covers drug treatment both in the community and in prison to ensure continuity of care. This was strongly supported by Steering Group members and experts involved in the review, and relates equally to commissioning and funding arrangements, the performance framework and supporting information systems, and the commissioning of research into treatment effectiveness.

Service provision

Whatever structural changes are made, strategic planning and commissioning decisions need to be based on evidence of what treatments, packages of treatments and treatment pathways are most effective for PDUs with diverse needs. Service provision comprises case management (including assessment and care planning), clinical services, and psychosocial services. There has been considerable investment in case management and psychosocial provision over the past 10 years, including the development of pathways of care, and improved contract management. These services are valued by prisoners and demand exceeds supply. However, there has been a lack of research to provide evidence of efficacy of some of these services, and performance management has focused on volume of activity rather than quality and outcome, so it is difficult to demonstrate value. In contrast there has been much less investment in clinical services (clinical assessment, detoxification and maintenance prescribing) until the last few years and there is more research evidence to demonstrate efficacy. We summarise the research evidence below, and then report on feedback provided by prison and treatment staff, and drug-misusing prisoners.

Evidence on treatment effectiveness

(See Appendix 3 for a review of research evidence and references. This has been supplemented by discussion with the panel of experts.)

Many prisoners are poly-drug users and abuse a cocktail of drugs, including opiates and stimulants. There is also a distinct racial and socio-economic component to drug choice and black and ethnic minority prisoners tend to favour stimulants over opiates. Experts consulted as part of this review all appeared to support a poly-drug approach as being most effective, therefore, rather than drug-specific approaches and programmes.

Case management

For prisoners with sufficient time in custody, CARATS construct a care plan following a comprehensive substance misuse assessment, which plans future interventions including structured one to one work, group work, and referral to short and longer-term programmes. Little research has been commissioned to examine the efficacy of CARATS teams that provide case management (assessment, care planning, review, transition and release planning and handover). Since performance data focuses on quantity of activity rather than quality and outcome, it is difficult to prove its effectiveness.

However, the rationale for having a case management function as part of drug treatment is strong and given that drug addiction is a chronic relapsing condition with complex interventions required, it is difficult to know how services could be delivered without case management and associated assessment. It is important, therefore, that case managers have the skills to support prisoners with a wide range of complex needs, and

have a range of services available when constructing care plans.

Clinical treatment

Currently, no pharmacological treatments have demonstrated success in treating either cocaine or amphetamine dependence. As a result, the Department of Health makes no recommendation about the pharmacological treatment of stimulant dependence and instead advocates the provision of a 28-day psychosocial programme for stimulant misusers. NICE guidelines on drug misuse similarly recommend a range of psychosocial interventions over pharmacological interventions, ranging from brief motivational interventions to contingency management and self-help. Consequently, clinical treatment focuses on opiate addiction.

Historically, detoxification is the most preferred method of clinical management of opiate withdrawal in prisons. Evidence suggests that detoxification is not effective as a means of achieving long term abstinence as a stand-alone intervention and is more effective when offered with a combination of other interventions such as maintenance prescribing and psychosocial support. A clear detoxification delivery plan exists for prisons but it is not delivered consistently and is often poorly managed leading to some recent clinical negligence claims by prisoners.

Replacement therapies, such as Methadone Maintenance Treatment (MMT) for prisoners and offenders have been found to produce positive outcomes in terms of both drug misusing behaviour and criminal behaviour. Buprenorphine has also been shown to have similar outcomes to MMT. Issues that need to be considered when prescribing maintenance therapy to prisoners is both the length of sentence and the availability of community throughcare to support the regime upon release from prison. Clinical staff also need to be trained specifically in maintenance therapy. Historically, UK prisons have not consistently offered opioid maintenance. Even where it has been offered, the means by which it is delivered has been inconsistent between prisons and prisoners. This is changing however, and opioid maintenance is a key part of the IDTS programme. Like detoxification, maintenance prescribing has been found to be most effective when combined with psychosocial interventions.

Psychosocial interventions

Both opiate and stimulant users are believed to benefit from psychosocial programmes, although the evidence base supporting these interventions is relatively weak. There are three main types of psychosocial intervention within prisons:

- CARATS workers are able to provide one to one and group-work in addition to case management;
- Short courses designed for prisoners with low to medium levels of dependency;
- Longer-term or 'intensive' drug treatment programmes.

Little research has been commissioned to examine the efficacy of the 28 day psychosocial intervention package offered by CARATS for PDUs. Similarly little research has been commissioned to examine the efficacy of short-term programmes (SDP and P-ASRO) which provide 20 sessions over a period of 4-6 weeks for prisoners with low to medium levels of dependency, and focus on harm-minimisation.

There is more research evidence of the efficacy of the longer-term programmes of which there are three main types: cognitive behavioural therapy (CBT), 12-step programmes and therapeutic communities. Whereas CBT and 12 step programmes refer to a range of intervention techniques, TCs in particular provide a therapeutic environment in which participants live together and receive a variety of treatment modalities, which can include both 12 step and CBT intervention types. All three have been shown to produce positive outcomes and are equally suitable for prisoners using different drugs and poly-drug users. TCs have received the most attention. There is some concern about the quality of research on these long term programmes and the impact of selection bias on findings and applicability to the UK prison population.

Since CBT, 12-step and therapeutic communities are all abstinence-based, experts stressed the importance of the timing of such interventions at the right time for the individual, when they are ready to be and remain abstinent. This will occur at different times for different individuals, and again emphasises the importance of skilled case management to determine appropriate timing. Also, NICE (2007) provides guidance on when particular programmes should be used – ie CBT should not be routinely offered to people presenting with

cannabis or stimulant misuse or those receiving opioid maintenance. However CBT *is* appropriate for the treatment of co-morbid depression and anxiety disorders for those with cannabis and stimulant problems, those who are abstinent or are stabilised on opioids.

Cross-cutting themes

Looking at the research as a whole, there are a number of cross-cutting themes. The literature offers no gold standard of drug treatment intervention but that there are different treatment effects in different settings. However better outcomes are reported for clients who receive a combination of treatment programmes eg methadone maintenance and psychosocial interventions. Time in treatment and treatment completion are associated with better treatment outcomes, and better outcomes are reported for clients receiving aftercare support after completing a programme or course of treatment, such as ready access to a CARATS worker, together with wraparound services such as education, housing and related support, debt management, and employment preparation.

Prison drug treatment services are structured around care pathways, where clients potentially receive a multitude of concurrent interventions eg MMT, CARATs support, as well as mental health inreach support, and education services. However, the research that has been undertaken evaluates specific interventions in isolation from the wider care process, making it difficult to assess how effective care pathways are. Similarly little is known about the possible cumulative effects of multiple treatments, and how different treatment episodes may interact or interfere with one another.

Special consideration is needed when devising care plans for women, black and ethnic minority prisoners and prisoners with accompanying mental health problems. Some of the evidence has shown that these groups tend to have difficulty accessing treatment. The competency of staff in developing therapeutic alliances and providing motivational interventions is an important aspect of treatment. Many PDUs have spent years in their addiction phase and have developed a variety of associated problems including health, social and offending related aspects. Those in prison have arguably the most severe problems which will be multi-faceted in nature and therefore the responses need to be equally complex and flexible to address individual situations.

Feedback from stakeholders

(See appendix 4 for a summary of feedback from stakeholders.)

Drug treatment benefits and success factors

From the staff and prisoner perspective, a number of benefits were perceived to arise from the delivery of drug treatment such as an increased awareness of the impact of drugs on health and behaviour and the acceptance of the need to change, health benefits, and improved self-esteem. It was seen as most successful when a holistic approach is taken to health needs, and wider needs such as accommodation, employment and ongoing support on release. Other success factors were:

- · Care plan and treatment tailored to the needs of the prisoner
- Frequent contact with and access to CARAT staff
- Enthusiastic, non-judgemental, approachable staff (clinical, psychosocial and prison)
- Multidisciplinary teamwork in delivering programmes including prison officers
- Prisoners acting as peer supporters
- Throughcare and aftercare in place after a programme ends.

Clinical services, and treatment for opiate vs stimulant users

Prisoners commented on the variation in detoxification treatment times in different prisons, and on the attitude of some clinical staff which can impact negatively on their self-esteem. There was a feeling that those people abusing opiates got more treatment than stimulant users due to pharmacological treatment focusing on opiate addiction (for valid reasons), and the perception (we believe borne out in practice) that they were given priority over other drug misusers for the limited number of places on longer-term intervention programmes, based on the more severe consequences of self-harm (overdose, blood-borne infections etc).

CARATS and care planning

Prisoners valued contact with CARATS staff. CARATS staff were reported to be readily available in some prisons (not necessarily those visited during this review), whilst in others prisoners perceived CARATS to be scarce, with some saying they waited weeks to see a worker. A lack of treatment rooms led to a lack of privacy when staff were discussing user needs. In addition, there were reported to be a lack of offices to allow for clinical and psychosocial staff to be collocated and form teams.

With regard to care planning, due to staff shortages, the availability of places on suitable programmes, short sentences, and the churn of prisoners between prisons, such continuity can be difficult to achieve. Where prisoners are able to get on to a programme, some of those interviewed felt there was little to support them on completion either in terms of access to a CARATS worker, or wraparound services to keep them occupied and build a positive future.

Service variability and coordination

The variability in the type and volume of clinical and psychosocial treatments provided in different prisons was reported to present particular problems in continuity when prisoners transferred between prisons. This is a particular problem for women and young prisoners since there are fewer prisons.

Within prisons, because clinical and psychosocial services are funded, commissioned and provided separately, this can lead to poor coordination and teamwork in spite of the intention to provide coordinated care. The Integrated Drug Treatment System (IDTS) is a new pathway, designed to introduce a coordinated package of clinical and psychosocial care during the first 28 days on entry to prison and this will help to integrate clinical and psychosocial assessment and provision and throughcare into the community. It is too early to judge whether IDTS has or will be successful although there is strong support from all stakeholder groups for the principles of IDTS. However, fewer than half of all prisons currently have IDTS and there is currently no funding to extend implementation to the others.

Transition

With regard to transition between community and prison, these services are funded and commissioned separately, and provided by separate teams; CJITs or 'DIP teams' in the community; CARATS in prison. The teams use different assessment tools. The Drug Intervention Record is designed to enable key information to be exchanged between teams when a person enters and leaves prison, however this is in a paper-based form and we found evidence of forms being lost or arriving too late so that work is duplicated. There is no electronic information system which is currently used to assist information sharing. We found examples of effective, well-managed transition arrangements between community and prison and out again, although these were rare.

Prisoners and prison and programme staff commented on the need to avoid Friday night releases which make continuity of care difficult as the community team is not set up to respond to them, as does the unplanned release of remand prisoners which is beyond the control of prisons and treatment providers. They emphasised the need for support from CJITS and the Probation Service, especially in the immediate period after release, and for the involvement of peer supporters post-release and engagement with family, partners and close friends. Where IDTS is being implemented additional CARATS resource has been included to assist with transition planning, although the impact on community services of IDTS in terms of larger numbers of prisoners being released on methadone maintenance is unknown.

Wales

We were asked to examine issues arising for Welsh prisoners being accommodated in English prisons. North Wales has no prisons and South Wales has no full Category B prisons. Consequently these prisoners go to English prisons, mainly in the south of the country. The Area Drug Coordinator for Wales was not aware of any transition issues unique to Welsh prisoners in English prisons. He felt that the issues, such as short notification of release date to CJITs, and the slow transfer of information between teams, were the same for Welsh prisoners moving backwards and forwards across the border, as they were for prisoners elsewhere.

Coordination with alcohol, mental health, and wraparound services

Alcohol and mental health services are also funded commissioned and provided separately from drug treatment (through PCTs). With regard to mental health, there is a particular challenge to coordinate

services for those drug misusers at high risk of suicide or self-harm. Wraparound services such as employment preparation, housing advice and debt management (through prisons) are also provided separately. A prisoner may be receiving several programmes (eg a psychosocial programme, other behaviour package, and mental health inreach) with potential duplication of effort.

Tailoring, targeting and performance indicators

In order to access a short or longer-term DTP, prisoners must be assessed by the CARATS worker as needing it. They may then wait for a place, and/or be moved to another prison providing a suitable programme. However, the stakeholder interviews conducted during this review indicated that in spite of staff effort, treatment is not necessarily tailored to the needs of the prisoner, or targeted at those most in need. Rather, it may be based on what is available at the time in each prison.

Key performance targets are based on volume of activity rather than quality or outcome and some staff taking part in the reveiw, under pressure to reach output based key performance targets (KPTs), reported selecting programme users based on their availability to complete the programme rather than on severity of dependence and timeliness for the individual. For example, the Prison Service should achieve 5,923 drug treatment programme completions (2006/7), and CARATS should ensure 52,499 prisoners receive a completed substance misuse triage assessment (2006/7). There was strong support from all stakeholders for the introduction of KPTs based on quality and outcomes.

High security prisons

As well as looking at the main prison estate, we visited two prisons and spoke to the national offender health lead and area drug coordinator for high security prisons. High security prisons appear to have many of the same problems as those in the main estate. We were told that it can be difficult to recruit CARATS staff due to the 12 week wait for additional security clearance after someone has been offered a job. We understand the process has recently been reduced to 6 weeks although the additional work presents a pressure to the service. One longer-term CBT programme is offered which is specific to high security prisons (FOCUS). Like similar programmes in the main estate the course appears to be valued, but there may be little aftercare available. More worryingly, one of the prisons visited currently had no detoxification service available, and reported difficulty in getting the PCT to make the resources available.

Private prisons

We held one interview with a private prison Controller to ascertain whether there were any lessons to be learned from their experience. From that limited encounter we could identify little distinction between the private prison and the main estate. They were also encountering difficulties in engaging the PCT to access funding for detox services. One difference was that the Controller felt they had good links with the community since they had a relatively large CARATS team. Each CARATS worker held a caseload for a particular area from which prisoners are received (eg North Wales), so were able to establish links with the DIP teams and rehab workers to facilitate release planning.

Other gaps in provision

- Adequate staff support to address mental health issues within the prison based population (mentioned by prison clinical staff),
- Need to address health needs of users in a holistic way e.g. full screening as a means of getting them to take responsibility for their wellbeing,
- Non-English speakers and those with literacy problems thought to have unequal access to treatment,
- Post release planning issues, particularly in relation to housing assistance.

Although beyond the scope of this review, consistent feedback also pointed towards the need for an (accredited) alcohol treatment programme. This was reiterated by a range of stakeholders including prisoners. Two women serving life sentences in Holloway for example had set up their own support network through Alcohol Concern and had been deeply frustrated about the lack of provision prior to that.

Conclusion

Our analysis indicates the need for a national strategy covering drug treatment of all types in both prison and

the community. It will need to clarify and prioritise the required outcomes; and introduce revised commissioning arrangements to facilitate coordination of drug treatment services and ensure best practice is followed. Funding streams need to be simplified or unified to support effective commissioning, and a national performance framework is required, which will require fit for purpose information, and ideally a single information system.

Where there are limited resources, an effective strategy for provision needs to be based on evidence of what works. Programmes that are proven to work in prisons should clearly be prioritised, whilst those where there is evidence of no effect should be withdrawn. However, there are a number of programmes where the effectiveness is uncertain; in this case it is not justifiable to invest large amounts of resources on the provision of these services, but instead introduce them cautiously, observing their effects on outcomes, and maintaining close performance management as it is likely that their success is as dependent on the way in which they are delivered as the actual intervention itself.

There is research evidence demonstrating the effectiveness of the pharmacological treatment of opiate addiction through detoxification and maintenance prescribing, which should be supplemented with psychosocial treatment. There is also research evidence of the efficacy of psychosocial treatment for stimulant users and for long-term psychosocial programmes for both opiate and stimulant users and polydrug users. More research is needed into CARATS, short-term programmes, and the cumulative impact of a variety of services provided along a pathway. Drug treatment should be focused on polydrug use rather than having programmes tailored to specific drugs.

Services were appreciated by prisoners although demand for each type of services outstrips supply. Although pathways of care have been designed, we found evidence of a lack of continuous joined up care within prisons, and the variation in the volume and type of service, as well as different clinical practices causing difficulties in providing continuity and consistency of care both within and between prisons. We found evidence of a lack of effective targeting of programmes due in part to perverse incentives caused by KPTs based on volume of activity rather than outcome.

In the next two sections we provide options for the way forward. We start with service provision, since this will inform the choice of commissioning structure and the way in which diverse funding streams might be aligned or merged.

3 Implications for service provision

Introduction

In this section we address three key questions:

- What must be done to provide a minimum standard of care for all PDUs in all prisons? Within this group
 we include services where failure to provide care would be considered inhumane, and where there is
 already a strong evidence base of efficacy in relation to reduced self-harm, and reduced re-offending.
- What **should** be provided in addition? We include services with some evidence base, which could be provided on a prioritised basis where resources are available.
- What could be provided? We include services where the evidence base is as yet weak or non-existent
 (as opposed to evidence of ineffectiveness) and where investment must be linked to careful analysis of
 impact and ongoing delivery.

The principle in applying the above is that if people are unable to receive the minimum standard of care because resources are being spent on services in the 'should' or 'could' category, there is a clear implication that resources should be shifted. In commissioning terms this is 'allocative efficiency'.

When more evidence becomes available of the efficacy of a treatment or programme, it should move up from could to should, and should to must.

Dependence on heroin and/or crack cocaine is a chronic relapsing condition which can last a life-time. Although a custodial sentence provides an opportunity to treat the addiction, services should be provided end to end, with coordination between community and prison. Therefore, a prison sentence is not always the right time to offer a full gamut of interventions - it may however be a critical time to offer someone help. Effective assessment and case management can help determine this.

Services should be tailored to the needs of the individual which includes providing the right treatment at the right time and in the right place to be effective.

Sources of information and options: The options below are based on the review of research evidence, stakeholder feedback including that from the Steering Group and Expert Panel, and examples of good practice and innovation encountered during fieldwork.

What must be done to provide a minimum standard of care for all PDUs in all prisons?

What might minimum standards comprise?

Defining a set of minimum standards will be an early task for a national strategy group. However, using the evidence available to us, the advice of various experts (sometimes conflicting) and applying the principles of humane treatment and services with a strong evidence base, we suggest the following be considered:

• The need to provide the same 'front end' on arrival in prison for all prisoners - to assess, stabilise and prevent self-harm. The IDTS model indicates this should last for the first month.

- All to receive a holistic assessment of needs and a matching care plan.
- The care plan should aim to be holistic including psychosocial inputs and preferably also wraparound services, alcohol and MH inputs.
- The NICE guidelines for detoxification should be implemented, and rapid access maintenance prescribing
 made available in all prisons, which should remain available to those prisoners who continue to inject
 while in prison. The latter will also allow prisoners on maintenance programmes to be moved more easily
 between prisons
- Measures to reduce the transmission of blood-borne viruses, such as screening and vaccination.
- The minimum psychosocial input should be ongoing case management, with particular attention on the period leading up to release, and to an effective handover and follow-through into the community. The level of input may vary with the severity of addiction and complexity of the prisoner's needs.

The danger of litigation from prisoners on indeterminate public protection sentences has been raised as a concern. This issue is covered under 'prioritisation' in a later section.

Issues and implications

The minimum standards suggested above imply greater expenditure on clinical treatment facilities, replacement therapies and training, and the introduction of an out of hours and weekend service, to ensure prescribing can be provided to prisoners released during these times.

They also imply an increase in the numbers of CARATS staff, with the possibility of introducing morning and evening shifts to increase operating hours and therefore availability. The skill level of CARATS staff needs to be raised to ensure they can provide effective case management to PDUs with diverse and complex needs. The KPT for CARATS needs to change from a numerical target for assessment, to a set of indicators that monitor the quality and timeliness of case management tasks. A minimum benchmark for CARATS is needed eg X workers per 100 PDUs based on an agreed caseload. However, apart from the short interventions outlined in the NICE guidance, there seems to be little evidence to support the use of resources in CARATS workers offering any more psychosocial input.

Does this imply that IDTS in its current form should be implemented in every prison? Issues to consider are:

- The model only went live in October 2007 and has yet to be evaluated.
- To implement it in all prisons is not achievable within current funding judging from costing estimates provided by DH and MoJ for the clinical and psychosocial elements in 2006/7 and 2007/8.
- Some stakeholders have indicated to us that IDTS encompasses what should be happening anyway and
 also that the funding for IDTS could go further if IDTS allocations were to be adjusted to take account of
 existing resources.
- IDTS is a short-term intervention and does not address the needs of prisoners on longer-term sentences. It is also perceived by some to benefit opiate users more than stimulant users.

Continuity of care on entry to and release from prison would be facilitated by DIP and CARATS teams being commissioned as one combined service. This could also improve productivity and value for money and would be facilitated by the merging of criminal justice budgets across prison and community. Indeed it is understood that those involved in revising the National Drug Strategy are examining the possibility of merging the DIP budget (£150m) with the prisons and DRR budgets.

A more radical solution would be to commission highly skilled drug treatment teams under strong leadership, able to cater for a variable population across community and prison. This would need to encompass CJITs, CARATS and clinical functions under a strong leadership. The benefits would be continuity of care; ability to tackle the range of needs including opiates, stimulants, alcohol and incorporating or liaising with mental health inteach services.

What should be provided in addition to the minimum standards, when resources are available?

We include here services with some evidence, albeit usually generated in very different settings to UK prisons. According to the evidence presented in section 2, these comprise:

- Longer-term DTPs (12-step, CBT and services delivered in a TC) which have been shown to provide benefits, and are suitable for all including those with poly-drug use.
- Of these CBT *is* appropriate for the treatment of co morbid depression and anxiety disorders for those with cannabis and stimulant problems, those who are abstinent or are stabilised on opioids.
- The NICE guidance (2007) recommends the use of behavioural family/couples therapy work and contingency management.
- Training of clinical staff and mainstream uniformed staff within prison to address issues of empathy and support raised by prisoners who took part in the consultation exercise. Such training is already available in IDTS prisons.

Rehab hostels: The greater use of rehabilitation hostels are indicated to be effective in preventing relapse and self-harm in the NICE guidelines (July 2007). These could be used both for those released from prison as a step-down facility, where intensive work on housing, family work, and preparation for employment can also take place. A PDU might also be more easily released early with a tag if they were to go to a hostel.

Issues to consider

These DTPs are expensive and places need to be allocated to those who are ready to benefit. Since they are abstinence-based, prisoners need to be ready to be abstinent and to continue being abstinent. It may be that a prisoner will not reach this point whilst in prison, and may not be ready until post-release. Consequently these DTPs need to be delivered in both prison and community settings, for instance in rehab hostels.

The DTPs also need to be followed by aftercare in order to maximise their effectiveness. If aftercare cannot be provided, the impact on the prisoner reduces in the months that follow which represents poor value for money, although prisoners may benefit greatly at the time. For this reason, the availability of aftercare and time to release (so that they can use it as a platform for recovery) are also important factors in allocating places.

Clustering of prisons, whereby services are provided to serve a combined prison population could help to reduce the cost of providing the longer-term DTPs. This is already operating in Sheppey, and less formally in regions like Yorkshire where transport links between the main cities and prisons are good. London local prisons also tend to have arrangements with particular prisons elsewhere. Clustering would need to work across PCT, LA and Probation Trust (PT) boundaries. The newly announced Titan prisons, which we understand will have a number of separate blocks, also provide an important opportunity to provide a continuous pathway of care.

When faced with prioritising prisoners to receive scarce places on programmes, an ethical framework for prioritisation would help to support professional judgement. We propose a means of prioritising prisoners later in the report.

What could also be made available?

We include services where the evidence base is as yet weak (as opposed to evidence of ineffectiveness). Once good or strong evidence is available, such treatments would move into the 'should' or 'must' categories. According to the evidence presented in section 2, these comprise:

- The CARATS element of the IDTS programme.
- Short-term programmes SDP and PASRO.
- · The introduction of needle exchange in prison is a controversial issue. However, we understand it is

common practice in parts of Europe. We understand that those people who inject in prison share injecting equipment more often and with more people than they do in the community.

 Drug free prisons: Reducing drug supply in prisons is a major issue and mandatory and voluntary drug testing incurs significant expenditure. Not all prisons could be drug free but there could be voluntary facilities which had higher security and more extensive personal search requirements.

Issues to consider

More research is needed into the efficacy of the short-term programmes (SDP and P-ASRO). A review of the literature on the benefits and practicality of introducing needle exchange within prison is also needed, together with an examination of prisons which already provide this service.

The creation of drug free prisons is an expensive option and was not considered to be practical in the current resource climate. However, the recently announced creation of 3 new Titan prisons, which we understand will comprise separate blocks within a shared compound with shared services, presents an ideal opportunity to consider building designs and operational arrangements that would facilitate the creation of environments that can be kept genuinely drug-free.

Option for notional revised care pathway within prison

Using the services outlined in the previous pages a notional new care pathway is proposed below. Further consultation should be undertaken to refine such a pathway, and its introduction is unlikely to be possible within current resources. It would require, for example, more CARATS staff to undertake case management/key working, and more wraparound services during the middle of the sentence. If resources were increased, or significant realignment to take place, it would also take time to put in place.

Entry to prison: A combined DIP and CARATS service would assist with continuity of care on entering (and release from) prison. The teams would use the same assessment tools and share information using a common information system. In Wales DIP workers offered to give CARATS read-only access to their data systems which they could access via the internet. This had proved relatively easy to implement.

First 28 days: As described under 'minimum standards' above, all prisoners would receive the same core services on arrival to stabilise them and prevent self-harm. Based on the IDTS model, this will include assessment, clinical inputs to stabilise the prisoner and provide maintenance prescribing or a detoxification pathway, measures to reduce the transmission of blood-borne viruses, and a care plan. As a minimum this requires that rapid access maintenance prescribing be available in all prisons. Where resources are available behavioural family/couples therapy work and contingency management should also be provided.

Mid-sentence: During the middle of the sentence for those with sentences over a month, the care plan would include access to peer support, CARATS and clinical inputs, working in coordination with other prison services (education, employment, debt management, mental health). Methadone maintenance would continue for prisoners who continue to inject in prison, but with careful management and review.

For those PDUs ready to be abstinent, they should have access to a range of intensive DTPs. These include the 12 step programme for those with severe dependence both to opiates and/or stimulants; CBT for opioid dependence or co-morbidity, and therapeutic communities for all those with significant drug misuse problems as indicated in the NICE guidelines (July 2007). However, in the absence of aftercare to support a prisoner on completion of a DTP, placing a prisoner on such a programme should be reviewed in the context of scarce resources.

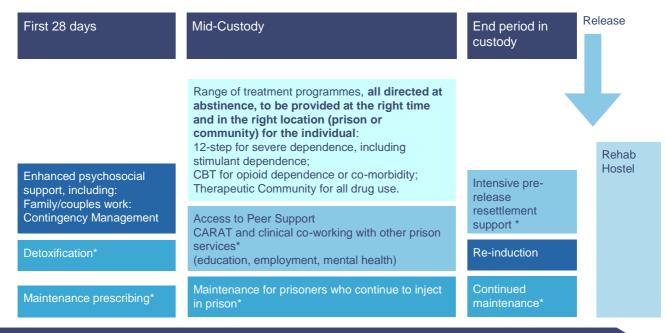
End period in custody: All prisoners must receive intensive pre-release support from CARATS and wraparound services designed to ease their transition into the community, ensure continuity of care and prevent relapse. Retoxification is an option, based on professional judgement for those PDUs deemed likely to relapse on release in order to prevent accidental overdose and death.

Release: Where resources are available, prisoners who were deemed to benefit should be released to a rehabilitation hostel post-release in order to prevent relapse and self-harm, as indicated in the NICE guidelines (July 2007). Intensive work on housing, family work, and preparation for employment can take place at this stage.

Figure 1 below shows how the pathway might work.

Figure 1: Notional Prison Drug Treatment System

(* denotes minimum standard)



Combined CJIT / CARAT Team providing case management (ie 'Keyworking')*

How could resources be freed up within the existing system to help pay for minimum standards for all?

It is beyond the scope of this review to provide detailed costings of the impact of the suggested changes above. However, we outline here some areas where we think resources could be freed up.

Follow the principle that if people cannot receive the minimum standard of care because resources are being spent on services in the 'should' or 'could' category, there is a clear implication that resources should be shifted. In commissioning terms this is 'allocative efficiency'.

In those prisons where IDTS is being implemented, explore the possibility of reducing IDTS funding to take account of pre-existing resources in order to support the achievement of minimum standards for all PDUs in all prisons.

CJITs and CARATS teams report a lack of capacity to conduct effective transitional handovers, although cultural factors may also be present. The two teams use different assessment forms, and the Drug Intervention Record designed to enable information to be passed from one to the other is paper-based and may get lost. These problems could be overcome by the creation of joint CJIT/CARATS teams, or teams that also include clinical staff. Based on experience in other sectors, a productivity gain of 10% minimum could be expected, for example through eliminating duplication of effort. It would also potentially make it easier to keep track of remand prisoners with unplanned releases.

The creation of a single criminal justice funding stream combining prison psychosocial and DIP funding would facilitate this and provide a more efficient basis for co-commissioning generally. As previously stated, the inclusion also of clinical treatment funding for prisons and community provision would create yet more efficiencies.

Contract specifications focused on outcomes, and tighter performance management of providers is required in order to hold account for the delivery of the terms of the contract.

The involvement of providers in the strategic commissioning process is good practice and has many benefits for commissioners. Our work with local authorities indicates that providers may be prepared to reduce prices (without compromising quality) if they have more certainty about future commissioning intentions, and longer-term contracts. It is also important to introduce contestability to ensure best value for money.

Incorporating drug treatment messages into other programmes provided within prison as an alternative to some of the work of CARATS group work, and the short-term DTPs (SDP and P-ASRO). There is also a need to rationalise and coordinate existing programmes to ensure there is no duplication of effort eg drug, alcohol, mental health, education programmes.

Mandatory drug testing (MDT) was not part of this review; however it was felt appropriate that we would comment if we found any evidence of an impact on drug treatment. Our analysis of the views of national and regional stakeholders indicated support for anonymised testing to provide an indication of the level and type of illicit drugs that were being taken by prisoners (which would aid the planning and commissioning of services). However, staff and prisoners generally felt that MDT should not be used to monitor the behaviour of individuals since it was open to manipulation (with clean urine often being used as a currency), and other problems such as recreational users of cannabis moving to opiate use to avoid detection.

We suggest that longer-term DTPs (12-step, CBT and use of TCs) should be used where resources are available. Given that sufficient resources may not be available to treat all those prisoners who are ready for such programmes, we propose below a method for supporting professional judgement in prioritising prisoners.

Option for prioritising longer-term intensive psychosocial treatments

Context

Early in the review, we explored with the Steering Group and Expert Panel the segmentation of the prison population via a number of characteristics such as age and gender. There was a general acceptance among Steering Group members, experts and others interviewed of the need for some form of prioritisation in relation to the more expensive interventions, such as intensive CARATS monitoring and review, the 12 step programme, and therapeutic communities. We were advised that segmentation might be the basis for that, but that it should not be used until after the first 28 days in custody. We propose below an approach to prioritisation based on segments of the population used within an economic model that considers a range of impacts of drug treatment on the individual and society.

Prioritisation model

We propose the introduction of a rational prioritisation model based on government policy and the outcomes required. At present, desired outcomes include reducing reoffending, reducing health problems (accidental death, suicide, transmission of blood-borne viruses), and improving future life chances (employment, earnings).

The choice of indicators has been determined by the evidence base which identifies groups who require particular attention, together with the development of an economic model which looked at the expected costs and benefits to society, the individual and the state from certain areas of costs.

The prisoner characteristics identified through the evidence review (see Appendix 3), our early work on segmentation, and an initial broad brush economic impact assessment were discussed with the Steering Group and with later on with the regional workshops. Among PDUs the prioritisation groups are:

- Young (eg 18-21) less likely to already have long-term damage and have more potentially positive
 years in front of them; however, they are often harder to treat as they are further from the personal
 consequences of their actions.
- Older (eg 30+) more likely to accept treatment as they are closer to the personal costs of their
 addiction; however, they have a higher likelihood of existing long-term problems and fewer years of
 potential positive activity.
- Short-term prisoners for acquisitive crime including PPOs and prisoners on remand these prisoners are among the most common causers of social costs (through their criminal activities), have frequent contact with the authorities but often pass through the criminal justice system fairly quickly (matter of months rather than years).
- Women women have different treatment needs than males especially with regard to the role of relationships and children with regard to their treatment needs. The impact of their drug abuse on their children is also likely to have significant costs for both their children and for society.
- Those co-dependent on alcohol alcohol abusers continue to face many of the health, social, criminal

justice and economic output costs that illegal drug abusers face. Indeed, evidence from the NTORS study suggests that when drug abusers reduce their drug taking, they may compensate by increasing alcohol consumption, though this evidence was for all drug abusers and not only those with a heavy alcohol dependence.

IPPs – these prisoners may face difficulties in meeting their release criteria if they are not offered
programmes to address their drug problems. Failure to provide courses in a reasonable time frame may
have legal consequences if they are not considered to have been fairly treated.

The only prisoners excluded from the above groups are men in their twenties who have been convicted of more serious crimes. Furthermore the groups are not mutually exclusive - a person may be young, female and a PPO. We are not suggesting that individuals in each of these categories are automatically prioritised (see under 'Potential uses of the model below).

The potential cost savings over the course of a lifetime were estimated in relation to:

- Excess mortality costs
- Excess morbidity costs
- Direct health costs
- Lost economic output
- · Costs to the criminal justice system
- Social costs
- Intergenerational costs.

All these costs have been calculated in present value terms by using a 3.5% discount rate. In each case where a choice of variable was presented, the more conservative options was selected (eg lowest pay band). This biases the model outputs as underestimates of the true costs.

We were able to estimate the costs only on the basis of age and gender due to the availability of data. The findings were that cost savings *if the intervention were immediately effective* were estimated as:

- 21 year old male £736,000
- 30 year old male £560,000
- 21 year old female £737,000.

The economic framework is written up in Appendix 5, and an explanation of the model and calculations used above are included in Appendix 6. This approach can be adapted as Government policy changes, but serves, alongside other evidence, to promote a review of the level of resourcing provided for drug treatments.

Potential uses of the model

There are two potential uses of this approach:

- a) To assist in strategic needs analysis to guide planning and commissioning decisions;
- b) To support staff in using their professional judgement in allocating scarce resources in such a way as to best achieve desired outcomes for the individual and society. Here the approach would be built into an assessment tool by way of a points system. A person's risk rating would be higher the more categories they fall into.

As the evidence base develops, the weightings attached to different groups could be changed.

Conclusion

In this section we have provided an outline of what must be done to provide a minimum standard of care to all prisoners, based on what is humane, and on current evidence of efficacy. We also outline services with a good evidence base which should be provided when resources are available, and services that could also be provided but for which there needs to be more research to establish its efficacy. We recommend the use of 'allocative efficiency' whereby resources are realigned to ensure first that a minimum standard of care is delivered to all before resources are spent on other services. Building on the above, we also propose a notional revised care pathway.

Delivery of the minimum standard of care in all prisons is not likely to be possible within existing funding so we have outlined a number of areas where we believe existing resources could be freed up, together with an approach to prioritising longer-term psychosocial treatments for maximum impact on the individual and society, based on lifetime cost savings in relation to areas such as morbidity, lost economic output, criminal justice costs and social costs. We suggest that this could be used to guide the commissioning process at a strategic level, and in supporting professional judgement at the front-line when allocating scarce resources to individual prisoners.

4 Commissioning, Funding and Performance management

Introduction

This review was also tasked with examining the extent to which current commissioning arrangements are fit for purpose and if not, given the service objectives, what should be the preferred commissioning model. In previous sections we have concluded that a national strategy is required to guide the commissioning and provision of drug treatment to span both community and prison, and one that clarifies and prioritises outcomes. Accompanying the strategy should be a national commissioning framework to facilitate the coordination of drug treatment services and to ensure that best practice is followed, together with the simplification or unification of funding streams. A national performance framework is then required, supported ideally by a single information system, or by protocols to ensure effective information sharing. Finally we highlight areas where further research is required to demonstrate the efficacy of particular services, and combinations of services.

The section on provision indicates the range and balance of services that must be provided for prisoners and offenders as a national minimum standard of care; and those that should also be provided where resources are available. These options themselves have implications for the way in which commissioning and funding streams need to be structured. For example, we make the case for a combined CJIT/CARATS service to help ensure continuity of care on entry to and release from prison. This will be facilitated by a single budget and a single commissioning body to cover community and prison psychosocial services.

The key questions: What outcomes is prison drug treatment there to achieve, and how can services be funded, commissioned and delivered most effectively to ensure there is clear accountability for and continuity of care for drug misusers in the criminal justice system? Commissioning has a further objective to facilitate the delivery of the recently developed PSA target:

PSA 25: to reduce the harm caused by Alcohol and Drugs which will drive further improvement in
the level of effective treatment for drug users. For the first time this will be extended to focus on
alcohol misuse, thereby reducing the harm to communities as a result of associated crime, disorder
and anti-social behaviour.

The process that we went through is as follows. We gathered stakeholder views on current commissioning arrangements, facilitated a discussion on best practice commissioning and what tasks could best be undertaken at a national, regional or local level, put forward a number of options for discussion by the Steering Group and experts and took account of proposals and comments received from individual Steering Group members and experts.

Commissioning is a strategic process for assessing the needs of a population, in developing services or providers to meet those needs if required, contracting [including monitoring and performance managing] services and undertaking a range of strategic efforts to meet a population's needs. Stakeholders emphasised the need to build on existing structures and networks as far as possible, and to ensure fit to the direction of travel in NOMS and DH with regard to commissioning. The principle of a commissioner – provider split is generally accepted.

Current arrangements

The current commissioning arrangements for drug treatment services within prisons and outside in the community involve various organisations and incur a mix of regional and local commissioning arrangements. Table 1 in section 1 demonstrates the myriad arrangements. Clinical services are commissioned locally through PCTs who since 2005 have been responsible for clinical treatment both in custody and in the community. Guidelines for clinical services are set by the National Treatment Agency (NTA) although NTA does not have strategic responsibility for drug treatment in prisons. The psycho-social services in prisons are commissioned by Governors but often in partnership working with DATs and other agencies. Services in high security prisons are commissioned centrally by NOMS.

Current funding arrangements are complex. There are multiple funding streams (see Table 1 in Section 1). Different departments fund different drug treatment services both in prison and the community. This creates a barrier to partnership working, potentially stifling innovations that cross boundaries. It represents an inefficient way of providing joined up services.

There are pooled treatment budget (PTB) mechanisms already in existence covering drug treatment in the community but excluding DIP funding. A recent change means that the PTB can now be used to invest in drug treatment within prisons provided they enter data on NDTMS which is a step forward although there is concern that unmet demand for treatment in prisons could potentially threaten services in the community.

Stakeholders wanted there to be fewer or possibly a single funding stream which could be used more flexibly to support the whole of a prisoner's drug treatment needs both inside and outside prison. Conditions could be set on the use of the funding for example to support partnership working in order to maximise positive outcomes.

What is Best Practice Commissioning?

In evaluating the most appropriate commissioning arrangements for drug treatment services in prison, it is important to understand what is expected role of a commissioner and the best practice features that make up a "best in the class" commissioning function.

Drawing from evidence from international experts, academic reviews and experience from other sectors, PwC has evaluated the commissioning requirements against a Commissioning function model that describes what "best in the class" commissioners actually do to deliver the desired outputs of appropriate treatment and value for money. The eight commissioning functions are shown and summarised in Figure 1 below. The functions do not have to be delivered at one single level, and some can be delivered at different levels. Indeed, it is worth remembering the adage that commissioners are generally either too large, or too small; choices about commissioning need to be based on a series of judgements.

It should be noted here that the involvement of providers in the strategic commissioning process is good practice and has many benefits for commissioners. Providers should be involved in the strategic needs assessment to harness valuable market intelligence, ideas and innovation. The sharing of information on likely commissioning intentions with all providers including potential new ones on an equal basis will give advance warning of shifts in policy and purchasing decisions so that providers can respond accordingly, ensuring the required volume and range of services is in place in a timely manner, and ensuring contestability. Contracts should specify quality standards (from national performance framework) and outcomes and leave a degree of flexibility on delivery.

Figure 2: Best Practice Commissioning



Plan Stage

Assess needs – through a systematic process that assesses and translates the needs of a resident population.

Describe services and gap analysis – Reviewing and defining the gaps of services through the perspective of areas of overuse, misuse or under use.

Deciding priorities – Using the available evidence of cost effectiveness and a robust ethical framework. Prioritise areas for commissioning.

Risk Management - Assessing the key risks facing the Commissioner and deciding on the strategy to manage it.

Strategic Options – Examine and appraise the options available to deliver the Commissioning priorities.

Execution Stage

Contract implementation – designing service specifications and contracts to put these strategic commissioning intentions into action.

Provider development – shape and support provider developments or introduce new providers to deliver the services required.

Performance Management Stage

Managing performance – monitor and manage the performance of providers against their contracts, especially against KPIs.

© PricewaterhouseCoopers

Evaluation of the Commissioning Function Requirement

As part of evaluating the commissioning options, we assessed the requirements against the best practice model functions and tested this out in a workshop session with the steering group. The key questions examined were:

- What level is best placed to undertake the commissioning function (national, regional or local PCT)?
- · What is the likely availability of skills and expertise?
- What are the optimum arrangements to deliver the national multi-factorial policy objectives and commission services that address a spectrum of prisoner needs both in and outside the prison pathway?

The key conclusions of each function are summarised in Table 2 below.

Table 2: PwC interpretation of Steering Group discussion on 31st October 2007

Commissioning Function	Current Position	Recommended Approach			
Strategic Needs Assessment Assessing needs through a systematic process that assesses and translates the needs of a resident population.	 NTA provides health needs assessment analysis around community services, and we understand NOMS is developing a needs assessment tool for use in prisons Ad hoc research analysis undertaken by DH – no systematic analysis undertaken as part of a commissioning cycle. 	 Should be undertaken at the appropriate population planning level. Requires a national needs assessment tool methodology to ensure consistency. Needs to be integrated with the community based needs assessment work undertaken by NTA. Proposed that it has a national and regional function 			
Review services and gap analysis Review current services and models in relation to outcomes/costs – include areas of under use, overuse and misuse.	With IDTS beginning to introduce a service and gap analysis assessment as part of the 2008/09 planning cycle.	 Need for a co-ordinated assessment of service provision compared to needs profile across both prison and community. Suggests that this is better undertaken on a regional level to reflect the regional population churn. Information needs to be collated for national perspective in order to inform overall DH, NOMS and HO planning. 			
Manage risk e.g. population risks, policy changes and policy shifts.	 Limited activity at present around undertaking a systematic horizon scanning assessment Stakeholders commented on the need to clarity accountability and responsibility. 	 Needs a national and regional perspective to undertake horizon scanning across various factors. The impact on commissioning or treatment programmes e.g. of drug taking habits – requires multidepartmental inputs. Requires new skill sets, in particular, actuarial skills 			
Decide priorities – uses Available evidence for cost effectiveness and ethical framework which must be agreed by stakeholders	 Current priority setting processes are not transparent Limited involvement of stakeholders 	 This commissioning task needs a collaborative approach across national policy departments to agree the top priorities. Need to develop national knowledge management based at what is best practice to be used by all regional commissioners. Preferred approach is that decision making around priorities should be at a regional level within a national framework based on a clear strategic vision with outcomes. 			

Commissioning Function	Current Position	Recommended Approach			
Strategic Options Brings together all available information including best practice, economic appraisals, stakeholder views to define best model to deliver agreed and measurable outcomes.	 No one agency/organisation currently undertakes this role with the right set of information. Stakeholders highlighted many issues in relation to achieving continuity of care between prisons and the community. 	 A national good practice database would assist commissioning activity If you commence to commission prison services as an integral part of community service provision, then this commissioning function should be part of a regional commissioner's remit. 			
Contract implementation Puts best service models into action through robust contracting arrangements to deliver measurable quality outcomes and values.	 This requires a commercial process and the requisite skills. NOMS' DST develops service specifications and service contracts are managed by prison area drug coordinators. Stakeholders highlighted that variability and the large number of DATS doesn't lend itself to consistent contracting. 	Requires commercial skills to be provided at. a national level. But implementation should be a regional activity.			
Provider Development Promote improvements and encourage introduction of new providers and provide reform.	 Undertaken by national support team around third sector No systematic approach linked to a regular commissioning cycle. Stakeholder enjoyment – highlighted the desire for regional stakeholders to get actively involved in shaping provider services. 	Required at national and regional level, to cater for both national providers and more regional or local ones.			
Manage Performance Systematic performance review of services and contracts.	 Fragmented approach across organisations Problems highlighted in relation to existing performance management arrangements within particular regions and prisons. 	 Requires a national performance framework within a regional commissioning approach. But requires regional and local authority input, and systems in place to deliver effective operational management. 			

Overall, this assessment indicates that decision-making and performance management warrants local stakeholder involvement. However, the majority of the functional activities that represent good practice commissioning would be cost-effectively provided by establishing a regional collaborative commissioning approach. We concluded that a regional model is the most appropriate way forward, working within a national framework of minimum service standards and a cross departmental strategy that balances the various objectives and priorities. Some of the commissioning functions clearly would be better undertaken with the use of a national approach and specialist commissioning function. A key issue raised in the work is the extent to which the prison population needs can be planned for on a regional or national basis. The scale of prisoner transfers could imply that forecasting and planning needs to be on a national basis. However stakeholders indicated that in most regions prisoner transfers are maintained within a regional network of prisons (except for example London). Taking a year on year trend, the mix of prisoners is relatively reliable to predict and subsequently use as a planning basis.

The assessment clearly shows that commissioning activity does not necessary best fit into a complete national and regional commissioning approach.

Stakeholder Views

Many of the stakeholders consulted emphasised the need to build upon the existing regional drug partnership networks or forums established around both prison and community based treatment programmes, but that they would need to be given the authority through joint commissioning arrangements that enables decisions on resource prioritisation across the full service spectrum for prisoners and offenders with drug problems. The desire for an integrated commissioning approach across both community and prison based services was raised by nearly all stakeholders.

The key gaps in the current commissioning arrangements highlighted by many were:

- Absence of an overall cross departmental strategy for dealing with prisoners and offenders with drug problems, which balances the objectives and priorities, and sets out a framework for commissioning.
- Lack of formal authority to make decisions on commissioning priorities across the whole drug service
 pathways and joined up treatment and care interventions for prisoners moving from prison to prison real
 joint commissioning with authority and responsibility.
- Lack of systematic approach to priority setting given the resources available.
- The ability of individual PCTs with one or two exceptions to build up sufficient expertise to commission prison based treatment services and in particular shape and reform the future supply side. Also difficulties in making the improvement of service provision in prisons a priority given the existing PCT commissioner structure and the many other agendas facing PCTs.
- Lack of focus on attempting to join up service commissioning to address the service gaps and duplication associated with community teams and prison based teams.
- Focus on provider performance management that is based on activity based output measures rather than a balance of outcome measures.

Options for a revised commissioning model

All of the tasks within the best practice commissioning cycle do not need to be undertaken by one body or at one level. However there does need to be a coherent structure to link the tasks. Following discussion and review with the Steering Group and experts, consensus was reached on the following that needs to be built into any future commissioning arrangements:

A joint national strategy group for offender drug treatment involving DH, MoJ and the HO; together with:

- Establishment of Regional Partnership Boards for prisoner and offender drug treatment that would undertake a performance management role holding local joint commissioners to account in the delivery of their commissioning plans; and
- Development of an integrated commissioning model for both prison and community based drug treatment programmes, with clinical commissioning remaining the responsibility of PCTs.

Provided the national strategic and regional performance management functions are in place and operating well, it is less important which option for day-to-day commissioning is chosen. We outline below the remit of a joint national strategy group and of Regional Partnership Boards. We then discuss two options for commissioning.

National Prisoner and Offender Drug Strategy Group

A national prisoner and offender drug strategy group (NSG) for drug treatment would include representation from DH, MoJ and the HO. Its role would be to produce and maintain:

- An integrated prisoner and offender drug treatment strategy
- A set of national minimum standards setting out what must be provided in each prison working with community case management and providers
- A resource allocation model
- A commissioning and performance management framework
- Model contracts

In addition we would recommend that the NSG would play a role in:

- Undertaking provider development (for national providers)
- Commissioning research to support the development of services and pathways over time.

The NSG would be supported by a national strategic commissioning team with the skills to undertake the above.

An early task of the NSG would be to jointly examine the various commissioning strategies, objectives and performance measures of each Department pertaining to prisoner and offender drug treatment. One way of doing this is to use a balanced scorecard approach, which helps to identify and describe the shared strategic intentions for prisoner and offender drug treatment across prisons and the community, and outline the mechanisms by which the partner organisations can work towards achieving these, and know when they have done so. The first step is to work together to develop a strategy map, which is then supported by an index of key performance targets which ultimately develops into a performance framework. An example of what such a scorecard might look like is given in Figure 3. Please note that this has been drawn up merely to illustrate the sorts of elements that might go into such a strategy and does not represent recommended content.

Figure 3: Example Strategy Map

Outcomes (What we want to achieve)	 Reduction in re-offending Reduction in drug-related health problems and deaths To reduce the harm caused by Alcohol and Drugs PSA25) 3. Other								
Customers (What we need to do for and	drug t the rigl right p	de the right treatment at ht time in the place for the dividual	Provide continuity of care during the offender pathway/addiction career	Involve and the right su families significant	pport to and	treatmer to drug	le holistic it in relation s, alcohol, intal health	Provide safe environments vulnerable prisc	for
with others)	1.KPTs		1.KPTs	1.KPTs		1.KPTs		1.KPTs	
	Commissioning				Delivery				
Internal Processes (What we need	Strategic needs assessment	Develop commissioning plans that address priorities	Ensure the quality of delivery through monitoring	Integrated individual assessment and care plan	Provide appropria intervention right tim	ate at the	Rehabilitate effectively	Safe, timely and integrated transition and release planning and handover	Review to ensure care plans are still appropriate
to do well to reach our goals)	1. KPTs	1.KPTs	1.KPTs	1.DPTs	1.KPTs	1	.KPTs	1.KPTs	1. KPTs
Resources, learning and growth (What we need to enhance to succeed)	High le sponsors culture c	hip and make the make	Developing kforce strategies including aintaining multi- isciplinary and lti-agency teams	Better Management Information Systems		aging to our budgets rdependency	Streamli	nea buagets	Investment in esearch to improve treatments and pathways

PricewaterhouseCoopers LLP 36

Regional Performance Management Function

Responsibility for performance management would be vested in a Regional Partnership Board (RPB), supported by a Regional Joint Performance Team, and hosted and led by either the NTA or the ROM for the region. It would include representation from Regional Offender Management, the National Treatment Agency regional manager, the SHA, and the Government Office. Its role would be to apply the performance management framework above, to hold commissioners to account, and to report to the NSG. It must have the authority to enforce its judgements. There is potential to link this function to one of the existing regional groups providing it could dedicate sufficient attention to the task.

The RPB would need to have clear leadership. The Steering Group indicated that a new role be created to allow the leadership to focus solely on prisoner and offender drug treatment eg a Regional Prisoner and Offender Drug Treatment Manager (RPODTM). It was probably less important who they worked for (it could be NTA, SHA or ROM) than to ensure they work to a multi-disciplinary agreed regional performance plan, based on the national strategy, and delivery of the national minimum standards.

The RPODTM would require a team with the requisite skills (eg data analysts) and powers to collate data and manage performance.

Option: a joint performance framework is needed to clearly reflect priority of outcomes (e.g. reoffending, health). The performance framework should include key performance targets based on quality and outcome rather than volume of activity. Each key element of case management should have a KPT (assessment, care planning, review, transfer or release), and KPTs should be used to incentivise continuity of care and partnership working.

We have not provided a set of proposed new KPTs as these would need to be the result of joint strategic planning – however the above approach will help devise them. One example however is:

Example of a KPT based on volume of activity: Across the prison service CARATS must ensure 52,499 prisoners receive a completed substance misuse triage assessment.

KPT based on quality and outcome: Triage assessment to be undertaken within X period of arrival in prison; All prisoners to be registered with a GP prior in their home locality prior to release from prison.

Commissioning options:

We provide below two options.

Option 1: Local commissioning by DATs under PCT leadership of all prison and community-based drug treatment; including clinical and case management services (CJITS and CARATS) and psychosocial programmes (Figure 4)

Option 2: Establishment of a regional commissioning function to commission more specialist programmes such as psychosocial drug treatment services or to undertake specific parts of the commissioning function on behalf of local commissioning groups (Figure 5)

These options are described below:

Option 1: Local Joint Commissioning model approach

We would envisage that this commissioning model would build upon the existing Drug Action Team (DAT) commissioning role but in order to coordinate with wraparound and other services, a representative of the ROM would need to be included if they are not already. This local joint commissioning team would be hosted by the PCT but would co-opt local expertise where available from other agencies to undertake the full range of commissioning activities as outlined in Figure 4. The Commissioning role would be shaped by the proposed national strategy group and supporting national commissioning team. These local joint commissioners would be responsible for:

- · commissioning clinical services in prison and community; and
- commissioning case management and psychosocial as well as wraparound services in the community (DIP and other services) and prisons (this includes intensive long-term drug treatment programmes).

In terms of funding streams we would recommend that these local joint commissioning bodies (hosted by local PCTs) receive two funding streams:

- An integrated clinical services budget is established to support the reduction of self harm and reduced transmission of blood-borne viruses. This would cover detoxification, maintenance, and other healthcare services targeted specifically on drug misuse among prisoners and offenders in the community.
- An integrated non-clinical budget to support the joining up and reducing re-offending objectives. This
 would cover case management and psychosocial programmes both in prison and the community and the
 funding of 'step-down' rehab hostels. It is understood that those involved in revising the National Drug
 Strategy are examining the possibility of merging the DIP budget (£150m) with the prisons and DRR
 budgets so this option is a real possibility.

This option envisages that each PCT in conjunction with DATS would establish a commissioning function to undertake the following commissioning activities:

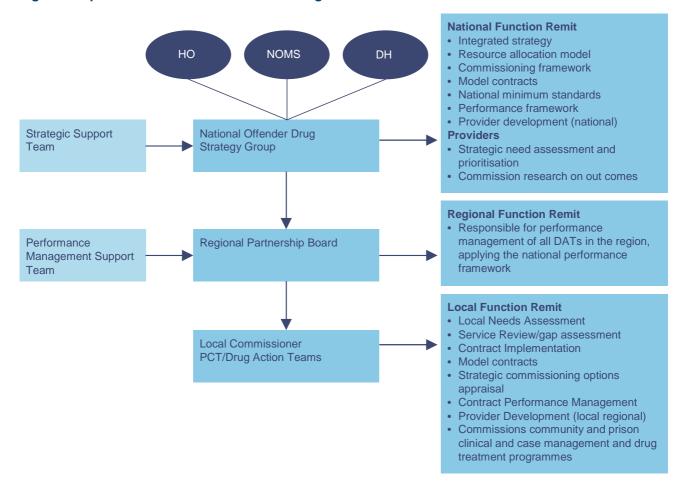
- All Planning activities as outlined in the commissioning cycle with the exception of risk management support activities
- Execution of commissioning plans around establishing local contracts and developing providers
- Performance management of contracts.

The performance of the local joint commissioners against a national performance framework would be undertaken by the proposed Regional Partnership Boards with inputs from national commissioning team support.

The drawback of this commissioning model is the scale of potential duplication in commissioning support functions to undertake the full role. Health sector experience highlighted by the recent State of Nation 2007 Report indicates that there is a lack of expertise and capability at a local level across the board to deliver best practice commissioning. Evidence in the Report indicates that PCTs are not yet in a position to fully understand local health needs, and to translate these effectively into the commissioning of services. This is particularly the case for relatively small segments of the local population such as drug misusers in prison. The capability of local DATs in conjunction with PCTs to undertake an effective provider development and performance management role is currently limited.

Overall this option will require a considerable investment in commissioning capability across the full range of local PCTs and DATS if the potential gains of joint commissioning are to be realised. This scale of investment may represent between 3 to 5% of the commissioning investment in order to provide an effective commissioning function. There is a significant risk, even with a national commissioning function capability around the planning and specific execution activities, that the quality and capability of commissioning may still be very variable within this organisational model.

Figure 4: Option 1 - Local Joint Commissioning



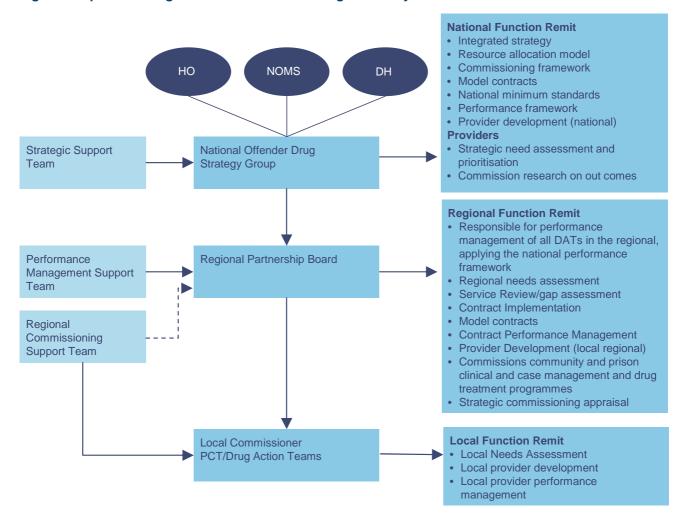
Option 2: Development of Regional Commissioning Function hosted by a lead PCT supporting local joint commissioning arrangements across the region

This option envisages the development of a regional commissioning function to undertake the following activities:

- Undertake specific parts of the commissioning function on behalf of individual PCTs or DATs. For
 example, as outlined in the best practice model the planning activities such as health / social needs
 assessment, review of services compared to health needs, and the identification of strategic options. The
 provider development and performance management role could also be undertaken on a regional basis
 on behalf of the PCTs/DATs.
- Undertake all the commissioning activities for specific specialist or intensive programmes. For example it
 is recommended that intensive longer-term psychosocial programmes (CBT and 12-step) and therapeutic
 communities are commissioned regionally. The tasks would include shaping and agreeing regional
 priorities in relation to these services, addressing the transition of prisoners between prisons, and
 assisting with the development of prison clusters to achieve economies of scale.
- Commissioning of specific enabler projects that support the development of commissioning of drug treatment programmes across prison and in the community eg integration of assessment and information systems.

This option would still require a local priority setting, but the regional commissioning function would support local groups in the delivery of their commissioning role. The local DATs/PCTs would also have a role to play in the various planning activities, shaping the development of service specifications, and performance monitoring of local contracts.

Figure 5: Option 2 - Regional Joint Commissioning hosted by a lead PCT



Funding Streams Implications

We would advise that a similar funding stream approach would still be required with this option at a local level. There is flexibility to pool funds where agreed between health and criminal justice based on joint planning priorities and within these departmental funding streams to commission joined up treatment and psychosocial programmes.

PCTs and DATs (local authorities) would receive the funding streams from health and criminal justice and decide how much is needed to support an agreed regional commissioning infrastructure and finance regionally commissioned programmes.

The advantages of this commissioning model options are:

- Concentration of commissioning function activity associated with drug treatment programmes into a specialist number of teams where best practice commissioning competencies can be developed or procured
- Likely to represent a better value for money option around the development of commissioning function capability
- Facilitates the development of provider relationships on a manageable scale from the providers
 perspective where innovation of service design delivery and improved performance could be given a
 greater focus as a result of reducing the scale of interactions with many different commissioners

- Provides large funding streams to pool resources across health and criminal justice to develop a greater risk share approach and flexibility in the use of available resources from year to year
- Provide some greater purchasing leverage with particular regional or national providers.

The drawbacks of this approach however are around the following:

- The envisaged lower involvement of DATS and individual PCTS in the total commissioning function activity than option 1
- Synergy in the geographical boundaries between NOMs regional structure with health and other government offices
- Addressing all local nuisances in service specification when commissioned at a regional level.

These barriers can be overcome through the design of the commissioning function engagement culture with constituent stakeholders and joint working across geographical boundaries.

Recommendation

Overall, prior to deciding which option to adopt, we would recommend that the National Steering Group consults upon both options and examines the scale of investment to provide the necessary commissioning support for each option.

It should be noted that improvements in commissioning are delivered not just by introducing appropriate structures and systems, but as in other parts of the public sector, by developing the necessary competencies and capabilities of the commissioning team.

High Security

CARATS and psychosocial drug treatment programmes are currently commissioned nationally by NOMS for the high security prisons. However, since drug treatment in these prisons is essentially the same as in other prisons (clinical services, CARATs, and a limited number of psychosocial programmes), we are of the view that services could be commissioned at regional level under Option 2 above alongside services for other prisons. This would ensure consistency of approach and procurement efficiency. A precedent has been set in the commissioning of other services such as bail accommodation. We understand also that South Central lead PCT and the SE ROM are in discussion over the commissioning of prisoner and offender health services more generally, including high security and youth establishments.

Implementation – the challenges

It is important to note the challenges that organisations will face in implementing the far-reaching changes proposed. We list some of these below:

- The time and effort needed to develop a common understanding of concepts and terminology should not be underestimated.
- The requirement for different departments and organisations to change working practices, to look beyond traditional boundaries, to define clear outcomes, and develop a stronger evidence base to guide commissioning decisions, all present major challenges.
- The practical implications of changes in structure and commissioning arrangements including TUPE, contract variations, developing specifications for new services and decommissioning others, will take time.
- Introducing more joined up structures and arrangements at a time when some of the organisations involved are still going through complex internal changes adds another layer of complexity.

5 Conclusion and next steps

Conclusion

There has been investment in prison-based drug treatment services over the last 10 years leading to notable improvements in care. We have encountered many examples of excellent practice and real commitment amongst staff during this review. However drug treatment in prison and continuity of care with community provision is fragmented, with many organisations responsible for funding, commissioning and performance managing different aspects of care, but with no one body being held accountable. There is a lack of agreement on outcomes that services are there to achieve, the evidence base for some current interventions in relation to outcomes is weak, and there is a lack of meaningful performance data with which to measure progress against outcomes. Through a careful examination of documentary data, extensive stakeholder consultation, and advice from experts, we have put forward a number of options to help simplify and clarify arrangements, and improve coordination, continuity and quality of care.

With regard to the provision of services, we have provided an outline of what must be done to provide a minimum standard of care to all prisoners, based on what is humane, and on current evidence of efficacy. We also outline services with a good evidence base which should be provided when resources are available, and services that could also be provided but for which there needs to be more research to establish its efficacy. We recommend the use of 'allocative efficiency' whereby resources are realigned to ensure first that a minimum standard of care is delivered to all before resources are spent on the other services. Building on the above we also propose a notional revised care pathway.

Delivery of the minimum standard of care in all prisons is not likely to be possible within existing funding, so we have outlined a number of areas where we believe existing resources could be freed up, together with an approach to prioritising longer-term psychosocial treatments for maximum impact on the individual and society, based on lifetime cost savings in relation to areas such as morbidity, lost economic output, criminal justice costs and social costs. We suggest this could be used to guide the commissioning process at the strategic level, and in supporting professional judgement at the front-line when allocating scarce resources to individual prisoners.

In relation to commissioning we describe the eight key functions that make up a best practice commissioning cycle. We then describe how commissioning arrangements for prison and community treatments compare against this, based on a Steering Group discussion. Having put a number of options for commissioning to the Steering Group and experts, showing which commissioning functions might be undertaken at national, regional and local level, we agreed with them two fundamental foundations for a revised commissioning structure: The need for a National Strategy Group for prisoner and offender drug treatment combining DH, MoJ and HO membership; and a strong regional performance management function to apply national strategy. We agreed with the NSG that provided these are in place and operating effectively, the exact configuration of commissioning is less important.

We propose two options for commissioning, both of which combine the commissioning of prison and community, and clinical and psychosocial provision. Option 1 is based on PCTs and Drug Action Teams; and Option 2 proposes the development of a Regional Commissioning Function hosted by a lead PCT to support local joint commissioning arrangements across the region. We suggest that the latter is likely to serve the needs of prison and offender drug treatment best, given the scale of potential duplication in commissioning support functions in individual PCTs/DATs to undertake the full role, and PCTs are not yet in a position to fully understand local health needs, and to translate these effectively into the commissioning of services, particularly for relatively small segments of the local population such as drug misusers in prison. Furthermore, the capability of local DATs in conjunction with PCTs to undertake an effective provider

development and performance management role is currently limited. However, before choosing we would recommend that the National Steering Group consults upon both options and examines the scale of investment to provide the necessary commissioning support for each.

We outline some of the challenges facing departments and organisations in implementing the above changes to commissioning arrangements and provision, which are considerable and will take time.

Next Steps

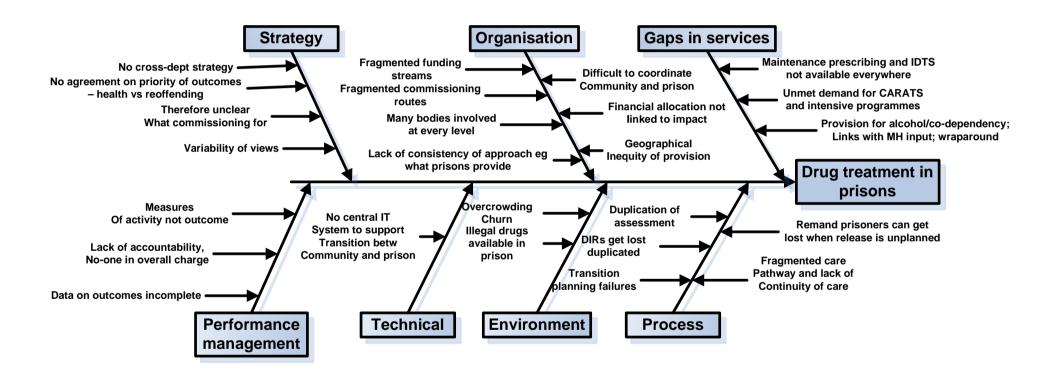
We provide below an outline of the initial actions required to implement our proposals, should they be approved:

- 1 Establishing a National Prisoner and Offender Drug Strategy Group. The early tasks of this group, in its first 100 days, would be to establish the membership and terms of reference, and commissioning a series of projects to include the following:
- 2 Articulate and agree the key outcomes for prisoners and offenders in prison and in the community; Demonstrate how the partner organisations will work together to successfully deliver those outcomes; Identify measures (key performance targets) which will help the partner organisations to understand how their performance contributes to the achievement of the outcomes and: Set out how current activities (initiatives) align with the key outcomes and design others to fill gaps. Initiatives would include:
- 3 Establishing a set of National Minimum Standards and conducting a gap analysis to establish what is feasible within current resources, and to develop a plan for implementing the standards over the next 2-5 years. This will include build or procure plans.
- 4 Identifying opportunities for achieving efficiency savings to invest in services. These may include, for example, disinvestment in services not falling within the national minimum standards, and achieving productivity gains for example by merging CJIT and CARATS teams and through provider development. A detailed business case should be produced to fully appraise the extent to which funds can be released. It should then be consulted upon to ensure the potential impact of withdrawal and changes are fully understood before final agreement and implementation.
- 5 Examining the case for prioritising prisoners and offenders using the economic framework proposed in Section 4. This assesses the impact on the individual and wider society of successful drug treatment for specific segments of the drug-misusing prisoner and offender population as an aid to commissioning at a strategic level, and to support professional judgement when allocating resources to an individual. The approach should be consulted on in localities, which may have different priorities.
- 6 Developing the commissioning model at national, regional and local level. This would commence with a consideration of the roles for example of the Regional Partnership Board, support structures and skills required to support each level. A capability and capacity review and formal assessment by region would then be required, followed by an appraisal of the costs and value for money of adopting the local or regional commissioning model proposed in Section 4, and consultation on this. Governance structures and reporting arrangements will then need to be agreed.
- 7 Developing a single health and a single criminal justice funding stream. In best practice commissioning, funding should follow commissioning; consequently the level at which these funding streams are aligned or merged will depend on whether a local or regional commissioning model is adopted. Funds should be merged to meet specific commissioning objectives.
- 8 Agreeing how information sharing will be achieved to support both performance management and case management. The lack of a shared system, and the high costs and long lead in times to any future system, should not hold up progress in information sharing (i.e. it should not be on the critical path to improvement). Measures should be taken immediately to facilitate practical information sharing for example by issuing read-only rights to staff needing access to information on the same person, with suitable protocols for confidentiality.

List of Appendices

- 1. Summary of issues identified during the course of the review
- 2. List of national and regional consultees and experts
- 3. Evidence Review
- 4. Local stakeholder consultation report
- 5. Economic Framework
- 6. Economic Framework Model

Appendix 1 – Summary of issues identified during the course of review



PricewaterhouseCoopers LLP 45

Appendix 2 – List of participants in the Review

Steering Group for the Review

- Crispin Acton: Programme Manager, Substance Misuse, Department of Health (Chair until September 2007)
- Dianne Kennard: Acting Programme Manager, Drug Misuse, Department of Health (Chair from September 2007)
- Fiona Marshall: Senior Adviser, Drug Policy Implementation, Substance Misuse and Offender Health, Department of Health (Project Manager)
- Mary Piper: Public Health Physician, Offender Health, Department of Health
- Mark Prunty: Senior Medical Officer for Substance Misuse Policy, Department of Health
- Sarah Mann: Head of Interventions, Ministry of Justice
- Martin Lee: Head of Drug Strategy Team (DST), Ministry of Justice
- Lori Chilton: Head of National Drug Programme Delivery Unit (NDPDU), HM Prison Service
- Nino Maddalena: National Treatment Agency
- Sherife Hassan: Drug Strategy Unit, Home Office

Others attending on an ad hoc basis:

- John Podmore: Offender Health, Department of Health
- David Marteau: Offender Health, Department of Health
- Rachel Hunter: Public Health Support Officer, Offender Health

Expert panel

The expert panel met as a group on 8th October, provided feedback on both the service and evidence review and early options for commissioning, and were invited to attend the implementation workshop on the 15th November and meeting on 28th November to discuss the final report. Some experts also provided individual feedback on various options and on the draft final report. The members of the expert panel were:

- Mike Trace RAPT
- Kate Davies NTA
- Professor Mike Gossop Institute of Psychiatry
- Professor Anthony Maden Imperial College
- Dr Mike Farrell Maudsley Hospital
- Michael Spurr HM Prison Service
- Dr Nat Wright HMP Leeds
- Dr David Best University of Birmingham
- Mr Alex Stevens University of Kent

National stakeholder interviews

Name	Department / Organisation
Phil Wheatley	HM Prison Service
Michael Spurr	
Ian Poree	
Michael Wheatley	
Simon Matthews	
Richard Bradshaw	NOMS Health Offender Partnerships
John Scott	NOMS Offender Management
Robin Brennan	
Sarah Mann	Ministry of Justice
Martin Lee	
Dr Mary Piper	Department of Health
John Podmore	
Fiona Marshall	
Dave Marteau	
Lori Chilton	National Drug Programme Delivery Unit
Sally-Ann Walls	
Sharon Avis	
Anne Owers	HM Inspectorate of Prisons
Siggi Engelen	
Elizabeth Tysoe	
Peter Wheelhouse	Home Office DIP policy lead

Name	Department / Organisation
Nicola Lowit	NOMS Commissioning policy lead
Kevin Lockyer	Regional Offender Manager, South West
Brian Arbery	ADAPT
Peter Rorstad	
Gina Mescheni	
Karen Biggs	Phoenix Futures
Mike Pattinson	CRI
Geoff Hughes	Wales Area Manager
Phil Morgan	Wales Area Drug Coordinator
Paul Hayes	National Treatment Agency
Nino Maddalena	
Rosanna O'Connor	
Nat Wright	Royal College of General Practitioners (RCGP)
Dr Mike Farrell	Royal College of Phychiastrists (RCPsych)
Mike Trace	RAPT
Jimi Grieve	National Users Network
Dr Nat Wright	HM Prison Service
Dr Mike Farrell	Consultant Psychiatrist
Kevin Lockyer	Regional Offender Manager, South West

Regional interviews and workshops by area

Note: Interviews were also held at a local level with stakeholders from organisations such as PCTs and the Probation Service in each of the following Prison Areas. These individuals are not named due to the confidentiality agreement with participants. See Appendix 4 for details of the numbers of individuals seen and the organisations they represent.

West Midlands

- Sue McAllister: Area Manager, West Midlands
- Chris Rowland: Area Office, West Midlands
- Patrick Mahon: Service Development Manager, West Midlands
- Patrick Donajgrodzki: Head of Regional Development West Midlands
- David Skidmore: Regional Head, National Treatment Agency
- David Williams: CSIP and SHA
- Jackie Roberts: IDTS lead
- Jackie Stevenson: representative for the ROM
- Chris Randall: Area Drugs Coordinator

North West

- · Marie McLaughlin: Deputy ROM, North West
- · Ian Lockwood, Area Manager, North West
- Cindy McMaguire: Area Manager
- Mike Ryan: Regional Government Office
- Jeremy Spencer: Deputy Governor, HMP Liverpool
- Margaret Adam: Public Protection
- Ian Metcalfe: IDTS Co-ordinator
- Hayden Duncan: National Drug Treatment Agency
- Derek Ross
- Simon Ripon: CSIP

Yorkshire and Humber

- · Stephen Park-Stewart, Head of Health Interventions, Yorkshire and Humber
- Dawn Elaine: Deputy ROM, Yorkshire and Humber
- Glenis White: NTA Regional Manager
- Angela O'Rourke: CSIP Health and Social Care
- Ken Wilkinson: NDPDU regional representative
- Martin Pratt: ROM Office
- Louise Gartland: ROM Office
- Diana Bathgate: HMPS Yorkshire and Humber
- Steve Murray: HMP Hull
- Avtar Purewal: HMPS Area Drugs Coordinator
- · Lisa Gale: Lifeline regional rep
- · Vicky Harris: Joint Commissioning Manager, HMP Hull

London

- Steve Murphy: ROM, London
- Nick Pascoe: Area Manager, London
- Gary Poole, Area Drugs Coordinator, London
- Lynne Bransby: NTA
- Michelle Kemp: NTA
- Carol Morgan: NTA

- Kate Gilbert: London Probation Service
- Dezle Dennis: London Probation Service
- Liam Knight: Islington PCT
- Nancy Padwick: Islington PCT

Kent

- Sarah Payne, ROM, South East
- · Alison Keating, NTA Regional Manager
- Vince Walker Area Drugs Coordinator
- Barry Siddaway Medical officer, Sheppey cluster
- Nesrin Yurtoglu IDTS development manager
- Mary Munday CSIP
- Hud Manuel KDAT Finance Manager
- Paul Carroll, Area Manager, Kent & Sussex
- · Jackie Davis, Health Commissioner for substance misuse, Kent DAT

Local interviews and focus groups

See Appendix 4: Local Stakeholder Consultation Report. The individual participants are not named due to the confidentiality agreement used as part of the consultation programme.

Appendix 3 – Evidence of drug treatment effectiveness

This section sets out the available evidence on drug treatment effectiveness using examples from both the UK and abroad. It was circulated to the steering group at the end of October 2007 as part of the wider 'evidence and service review' paper. Any comments that were made by the steering group and the expert panel in response to this section of the paper have been incorporated below.

Scope of work

Prisons offer a wide range of drug treatment interventions, which span Tier One through to Tier Four of the National Treatment Agency's Model of Care (MoC). Research on treatment effectiveness however, does not cover this breadth of services and instead tends to focus almost exclusively on pharmacological and intensive drug rehabilitation programmes. As such, this review is heavily weighted to these research areas.

There is also a lack of research evaluating drug treatment effectiveness in a prison setting. As a result, many of the conclusions are drawn from evaluations of community based interventions. Similarly, due to a deficit of UK specific evaluations of drug treatment effectiveness, this review is based on a compilation of international research. The implications of both of these research gaps are discussed later in this section.

Caveat: Please note that this is intended to be an examination of best practice models to inform the Review of Prison-Based Drug Treatment Funding for DH and MoJ, and is not a systematic review of the literature in the research sense. Best practice is continuously evolving as new research emerges and therefore the evidence presented here will benefit from being regularly revisited in order to stay current.

Methodology

The research used in this review was compiled from a variety of sources. Much of the information is publicly available on the Internet (via the Department of Health, National Treatment Agency, the Cochrane Collaboration or NICE). This research was supplemented by a large amount of literature provided to us by key stakeholders, most notably NOMS and DH.

Outcomes

Several different outcomes are used to assess drug treatment effectiveness and they vary depending on the information source. Outcomes tend to be grouped into three main categories:

- · Drug misusing behaviour
- Social functioning, including criminal behaviour
- Health, both physical and mental including risk behaviours

Evidence

Detoxification for Opiod Users

- Historically, detoxification is the most preferred method of clinical management of drug withdrawal in prisons
- Evidence suggests that detoxification as a stand-alone intervention is not an effective treatment option and is more effective when offered with a combination of other interventions, such as psychosocial support. ¹ NICE 2007 guidance on opiod detoxification describes pharmacological approaches as the primary treatment with psychosocial interventions as an important adjunct. The guidelines state that "There is clear evidence that coerced detoxification against a patient's express will is likely to lead to relapse and increased harms such as overdose and blood-borne viruses."
- Tapered doses of methadone have been found to assuage withdrawal symptoms although they do not necessarily prevent relapse2,3.
- Buprenorphine has been found to be more successful than clonidine at managing withdrawal symptoms.4
- Clonidine and lofexidine are as effective as reducing doses of methadone at managing withdrawal symptoms.5 NICE 2007 guidance on opiod detoxification and 2007 UK clinical guidelines state that clonidine should not be used routinely in opiod detoxification UK clinical guidelines 2007 state that "alpha agonists are not useful in detoxification for patients with substantial dependence but may be helpful in relieving symptoms of withdrawal in those who are using small amounts of opiods and are keen to achieve abstinence." (page 57) Lofexidine is suggested in the UK clinical guidelines to be most successful for patients with uncertain dependence, young people with shorter drug histories. NICE technology appraisal state lofexidine may be considered for those who have decided not to use methadone or buprenorphine, have decided to detoxify over a short period or who have a mild or uncertain dependency.
- Naltrexone can be used following detoxification for its opiate blocking effect as it helps motivated patients in maintaining abstinence. However, in the 2007 technology appraisal it states that naltrexone should be used under strict supervision as it is hepatatoxic
- Delivery of detoxification across prisons in the United Kingdom is inconsistent and often poorly managed.
 6,7

Maintenance Prescribing for Opiod Users

 There is a great deal of evidence concerning Methadone Maintenance Treatment (MMT) for offenders in terms of it producing positive outcomes around both drug misusing behaviour and criminal behaviour.
 MMT is particularly effective when administered at a dose of between 60 and 100 mg/day.

¹ Treating Drug Misuse Problems: Evidence of Effectiveness. National Treatment Agency. 2006.

² Review of Drug and Alcohol Treatments in Prison and Community Settings: A Systematic Review Conducted on Behalf of the Prison Health Research Network. Roberts et al. University of Manchester. 2007.

³ Methadone a tapered doses for the management of opioid withdrawal. Amato et al. *Cochrane Database of Systematic Reviews. 2005.*

⁴ Buprenorphine for the management of opioid withdrawal. Gowing et al. *Cochrane Database of Systematic Reviews*. 2006.

⁵ Alpha2 adrenergic agonists for the management of opioid withdrawal. Gowing et al. *Cochrane Database of Systematic Reviews*. 2004.

⁶ Drug-related Mortality Among Newly Release Offenders 1998 to 2000. Home Office Online Report 40/05. 2005. Drug Misuse: Opiate Detoxification for Drug Misuse: NICE guideline draft. 2007. [These are two separate publications]

⁷ Feedback from Expert Panel Meeting, October 8th, 2007.

⁸ Four-year Follow-up of Imprisoned Male Heroin Users and Methadone Treatment: Mortality, Re-incarceration and

- Methadone and buprenorphine have been shown to produce similar outcomes. ¹⁴ But there are number of factors that need to be taken into account when selecting appropriate medication. NICE 2007 guidelines state "if both drugs are equally suitable, methadone should be prescribed as the first choice."
- Evidence for use of maintenance prescribing in UK prisons is lacking; the majority of trials have been conducted in the US and Australia.¹⁵
- There is not enough information to draw conclusions about the effectiveness of naltrexone or heroin maintenance.¹⁶ However these are two different drugs with different actions and very different clinical indications.
- Maintenance prescribing is a crucial element of a comprehensive harm-reduction strategy. 17,18
- To date, buprenorphine and methadone maintenance are infrequently provided in prisons, particularly in the male estate. This gap in current drug treatment provision in readily acknowledged and maintenance prescribing is part of the IDTS improvement plan. ^{19,20}
- Issues that need to be considered when prescribing maintenance therapy to prisoners is both the length
 of sentence and the availability of community throughcare to support the regime upon release from
 prison.²¹

Pharmacological Interventions for Cocaine/Amphetamine Users

- The 2007 UK clinical guidance recommends a range of psychosocial interventions ranging from brief motivational interventions for primary cocaine users to contingency management, self help approaches such as Cocaine Anonymous. The aspect of poly drug use also requires attention
- UK 2007 clinical guidelines state that fluoxetine should be used in the management of major depressive episodes associated with stimulant use but not for the management of cravings. There is a caution concerning toxic reactions with selective seratonin reuptake inhibitors.

Hepatitis C Infection. Dolan et al. Addiction. 2005

- 13 Review of Drug and Alcohol Treatments in Prison and Community Settings: A Systematic Review Conducted on Behalf of the Prison Health Research Network. Roberts et al. University of Manchester. 2007.
- 14 Treating Drug Misuse Problems: Evidence of Effectiveness. National Treatment Agency. 2006.

⁹ A Randomised Controlled Trial of Methadone Maintenance Treatment versus Wait List Control in an Australian Prison System. Dolan et al. Drug and Alcohol Dependence. 2003.

¹⁰ More than just Methadone Dose: Enhancing Outcomes of MMT with Counselling and Other Psychosocial and Ancillary Services. National Treatment Agency. 2004.

¹¹ Prison Needle Exchange: Lessons from A Comprehensive Review of International Evidence and Experience. Canadian HIV/AIDS Legal Network. 2004.

¹² The Effectiveness of Drug Treatment Programmes in Reducing Criminal Behaviour: A Meta-Analysis. Holloway et al. 2006.

¹⁵ Review of Drug and Alcohol Treatments in Prison and Community Settings: A Systematic Review Conducted on Behalf of the Prison Health Research Network. Roberts et al. University of Manchester. 2007.

¹⁶ Review of Drug and Alcohol Treatments in Prison and Community Settings: A Systematic Review Conducted on Behalf of the Prison Health Research Network. Roberts et al. University of Manchester. 2007.

¹⁷ If I Ruled the World. Presentation to Prisons and Beyond. Neil Hunt: UK Harm Reduction Alliance. 2006.

¹⁸ Outcomes of Drug Treatment Programmes: Briefing for Drug Strategy Unit.

¹⁹ Feedback from the Expert Panel Meeting, October 8th, 2007.

²⁰http://www.nta.nhs.uk/areas/criminal justice/integrated drug treatment system in prisons(IDTS).aspx

²¹ Review of Drug and Alcohol Treatments in Prison and Community Settings: A Systematic Review Conducted on Behalf of the Prison Health Research Network. Roberts et al. University of Manchester. 2007.

Psychosocial Programmes22,23

Pharmacological interventions are most effective when combined with psychosocial interventions

There is a lack of research evaluating the wide range of psychosocial interventions, in part due to a lack of understanding of what actually constitutes this type of intervention.

In particular, there is a lack of evidence supporting the use of brief psychosocial interventions in a prison setting, which focus on advice, information and support. Instead, the use of many of these interventions is supported by its demonstrated efficacy in a community setting only.

In particular, the 28-day psychosocial intervention currently recommended under CARATS for PDUs does not have a strong evidence base. This is not to say it is ineffective, but there is a lack of research to demonstrate this.

Intensive Drug Treatment Programmes (DTPs)

- There are three main types of intensive DTPs: cognitive behavioural therapy (CBT), therapeutic communities (TCs) and 12-step programmes, all of which encompass a range of interventions to address drug misusing behaviour
 - However, the 2007 NICE psychosocial guidance states that CBT should not be routinely offered to
 people presenting with cannabis or stimulant misuse or for those on opiod maintainance but that CBT
 is appropriate for the treatment of co-morbid depression and anxiety disorders for those with cannabis
 and stimulant problems, those who are abstinent or are stabilised on opiods.
- Of the three main types of DTPs, the most research has been done on therapeutic communities, although all three have been shown to produce positive outcomes. There is some concern however, about the quality of the research on DTPs and the impact of selection bias on findings. ^{24,25,26,27,28,29,30}
- There is poor understanding about which individual factors within DTPs have the greatest impact on outcomes. There is some suggestion that positive impact of these comprehensive programmes can be attributed to these unknown factors, e.g. the therapeutic alliance between staff and client, rather than the DTP as a whole. 31,32,33

²² Review of Drug and Alcohol Treatments in Prison and Community Settings: A Systematic Review Conducted on Behalf of the Prison Health Research Network. Roberts et al. University of Manchester. 2007.

²³ Drug Misuse: Psychosocial Interventions: NICE Guideline. 2007.

²⁴ Amity Prison-Based Therapeutic Community: 5 Year Outcomes. Prendergast et al. The Prison Journal. 2004.

²⁵ The Impact of IMPACT: An Assessment of the Effectiveness of a Jail-Based Treatment Program. Swartz et al. Crime and Delinquency. 1996.

²⁶ Drug Misuse Treatment and Reductions in Crime: Findings from the National Treatment Outcome Research Study. Gossop. National Treatment Agency. 2005.

²⁷ Five-Year Outcomes of Therapeutic Communities Treatment of Drug-Involved Offenders After Release from Prison. Inciardi et al. Crime and Delinquency. 2004.

²⁸ An Outcome Evaluation of Prison-Based Treatment Programming for Substance Users. Porporino et at. Substance Use and Misuse. 2002.

²⁹ Outcomes of Drug Treatment Programmes: Briefing for Drug Strategy Unit.

³⁰ The Effectiveness of Drug Treatment Programmes in Reducing Criminal Behaviour: A Meta-Analysis. Holloway et al. 2006.

³¹ Treating Drug Misuse Problems: Evidence of Effectiveness. National Treatment Agency. 2006.

³² Treatment Outcomes: What We Know and What We Need To Know. National Treatment Agency. 2005.

³³ Feedback from Expert Panel Meeting, October 8th, 2007

• It has also been suggested that positive outcomes can be attributed to individual client characteristics, e.g. personal motivation, and not to the programme itself. ^{34,35}

Discussion

Cross-Cutting Themes

Several key themes across intervention areas were identified, all of which have a potential impact on commissioning decisions:

- No gold standard drug treatment intervention is identified in the literature. One of the few systematic reviews of offender substance misuse in the United Kingdom states 'there are different treatment effects in different setting at different times both within and between different client groups'. 36,37
- Programme outcomes are related to demographic characteristics, e.g. programmes tend to be more
 effective at reducing criminal behaviour for males than females and younger clients than older clients.
- Special consideration is needed when devising care plans for women, black and ethnic minority prisoners and prisoners with accompanying mental health problems. These groups tend to have difficulty accessing treatment. ^{39,40,41,42,43,44,45}
- Time in treatment and treatment completion are associated with better treatment outcomes.

³⁴ Amity Prison-Based Therapeutic Community: 5 Year Outcomes. Prendergast et al. The Prison Journal. 2004.

³⁵ Treatment Outcomes: What We Know and What We Need To Know. National Treatment Agency. 2005.

³⁶ Interventions for drug-using offenders in the courts, secure establishments and the community. Perry et al. Cochrane Database of Systematic Reviews. 2006.

³⁷ Review of Drug and Alcohol Treatments in Prison and Community Settings: A Systematic Review Conducted on Behalf of the Prison Health Research Network. Roberts et al. University of Manchester. 2007.

³⁸ The Effectiveness of Drug Treatment Programmes in Reducing Criminal Behaviour: A Meta-Analysis. Holloway et al. 2006.

³⁹ Prisons, Drugs and Society. World Health Organisation. 2001.

⁴⁰ Helping Prisons to Meet the Drug Service Needs of Black and Minority Ethnic Prisoners: A Practice Guide. Centre for Ethnicity and Health. University of Central Lancashire. 2007.

⁴¹ Changing Habits. Audit Commission 31. The Substance Misuse Treatment Needs of Minority Prisoners Groups: Women, Young Offenders and Ethnic Minorities. RDS, Home Office. 2003.

⁴² Suicide in Recently Released Prisoners: A Population-based Cohort Study. Pratt et al. The Lancet. 2006.

⁴³ Women in Prisons. HM Inspectorate of Prisons. 2005.

⁴⁴ Substance Misuse Detainees in Police Custody: Guidelines for Clinical Management. Report of a Medical Working Group. Council Report C1R132. Royal College of Psychiatrists. 2006

⁴⁵ Improving the Health and Social Outcomes of People Recently Released from Prison in the UK--- A Perspective from Primary Care. Dr. Mark Williamson. Chair of the Secure Environments Group at the Royal College of GPs

⁴⁶ Engaging and Retaining Clients in Drug Treatment. National Treatment Agency. 2005.

⁴⁷ Recidivism among Drug Offenders Following Exposure to Treatment. Hepburn. Criminal Justice Policy Review. 2005

⁴⁸ Factors Associated with Abstinence, Lapse or Relapse to Heroin Use after Residential Treatment: Protective Effect of

- Evidence from residential programmes suggests that clients need a 'therapeutic dose' of treatment in order to impact change. There is suggestion that this occurs somewhere around the 90 day point. 50,51,52,53
- Better outcomes are reported for clients receiving aftercare support after completing treatment
- Better outcomes are reported for clients who receive a combination of treatment programmes, e.g. MMT plus psychosocial interventions.
- Personal motivation improves treatment outcomes.^{54,55} However motivation is notoriously difficult to assess or measure and length in contact with services is a more accurate predictive factor. The competency of staff in developing therapeutic alliances and providing motivational interventions is an important aspect of treatment. There are wide differences in the ability of agencies to retain clients in the community- factors such as staff warmth and flexibility are important.

Community commissioning focuses on developing a treatment system able to respond to a myriad of problems experienced by a heterogeneous population of drug users, and linked to generic providers at the tier 1 level so that it covers issues such as housing, education and employment. The DAT partnership approach assists in developing complex links and interdependencies to address the multifaceted nature of problematic drug misusers.

Many problematic drug users have spent many years in their addiction phase and have developed a variety of associated problems that include health, social and offending related aspects. Those in prison have arguably the most severe problems which will be multi-faceted in nature and therefore the responses need to be equally complex and able to address individual situations.

Research Gaps 56

There are several key research gaps in drug treatment effectiveness. These include:

- Evidence on the effectiveness of brief psychosocial interventions that focus on advice, information and support alone is weak and more research is needed
- More research is required on the effectiveness of the 28-day psychosocial intervention package offered by CARATs for PDUs

Coping Responses. Gossop et al. Addiction. 2002.

⁴⁹ Treating Drug Misuse Problems: Evidence of Effectiveness. National Treatment Agency. 2006

⁵⁰ Drug Misuse Treatment and Reductions in Crime: Findings from the National Treatment Outcome Research Study. Gossop. National Treatment Agency. 2005.

⁵¹ An Experimental Test of Chemical Dependency Therapy for Jailed Inmates. Dugan et al. International Journal of Offender Therapy and Comparative Criminology. 1998.

⁵² Treatment Outcomes: What We Know and What We Need To Know. National Treatment Agency. 2005.

⁵³ Feedback from Expert Panel Meeting. October 8th, 2007.

⁵⁴ Factors Associated with Abstinence, Lapse or Relapse to Heroin Use after Residential Treatment: Protective Effect of Coping Responses. Gossop et al. Addiction. 2002.

⁵⁵ Recidivism among Drug Offenders Following Exposure to Treatment. Hepburn. Criminal Justice Policy Review. 2005

⁵⁶ Review of Drug and Alcohol Treatments in Prison and Community Settings: A Systematic Review Conducted on Behalf of the Prison Health Research Network. Roberts et al. University of Manchester. 2007.

- The evidence base for maintenance prescribing is borrowed from community research (although there is an Australian (RCT) and Canadian prisons study evidence for its effectiveness). More information is needed to support UK policy for maintenance prescribing in prisons
- There is limited evidence to support any pharmacological interventions for substances other than heroin in both a community and prison setting.

Limitations of Drug Treatment Effectiveness Review

There are several limitations to current drug treatment effectiveness research, particularly in a prison setting. In 2006, Fazel et al. conducted a systematic review in order to gauge prevalence of drug misuse among prisoners. The review showed significant variations in prevalence estimates depending on the definition of drug misuse, specifically whether it encompassed any prisoner that misused drugs or those with a clinical dependence only. This variation in definition has obvious implications for prison drug treatment planning and also for the evaluation of drug treatment effectiveness, as prisoners with a history of drug use but not dependence might have different outcomes than those with clinical dependence. As a result, Fazel et al. called for a more clinical definition of substance misuse to guide drug treatment planning.⁵⁷

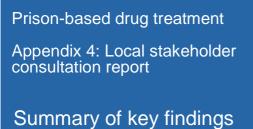
The majority of research used to drive current policy is borrowed from either an international or a community setting. There is concern that neither research streams account for the unique treatment environment provided in UK prisons. Prison systems vary internationally as do their approaches to drug treatment, which has an unknown impact on drug treatment effectiveness. Similarly, UK community based research does not take into account the discrete operating challenges posed by a prison environment, many of which can impact the success of drug treatment inventions.

Critically, prison drug treatment services are structured around care pathways, where clients potentially receive a multitude of concurrent interventions, e.g. MMT and CARATs psychosocial support. Interventions are evaluated in isolation of the wider care process however, making it difficult to assess how effective care pathways are. Similarly, little is known about the possible cumulative effects of multiple treatments and how different treatment episodes may interact or interfere with one another.

Lastly, research focuses on what is measurable. As a result, current research is weighted towards pharmacological and clinical interventions, which are more amenable to traditional study designs than psychosocial and other interventions for which certain biases are inevitable. Different approaches to assessing treatment effectiveness of more complex processes are needed in order to better understand what works for substance abusing prisoners.

⁵⁷ Substance abuse and dependence in prisoners: a systematic review. Fazel et al. *Addiction 101*, 181-191. 2006.

Appendix 4 – Local stakeholder consultation report



November 2007

PriceWaTerhousECoopers 🛭



Outline of presentation

- 1. Approach
- 2. Findings
- Demand for drug treatment
- Delivery of treatment
 - Key success factors
 - Barriers to effective delivery of treatment
- Performance management issues
- Transitions
 - Prison to prison
 - Prison / community interface
- Commissioning, funding and delivery
- Views on IDTS
- Key issues for each stakeholder group
- Process efficiencies
- Quick wins

Confidential – for Steering Group and Experts PricewaterhouseCoopers LLP

Page 2 15 November 2007

Approach Confidential – for Steering Group and Experts Page 3 15 November 2007

Overview of local stakeholders

• Local stakeholders were consulted in a number of ways through depth interviews and focus groups and via telephone interviews.

Stakeholders
Prison Governors
Prison Drug Co-ordinators
PCTs
Joint Commissioning Groups
Statutory and Voluntary Providers
Mental Health Trusts
Probation Service
Drug and Crime Partnerships
CJIT
Prison drug treatment staff
Prisoners and ex-prisoners
Carers

Confidential – for Steering Group and Experts PricewaterhouseCoopers LLP

Page 4 15 November 2007

Prison visits and group interviews conducted

Area	Prison	Description	Programme	Group interviews conducted
Kent & Sussex	Elmley	Local/male	IDTS	Interviews with senior management
	Swaleside	Secure/male	-	Interviews with prison staff
	Standford Hill	Open/male	-	(representing clinical, psycho-social and CARATs)
				Focus groups with prisoners
London	Holloway	Local/female	-	• Interviews with senior management
	Wandsworth	Local/male	-	Interviews with prison staff (representing clinical, psycho-social and CARATs)
				Focus groups with prisoners
West Midlands	Birmingham	Local/male	IDTS	Interviews with senior management
	Swinfen Hall	Cat C/young adults	-	Interviews with prison staff (representing clinical, psycho-social and CARATs)
				Focus groups with prisoners
North West	Styal	Local, Cat C/female	IDTS	Interviews with senior management
	Risley	Cat C/male	-	Interviews with prison staff (representing clinical, psycho-social and CARATs)
				• Focus groups with prisoners

Confidential – for Steering Group and Experts PricewaterhouseCoopers LLP

Page 5 15 November 2007

Prison visits and group interviews conducted

Area	Prison	Description	Programme	Group interviews conducted
Yorkshire and	Hull	Local/male	IDTS	Interviews with senior management
Humberside	Wealstun	Cat C/male	-	Interviews with prison staff (representing clinical, psycho-social and CARATs) Focus groups with prisoners
High Security	Whitemoor	Cat A, B/male	-	Interview with senior management Interview with prison staff (representing clinical, psycho-social and CARATs) Depth interviews with prisoners
High Security	Belmarsh	Cat A, B/male	-	Interview with senior management Interview with prison staff (representing clinical, psycho-social and CARATs) Depth interview with prisoners
Private Prison	Altcourse	Cat B/male	-	Telephone interview with senior manager

Confidential – for Steering Group and Experts PricewaterhouseCoopers LLP

Page 6 15 November 2007

Interviews with local stakeholders

Stakeholders	Total numbers achieved
PCTs	3
Joint Commissioning Groups	3
Statutory and Voluntary Providers	5
Mental Health Trusts	2
Probation Service	3
Drug and Crime Partnerships	3
CJIT	2
Families and Carers	4
Total	25

• In addition, 14 ex-prisoners were consulted throughout England within focus groups to further explore key issues

Confidential – for Steering Group and Experts PricewaterhouseCoopers LLP

Page 7 15 November 2007



Demand for drug treatment

- Demand for drug treatment in prisons far outstrips supply
- Overcrowding and staff shortages exacerbate the issue only 'scratching the surface'
- Treatment not necessarily tailored to needs of prisoner, rather based on what is available at the time in each prison
- Limited capacity to treat mental health problems
- High demand for accredited alcohol treatment programme
- Limited provision for non-English speakers and those with literacy problems
- However, those who have received treatment provided very positive feedback

Confidential – for Steering Group and Experts PricewaterhouseCoopers LLP

Page 9 15 November 2007

Delivery of treatment

- Great variation between prisons in level and quality of provision
- More integrated and holistic approach is needed to drug treatment
 - integration of clinical, psycho-social, drug awareness, educational
 - holistic approach to health screening
- CARATS service highly regarded by prisoners and prison staff
 - good relationships between CARAT worker and prisoner
 - in many prisons access to CARAT worker is limited after the assessment stage – they are overstretched
- Detox clinical practices vary between prisons (methadone vs subutex)
 - confusion amongst prisoners
- Maintenance creates problems when prisoners transfer between prisons; doesn't treat the dependency problem
- Psycho-social programmes very highly regarded by prisoners
- Mental health high demand but limited availability of services.

Confidential – for Steering Group and Experts PricewaterhouseCoopers LLP

Page 10 15 November 2007

Delivery of treatment – psycho-social treatment programmes

Benefits

- Increased awareness of impact of drugs on health and behaviours
- · Positive impact on health
- Greater self awareness and self-esteem
- · Positive impact on behaviour
- Greater understanding of and ability to talk about emotions
- More likely to take responsibility for own actions
- Acceptance of need to change motivated to 'get clean' or minimise harm
- Anger management
- · Better relationships with families
- · Safer prison environment

Barriers to success

- Strong need for throughcare and aftercare
- Difficulties in accessing CARATS worker or other support during and after programme
- Easy access to drugs in most prisons reduces effectiveness of treatment
- Often the derisory attitude of clinical/operational staff – impacts on selfesteem of prisoner
- Some prisoners get early release or transfer before end of programme
- · Limited availability of places

Confidential – for Steering Group and Experts PricewaterhouseCoopers LLP

Page 11 15 November 2007

Delivery of treatment – feedback on individual programmes (1)

Approach	Programme	Benefits	Issues
Clinical	Detoxification (via	Short treatment period	Bed shortages and staffing
	Methadone, Subutex)	 Physical dependency is 	issues
	Subdiex)	addressed	Attitudes of some staff
			Follow-up support at end
			Variation in treatment times
Clinical	Maintenance (via Methadone, Subutex)	Stabilises addiction, supports security within the prison environment	Physical dependency issues are not directly addressed
Psycho-social	CARATs Team	 Provide initial assessment, throughcare and aftercare. 	Issues with staff retention and availability in some teams
		• Intensive one - to - one support	 Quantitative KPTs focusing on throughput rather than the quality of the service
			Access issues
Psycho-social	Short Duration Programme	Short time period allows prisoners on remand or with short custodial sentences to access and complete the course	Too short for some and does not allow time to address behaviour and dependency issues
		Valuable as booster for longer-term prisoners	

Confidential – for Steering Group and Experts PricewaterhouseCoopers LLP

Page 12 15 November 2007

Delivery of treatment – feedback on individual programmes (2)

Approach	Programme	Benefits	Issues
Psycho-social	P-ASRO	Effective for alcohol dependency	Lack of throughcare and aftercare support
		 Improved behaviour, greater self-awareness and self- esteem 	
Psycho-social	FOCUS	Intensive course over 6 month period allows dependency issues to be fully addressed	Lack of booster programme for those who complete the programme and have long term sentences.
		 Longer time period allows group relationships to be built 	Not available in all high security prisons eg Belmarsh
Psycho-social	12-Step	 Intensive course over 3-6 month period allows 	Spiritual aspects are off-putting for some
		dependency issues to be fully addressed	Prisoners return to main wings after the programme where there
		 Described as life changing 	is an absence of support
		 Enables effective coping strategies – taking 'one step at a time' 	Evidence of poor targeting of participants within some course groups
		Strong relationships develop within the group	

Confidential – for Steering Group and Experts PricewaterhouseCoopers LLP

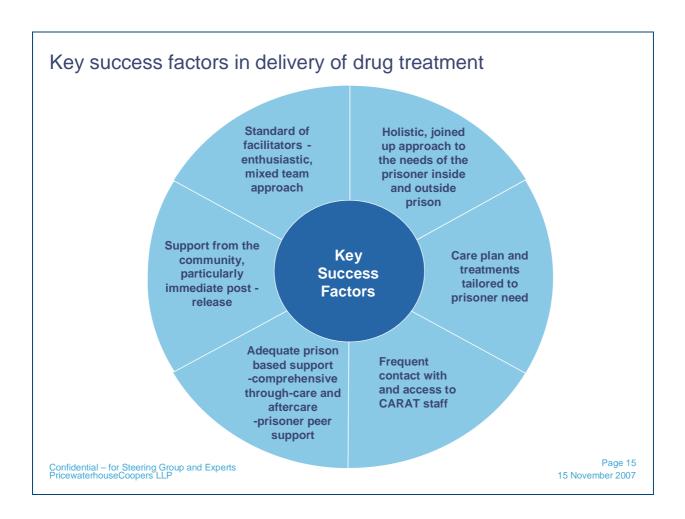
Page 13 15 November 2007

Success factors in delivery of drug treatment

- Most successful when a holistic approach is taken:
 - to health needs
 - joined up approach to needs of prisoner inside/outside/between prisons (health, accommodation, employment, support)
- Care plan and treatment tailored to the needs of the prisoner
- · Frequent contact with and access to CARAT staff
- Standard of facilitators enthusiastic, non-judgemental, approachable
- Multi-disciplinary teams delivering programmes (incl. prison officers)
- Prisoners acting as peer supporters
- Through-care and aftercare in place (in prison)
- Avoidance of Friday releases (especially unplanned) availability of services
- Support from community services DIP, Link, Probation service especially in the immediate period after release
- Involvement of peer supporters post-release and engagement of family, partners and close friends

Confidential – for Steering Group and Experts PricewaterhouseCoopers LLP

Page 14 15 November 2007



Barriers to effective delivery of drug treatment

- Absence of consistent approach amongst prisons
- Technical/process issues no central IT system for prisoner records
 - on initial assessment prison staff/CARATS rely on prisoner responses as the DIR is not immediately available
 - DIR often duplicated or lost
 - Paper based system cumbersome and ties up valuable resources
- Staff shortages, and recruitment/retention issues
- · Lack of resources
 - insufficient numbers of CARAT workers and programme staff
 - facilities for drug treatment
 - Availability of technology
- Supply of illicit drugs in most prisons (less so in high security and female prisons)
- Substance dependency is a long-term problem treatment focused on timeframe of custodial sentence
- · Lack of support when prisoners are released into the community

Confidential – for Steering Group and Experts PricewaterhouseCoopers LLP

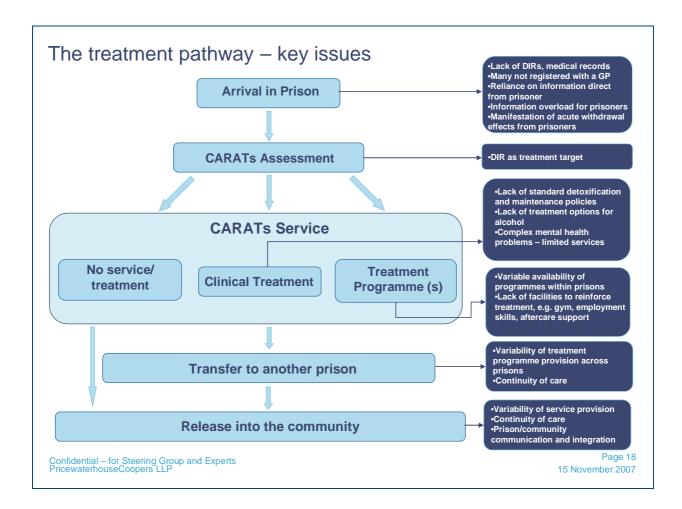
Page 16 15 November 2007

Performance management issues

- Reliance on quantitative KPT measures based on activity rather than outcomes (e.g. number of assessments by CARAT workers, numbers completing programmes etc).
- Need for greater focus on quality of measures to assess the impact of the treatment on individuals.
- Target driven approach viewed as inflexible agencies are target driven rather than client led
- What does success look like? No consistent approach to the prioritisation and measurement of outcomes
- Need for greater focus on quality measures to assess the impact of the treatment on individuals.

Confidential – for Steering Group and Experts PricewaterhouseCoopers LLP

Page 17 15 November 2007



Transitions - prison to prison Key issues

- Multiple movements within the prison systems were likely to interfere with treatment
- Continuity of care issues are common, particularly regarding maintenance programmes (eg prescription of methadone v subutex)
- Lack of consistency between prisons causes difficulties in prisoner transfers
 - different range of treatment programmes
 - different prescribing practices
 - IDTS facilitates transfer of prisoners to existing IDTS prisons
- DIR information is not always readily available to CARATS teams in the receiving prisoners
- Clustering of prisons was identified as a potential means of offering a wider range of programmes to prisoners in the future.

Confidential – for Steering Group and Experts PricewaterhouseCoopers LLP

Page 19 15 November 2007

Transitions – prison/community interface Key issues

- Examples of effective, well managed transition are rare
- The positive impacts of prison based drug treatment are often reversed outside the prison gate
- Lack of continuity in the wider drug treatment system and no funding links to encourage and support links. However, both systems are dependent on each other
- Kev issues
 - Lack of communication- between CARATS and community based offender management teams, and between prison and DATs, due to capacity issues and a different operating culture
 - DIR and health records often not shared with community
 - Often psycho-social programme treatments offered in prison cannot be continued in the community little evidence of integration
 - Little evidence of in-reach services in practice
 - Particular problems occur if prisoner resides outside the area served by the prison, or if release is un-anticipated
 - CJITs seem to have different criteria in terms of who they take on
- Many examples of prisoners reverting back to drug misuse on day of release
- Pockets of good practice do exist eg resettlement service in Hull and instances of use of link workers

Confidential – for Steering Group and Experts PricewaterhouseCoopers LLP

Page 20 15 November 2007

Commissioning, funding and delivery

- Commissioning arrangements are localised and can be complex
 - widespread confusion about the exact nature of commissioning arrangements within each area
 - Widespread lack of understanding of commission arrangements of other agencies
- Stakeholders felt that a variety of factors drove the commissioning of services:
 - Need
 - Resources
 - The National Agenda/Ten year strategy
 - Local policy
 - Political concerns
 - Media portrayal
- · Specific issues:
 - Shrinking resources and expanding services
 - "Lack of clear accountability and governance" within the commissioning cycle
 - Commissioning is "highly localised" and raises specific problems for agencies such as the probation service which operates at a sub-regional level
 - Localised commissioning is problematic where offenders are returning to a destination community which is in a different area from the releasing prison
 - short-term nature of funding is problematic in terms of service planning, staff recruitment and retention
 - ROM has a responsibility for the prison area but no input into budgetary decisions

Confidential – for Steering Group and Experts PricewaterhouseCoopers LLP

Page 21 15 November 2007

Views on IDTS

 Initial enthusiasm coupled with recognition that it is "early days" and it may be too early to judge the success and failures of the approach

Positive views	Concerns
It is an opportunity for change and improvement	Uniformity of resource and should be provided in all prisons to ensure equal access
Collaborative, multi-disciplinary structure	Performance management – lines of accountability are not clear
It is well integrated	Lack of central leadership, prison working in isolation
Perceived as easy to embed	Difficulties in transferring prisoners from IDTS to non-IDTS prisons
Has the potential to improve links between prisons and the community	Questions on the suitability of the model for open prisons
Being able to offer detox services on a wider basis	Risk of overdose on release – need for aftercare to be embedded in the model.

• Moving forward, there is a need to 'refresh' the system to ensure that progress does not stall.

Confidential – for Steering Group and Experts PricewaterhouseCoopers LLP

Page 22 15 November 2007

Key issues by each stakeholder group – prison stakeholders (1)

Stakeholder Group	Key areas of concern
Governors	Commissioning process and the level of bureaucracy within the system;
	Accessing funding from the local PCTs;
	Transfer processes between prisons, particularly from IDTS to non-IDTS prisons.
Prison treatment staff	 Concern that future treatment provision will be community based;
	 Variability in DIP teams linking in with CARATs teams and prisoners to work on post release plans;
	Over-reliance on quantitative KPTs rather than a focus on qualitative measurements of service provision.

Confidential – for Steering Group and Experts PricewaterhouseCoopers LLP

Page 23 15 November 2007

Key issues by each stakeholder group – prison stakeholders (2)

Stakeholder Group	Key areas of concern
Prison clinical staff	Adequate staff support to address mental health issues within the prison based population;
	The need for a consistent clinical approach within all prisons;
	Increased focus on harm minimisation techniques.
Prisoners	Consistent attitudes of all staff to drug issues including awareness and understanding of drug dependency issues;
	 Post release planning issues, particularly in relation to housing assistance;
	Boredom of routine within prison environment leading to drug use and the desire for enhanced employability skills to move away from drug use within the community;
	 Access to community based services including rehabilitation and counselling services and peer support services post release

Confidential – for Steering Group and Experts PricewaterhouseCoopers LLP

Page 24 15 November 2007

Key issues by each stakeholder group – community stakeholders

Stakeholder Group	Key areas of concern
Local community stakeholders	 Improved prison / community interface and a move away from a 'them and us' mentality;
stakeriolders	Greater community funding consistency and a move away from short term funding of posts;
	Greater integration between mental health and alcohol in-reach teams.
	General lack of understanding of the transition issues and the needs of ex-prisoners within the community, particularly within PCTs and Mental Health Trusts.
Ex-prisoners	Move away from traditional prisons for drug treatment services to more focus rehabilitation-based drug free prisons for those who actively want to address their dependency issues;
	An end to mandatory drug testing;
	 Increased focus on employability skills and increased training for ex- prisoners.
	Access to drug free hostels following post release.
Families and Carers	More information on support services available to families and carers e.g. through a one stop shop;
	Greater focus on the needs of the family;
	More consistent funding of family in-reach workers

Confidential – for Steering Group and Experts PricewaterhouseCoopers LLP

Page 25 15 November 2007

Issues for providers

- · Need to focus resources on a smaller number of people
- Range of short term programmes but lack of a whole systems approach
- Lots of time is spent filling in forms but they do not see any analysis of that data. DIRs get lost and they are not electronic
- Would like to be given more scope for innovation and creativity in their contracts there is a need to 'trust providers to do their job and deliver'
- · Would like commissioning arrangements to be more streamlined
- Resources are an issue for intensive programmes e.g. 12 step
- Need to employ more resources to deliver the CARAT service and to meet diverse needs of prisoners
- Performance management is input based ('tick box exercise') they favoured a shift to output based contracts (in order to effect outcomes)
- Providers are often not consulted when prisoners move which can disrupt programme delivery
- Communication mechanisms are difficult as in every prison people sit under different structures eg CARATs may sit under High Security or under resettlement.

Confidential – for Steering Group and Experts PricewaterhouseCoopers LLP

Page 26 15 November 2007

Analysis by key demographics and prison type

- Availability of drugs appeared to be less of a concern in both women's prisons and high security prisons
- Female prisoners were more likely to be on short sentences which impacts on the type of treatment and level of treatment they can receive
- Female prisoners can have more complex needs than male prisoners relating to mental health issues, previous histories of being involved in abusive relationships and issues around self worth and self esteem
- Feedback from prison staff suggested that older prisoners (30+) have a higher success rate following programme completions than younger offenders. Staff felt that this was due to more mature attitudes and stronger willingness to change
- Younger prisoners needed additional job training support to facilitate a move away from previous lifestyles
- Non-English speakers and those with literacy problems have unequal access to treatment.
- Staff within high security prisons felt that there was a lack of mid-range programmes such as booster programmes and short courses for those with long term sentences

Confidential – for Steering Group and Experts PricewaterhouseCoopers LLP

Page 27 15 November 2007

[&]quot;Prisoners could probably get through the majority of programmes within a 12 month period if they completed the programmes consecutively. In terms of a prisoner serving a 40 year sentence, what would you do with them for the remaining 39 years?"

Improvement ideas

Increased prison based support

- Introduction of a morning and evening shift system as part of the CARATs service to provide increased operational hours.
- Closer aligning of interventions with drugs, alcohol and mental health to provide more holistic treatment pathways.
- Drug awareness training for all operational, programme and clinical prison based staff.

Judiciary Training

- Judiciary training on appropriate lengths of sentences for drug offenders-
 - 2 week 'shock' sentences for minor drug offenders;
 - Short term sentences for other drug offenders to ensure re-housing does not become an issue.

Quality outcome measurements

• Less reliance on individual throughput KPTs within agencies in favour of quality outcome measurements based on the needs of the individual and the progress which each individual has made.

Confidential – for Steering Group and Experts PricewaterhouseCoopers LLP

Page 28 15 November 2007

Improvement ideas

Best practice approaches

- · Consortium approach to the commissioning process
- Greater sharing of experiences across prisons regarding IDTS best practice and the lessons learnt from the implementation of the system.
- Development of best practice staffing models based on a mixed team and mixed skills approach, within all prisons
- Electronic information system to record prisoner case histories and medical records and accessible to community and prison based treatment professionals.
- Job swap opportunities between prison based staff and community based staff to increase understanding and build lasting relationships.
- Implementation of a user voice initiative in prison and the community on the effectiveness of programmes.

Improved community provision

- More community in-reach teams for all users in prison is required, such as resettlement workers to manage the transition between prison and the community for each offender.
- Increased involvement of carers at a local level in determining needs and greater inclusion of carers in support programmes so that they can work in partnership with agencies to make the intervention more effective.
- Integration of community health teams, community alcohol support workers and probation and DIP teams to approach the needs of ex-prisoners within a more integrated approach.
- Provision of a nurse led out of hours weekend service to ensure that maintenance prescriptions can be provided to prisoners on release during this time.
- Introduction of drug free hostels to assist immediate post release housing provision and to provide immediate community support.
- Community based one-stop shop for advice and support, housing and benefits aimed at both ex-prisoners and their carers and families.

Confidential – for Steering Group and Experts PricewaterhouseCoopers LLP

Page 29 15 November 2007

Summary - key points

Demand for drug treatment

- Demand for drug treatment in prisons far outstrips supply and overcrowding and staff shortages are exacerbating the issue
- Drug treatment is not necessarily tailored to the needs of prisoners, and instead is often based on what is available at the time in each prison. However, those prisoners who have received treatment provided very positive feedback

Delivery

- There was great variation between prisons in the level and quality of provision
- CARATs services and psycho-social programmes were highly regarded by prisoners. Key benefits deriving from accredited psycho-social programmes included-
 - increased awareness of the impact of drugs on health and behaviour and positive impacts on both
 - greater understanding of and ability to talk about emotions
 - greater self awareness and self-esteem and more likelihood to take responsibility for their own actions

Confidential – for Steering Group and Experts PricewaterhouseCoopers LLP

Page 30 15 November 2007

Summary - key points

Delivery

- Key success factors in the delivery of drug treatment included-
 - Holistic and joined up approaches to the needs of the prisoner inside and outside prison
 - Care plan and treatments tailored to prisoner need
 - Frequent contact with and access to CARAT staff
 - Adequate prison based support including adequate through-care and prisoner peer support
 - Support from the community, particularly post-release
 - Enthusiastic, mixed team programme facilitators
- · Barriers to effective delivery of drug treatment identified by prison staff were identified as-
 - The absence of a consistent approach amongst prisons
 - Staff shortages and recruitment/retention issues
 - Technical and process issues including the lack of central IT records
 - Lack of resources
 - Supply of illicit drugs within prisons
 - Lack of community support for ex-prisoners

Performance management issues

Many felt that there was a reliance on quantitative KPT measures based on activity and that
there was a need for greater focus on quality measures to assess the impact of treatment on
individuals

Confidential – for Steering Group and Experts PricewaterhouseCoopers LLP

Page 31 15 November 2007

Summary - key points

Transitions

- The lack of consistency within clinical and psycho-social treatment programmes between prisons created difficulties within prison transfers
- Within the transition between prison and the community, continuity of care issues were common
- Examples of effective well managed transitions from prison into the community were rare. Key issues within the prison/community transition interface were identified as-
 - Lack of communication between CARATs and community based offender management teams and between prison and DATs
 - Health records and DIRs not being shared within the community;
 - No integrated treatment programmes between the prison and community interface
 - Little evidence of in-reach services
 - Varying criteria for entry among CJITs

Commissioning, funding and delivery

- Commissioning arrangements are localised and can be complex
- Specific issues identified by stakeholders included concern over shrinking resources and increased service need, perceived lack of clear accountability and governance and highly localised commissioning arrangements.

Confidential – for Steering Group and Experts PricewaterhouseCoopers LLP

Page 32 15 November 2007

Appendix 5 – Economic framework: outline of key issues

Introduction

The Department of Health ("DH") and the Ministry of Justice ("MoJ") have commissioned PricewaterhouseCoopers ("PwC") to review prison-based drug treatment programmes and provide recommendations on how these should best be provided. As part of the project, PwC was asked to set out an appraisal of options for delivering drug treatment programmes in prison. An economic framework was developed to assess the costs and benefits from these programmes to prisoners, the government and wider society. These were identified through reviewing literature from academic and government sources.

The economic framework and the resultant numerical model (covered in a subsequent annex) allow high-level comparison to be made between the impacts of various options in common monetary terms. The initial results of the framework were shared with economists and senior officials in Department of Health and Ministry of Justice, and this version has addressed the useful issues raised by them.

This paper outlines the key issues and characteristics for the economic framework that PwC underpins the work that undertook for the project. In addition to the more general influence through the project, PwC has undertaking a numerical analysis to give a scale of the costs and benefits involved. This analysis is based on the characteristics of drug users in prisons in comparison to the general population. The resultant economic costs are spread across the expected lifetime of the users and include direct financial costs, indirect benefits lost and some measure of welfare loss through excess mortality and morbidity. The details and results of this modelling are included in Appendix 6.

Structure

The structure of the paper:

- Characteristics Outlines the high-level characteristics of drug users, prison population and how these may impact on outcomes from drug-treatment programmes
- Costs of drug use The main impacts and estimated costs of drug use for society in terms of productivity, health, crime and social impacts.
- Treatment Links existing and potential treatment programmes with their success and effectiveness.
- Economic Framework Outlines the proposed structure of the economic model and potential methodological approaches.

Characteristics

The characteristics of drug users, prisoners and drug-using prisoners are important for determining the expected costs of illegal drug abuse and treatment outcomes. People who find themselves involved with drugs and crime typically have personal or circumstantial attributes which impact their health, economic and social lives. It will also be important to determine where the characteristics of these three sets differ. This will allow us to best use existing data sources and ensure that our analysis is appropriately tailored to particular circumstances.

Drug users

Illegal drug use is common. Up to a third of adults in the UK have used illicit drugs at some point in their lives, with prescription misuse likely to be even higher⁵⁸. Cannabis and ecstasy are the most commonly used illicit drugs though heroin and cocaine are associated more often with problematic use⁵⁹. In recent years, cocaine – and especially crack cocaine – has more prominent as a significant problem drug alongside opiates.

Drug users can be categorised into two broad groups – recreational and problem users. At any time, between 1.8m and 3.5m people in Britain will be using illegal drugs on a regular basis⁶⁰. Most will be able to control their habit and impose relatively limited costs on the government and wider society⁶¹. However,there are approximately 350,000 problem drug users according to recent research⁶². There is no single definition of 'problem drug use' in the literature, but most papers agree that problems users are those where drug taking has become an essential and central element of life, where users are showing signs of drug dependence and/or where they are undertaking high risk activities (e.g. injecting). This group's drug use imposes significant costs (e.g. health, criminal justice, social implications) on wider society – up to £23b per annum in England and Wales⁶³.

Higher risk of developing drug problems is often associated with specific individual and environmental factors, such as social exclusion, stress levels, local social norms and parental influence⁶⁴. These factors are likely to be collinear with other social and economic outcomes, e.g. skills performance and employment. Users can also often fail to realise when their drug use has become problematic. The causality relationship between drug use and these factors is complicated, multi-directional and inter-generational⁶⁵.

Some reasons for drug use

Many drug users exhibit a propensity towards higher present consumption preferring more immediate benefits over long term costs and risks. This could be driven by a higher than average discount rate of time preference and asymmetric information regarding the risks of drug use. This does not mean that drug abusers act differently than economists would expect. While extreme drug use and mental illness might impede some people's ability to consider their actions, rational addiction theory provides an economic explanation for drug use by suggesting that individuals are forward looking and do take into consideration future risks⁶⁷. However, those individuals who are prone to heavily discounting of the distant future will significantly favour present consumption against any long-term consequences. The larger discount rates imply a significant decline in consumption with age and health status, which is evidenced by steady decline in drug use in people over the age of 50 which may be linked to the onset of visible health consequences⁶⁸.

Other potential reasons for drug use which may also be involved include responses to parental authority, escapism, mental health issues and under-arousal.

⁵⁸ Gerada and Ashworth 1997

⁵⁹ Godfrey et al 2002

⁶⁰ Godfrey et al 2002

⁶¹ For young recreational users £35m and for older regular users £12m according to Godfrey et al 2002

⁶² Godfrey et al 2002, and Hay et al 2007

⁶³ Godfrey 2002

⁶⁴ Gerada and Ashworth 1997

⁶⁵ Social Exclusion Unit 2002

⁶⁶ Johnson 2006

⁶⁷ Becker and Murphy 1988

⁶⁸ Arcidiacono et al (2007)

Key demographics of drug users

The majority of users start in their teens⁶⁹, develop their habitual use in their twenties with use then declining or ceasing in later years of life⁷⁰ (though high premature mortality among users makes the sample somewhat biased). Illegal drug use is highest among males, particularly for those who are young and unattached to a partner or children. Many drug users have problems – both currently and in their past -- with training and employment which is likely to be circular relationship⁷¹ ⁷².

Drug users who end up in prison – or least in the criminal justice system – are more likely to have problems than the population wide averages for drug users. It is therefore necessary to bear in mind that the intensity of costs and risks for drug-abusing prisoners are likely to be greater than for the results obtained by looking at population-wide data.

Risk factors for drug usage

There are a number of individual and environmental factors that contribute to the likelihood of drug use, which often 'cluster' in an individual.

- Biological factors
- Temperament and personality: issues with under-stimulation which respond to chemical stimulation
- Family: poor familial and peer relations increase risk, while being married decreases probability of use. Drug abusers are also more likely to have had parents who abused drugs or alcohol.
- Emotional and behavioural problems: often associated with mental or physical disorders; negative links between substance abuse and delinquency.
- Mental or physical problems: psychopathology may also be linked to substance abuse; higher psychopathology in using than non-using delinquents
- Poor social connections: high unemployment, low level of skills and education.
- Peer use of substances: including drinking⁷³

The likelihood of individuals to engage in problematic drug taking is a combination of these personal, social and instructional factors, along with a degree of unexplained variation within populations.

Prisoners

The prisoner population is a subset of the arrested criminal population, i.e. only those that have committed serious enough or repetitive enough to justify custody.

⁶⁹ Bonomo and Promios 2005

⁷⁰ McDonald and Pudney 1999

⁷¹ McDonald 2002

⁷² Zuvekas et al 2005

⁷³ Bonomo and Promios 2005

Key demographics of prisoners

At any one point, about 80,000 people are in prison in England and Wales with another 225,000 on probation. Most prisoners (95%) are male⁷⁴ with a mean age in their mid/late twenties⁷⁵. A high proportion have a mental disorder – one-third with a psychiatric diagnosis⁷⁶. Around 43% of prisoners are serving long-term sentences between 4 years and life with slightly less (35%) serving short term sentences between 12 months and 4 years⁷⁷. Therefore, the stock of prisoners will be dominated by those serving periods greater than a year.

About 135,000 people will pass through the prison system during the year. The flow of prisoners will have a much higher contingent of those serving shorter sentences, so that the number of people serving shorter sentences is a more significant share of all of those that will interact with the prison system in any particular year. It is crucial to differentiate between those people that the have involvement with the prison system during a period of years and those currently in the system. The first group will include many more small level criminals who commit more frequent but less violent crime.

Characteristics of prisoners

People under custodial sentence or on remand typically face a range of social, financial and health issues in their life which have been contributing factors to their criminal activity and subsequent incarceration⁷⁸. The main characteristics of the prison population are low skills and education, poor employment outcomes, limited financial resources, high level of social exclusion, previous criminal history and widespread drug use.

Nine key factors have been identified as important to determining rates of offending and re-offending – education, employment, drug/alcohol misuse, mental/physical health, attitudes/self-control, institutionalisation/life skills, housing, financial support/debt and family networks⁷⁹. Criminal activity tends to decline with age after the thirties even for the most prolific criminals⁸⁰.

Where drug users / prisoners converge

There is an intrinsic link between problem drug users and prisoners, with both group sharing many of the same general characteristics. The largest share of drug users in prisons will generally be males, aged 20 – 35, on a short-term sentence for an acquisitive crime, with a history of imprisonment. This is because they represent the largest share of prisoners. A significant share of female prisoners will have drug problems, but they are much smaller share of the overall numbers of prisoners. It is estimated that around 70% of prisoners have taken illegal drugs in the year before their prison sentence, with up to 50% being categorised as problem users⁸¹. A high proportion of prisoners will have committed the crime in order to get drugs⁸², or will have been under the influence of drugs at the time, particularly for robbery, weapons offences, burglary and motor vehicle theft. Drug users are more likely to have prior convictions, and have a higher chance of reoffending than other prisoners⁸³.

74 Offender caseload statistics

75 Brooke et al 1996

⁷⁶ Brooke et al 1996

⁷⁷ Offender caseload statistics

⁷⁸ Birmingham et al 1996

⁷⁹ Social Exclusion Unit 2002

⁸⁰ Sampson and Laub 2003

⁸¹ Ramsay 2003

⁸² Ramsay 2003

⁸³ Ramsay 2003

Drug abuse is a causal factor in a relatively high proportion of the prison and jail population, with problem drug users committing a disproportion amount of total offences⁸⁴. Small subsets of particularly active criminals are likely to have committed a very large share of total crimes. These crimes will tend to be more acquisitive and less violent as (i) they are often used to finance drug habits and (ii) more serious crimes would require longer sentences which limit the opportunity to commit external crimes. This strong correlation between problem drug users and crime could mean that addressing issues of drug dependency could be effective in decreasing rates of crime but will also requiring addressing other issues which underpin both criminal and drug-using activity. Treating the type of drug users who record the most crime -- particularly while they are young -- is likely to have the largest impact on reducing the costs from drug-related criminal activity.

A high discount rate of time preference also provides some explanation of for the correlation between drug use and crime. Higher relative values on the current proceeds of crime but less value on the potential negative consequences of being caught could lead to higher perceived net benefits to individuals from criminal activity. This would cause them to be more likely to commit crimes than a person who had a similar set of morals but a different perception of relative time values. Thus, drug use and criminal activity may not only have a direct relationship between themselves but also be partially co-determined by personal characteristics such as perception of future costs and benefits.

Drug dependence treatment benefits tend to be concentrated among younger prisoners. These prisoners are less established in their addictions, have longer potential working lives and are less likely to have developed the most serious health consequences from their drug habits. This means that the benefits of effective drug treatment programmes for younger prisoners could have higher lifetime benefits. However, these needs to be tempered by the lower rates of achieving abstinence in this group than in older prisoners who may have higher personal incentives to quit drugs⁸⁵. Current drugs policy also is based on provision based on individual need and not simply on the groups that have the highest personal and societal gains from treatment.

Before commencing their sentence, the most commonly used drugs are cannabis and heroin, with a third of prisoners injecting. Once in prison drug use decreases slightly, with injection decreasing significantly ⁸⁶. Many prisoners also have recently been in drug treatment, methadone being the most common ⁸⁷. This has significantly implications for the types of drug programmes that should be targeted which need to differ according to the substance being abused, and linked to programmes before and after prison.

Entry and exit from prison are key risk points for many prisoners. Suicide and serious self-harm are significant risks for new prisoners, especially those with drug problems. Exit from prison is associated with much higher mortality with many deaths linked to drug overdose⁸⁸.

The impact of characteristics

The characteristics of drug users and prisoners will impact on the expectations that we have on their actions. In so far, as we can measure how these characteristics lead to outcomes that differ from the general population, these need to be include in our analysis.

The age of the population will influence the timescale over which future economic impacts can be assessed and also the degree to which previous behaviours may have already resulted in lifelong consequences. Younger people will have more years of future employment, fewer existing consequences of past use and also be more accessible to training opportunities to increase productivity.

⁸⁴ Karberg and James 2005

⁸⁵ Arcidiacono et al 2007

⁸⁶ Mason et al 2003

⁸⁷ Mason et al 2003

⁸⁸ Singleton et al 2003

The health of the population will determine their ability to function effectively in society and the expected future costs which they will impose. Several of the illness related to illegal drug use have relatively binary impacts, i.e. once you have been infected the costs occur no matter what happens subsequently. For instance, infection with Hepatitis C will involve considerable future costs to the health service even if one's subsequent behaviour is exemplary. Many people have flawed sense of potential health consequences of their actions leading to risky behaviours which they do not fully understand⁸⁹.

Existing skills and educational potential will influence the level of potential earnings that could be expected when engaged in mainstream employment.

Personal characteristics are often difficult to measure. In some cases, they may not be readily identifiable, and any population will have a natural variation in characteristics such as hard work, honesty and punctuality. However, generalisations based on studies can be made where we have reasonable expectations that population groups may be biased from the average in certain ways. The observation of poor personal and social skills in a significant share of both drug users and prisoners should inform our expectations of how they will perform in the wider economy and society.

Costs of drug use

Drug use results in significant costs for users, their friends and family, the government and society in general. The UN estimates the cost of drug use is between 0.5%-1.3% of GDP across a number of countries⁹⁰, while a separate study estimates that drug use costs around 1.8% of GDP in the UK⁹¹.

We have reviewed detailed studies of the economic costs of illegal drug users for Australia⁹², Canada ⁹³, the United States⁹⁴ and England & Wales ⁹⁵. Though they differ in there exact calculations, all the studies highlight the importance of lost productivity, additional health costs, criminal justice costs and social impacts. Lost productivity – through black market activity, unemployment, health problems and early mortality – is the largest cost in the studies that directly address it whereas the others note that it is expected to be the largest though they have not directly calculated the impact. Higher health costs are driven by a combination of direct impacts (e.g. infections, overdoses) and indirect impacts (e.g. poorer overall health relative to age). Criminal justice and prevention costs are estimated in a number of ways to allow for the complex interactions between drug use and different criminal behaviours. The final category, social costs, are not calculated in any of the studies though they all recognise that these would be massive and also key drivers for future costs in more identifiable areas of lost output, health costs and criminal justice activities.

Output (productivity)

The productivity and output of drug users is impacted in three key ways:

- causes or exacerbates their unemployability up to 80% of problem users are unemployed;
- lost productive years due to morbidity and impairment;
- reduced skills development and failure to meet potential

For prisoners, productivity loss is compounded by time spent in prison which erodes skills, creates an opportunity cost of lost experience, and acts as a negative signal for employers. The vast majority of problem drug users are welfare dependent, typically both before and after imprisonment, thereby increasing the costs to the economy in both direct costs and foregone output.

⁸⁹ Smith et al 2001

⁹⁰ Benyen et al 2006

⁹¹ US Office of Drug National Control Policy 2004

⁹² National Drug Research Institute and the Centre for Adolescent Health (2004)

⁹³ Rehm et al 2006

⁹⁴ US Office of Drug National Control Policy 2004

⁹⁵ Godfrey et al 2002

Interestingly, longer term incarceration has shown some positive impacts on employment outcomes. This has been linked to longer gaol time being more effective in breaking contact with former criminal associates, in addition to the effect of work and training programmes undertaken by long term prisoners⁹⁶. There is a strong link between stable employment and reducing reconviction rates⁹⁷. Increasing the productivity through long-term stable employment is a key performance indicator of effective drug treatments.

Improving the health outcomes and risk of morbidity will also have a significant impact on output of users by increasing both the quantity and quality of work that they can perform as well as reducing the personal, social and health care costs of poor health. Their ability to work will also allow them to secure more easily stable and quality housing which has a significant positive impact on their life chances.

Health

Problem drug users face significant health risks, which are associated with injecting, general health impacts and a higher risk of accident and injury. A study of England and Wales estimates the total costs to the health service to be between £283m - £509m per annum, with inpatient care (including treatment for mental problems) being the largest cost component, followed by accident and emergency 98 . This figure does not include the costs of premature death of young users, which is estimated at an additional £1 billion per annum.

The majority of drug users in prisons tend to have a history of injecting which has high health risks from poor injecting techniques and needle sharing which can lead to HIV / AIDS, hepatitis, tuberculosis and higher chance of mortality. The health costs of HIV / AIDS are often the largest drug related health costs.

Problem drug users are at an increased risk of mortality immediately following release from prison, up to 40% higher than the general population, particularly in the first week following release. This risk is increased further for poly-drug users⁹⁹. The high mortality cost among young problem users is associated with the significant productivity losses, and highlights the potential benefits from intervention for young users.

Drug use also has significant neonatal health costs for problem female drug users, which is estimated at approximately £4.3 million per annum¹⁰⁰. The lower quantum of drug related neonatal costs is related to the lower proportion of female problem drug users, but it is highly significant for the future health and social impacts on the children. This emphasises the need for targeted and specific drug treatment programs to address the potential problems that arise from different groups of drug users.

Crime

The crime associated with drug use has a significant impact associated with the costs to the criminal justice system as well as the costs to the victims of crime. The costs of drug related crime range from £2bn to £3.5bn in direct costs with another £7bn-£12bn in social costs due to victims of crimes ¹⁰¹.

The key costs to the criminal justice system include – arrest, policing and surveillance costs, judicial costs, and incarceration costs. Costs to the victims include – loss and damage to property, physical injury, stress and fear of crime. Particularly for violent crime the emotional and physical impact account for large share of costs. In addition, there are commercial and public costs that are incurred, which include – security, insurance, crime prevention, etc.

⁹⁶ Kling 2006

⁹⁷ Latendresse and Cortoni 2005

⁹⁸ Godfrey et al 2003

⁹⁹ Singleton et al 2003

¹⁰⁰ Godfrey et al 2003

¹⁰¹ Godfrey et al 2003

While drug users commit a disproportionate amount of crime, they typically commit more acquisitive crimes, which tend to have lower social and health cost implications compared to violent crimes. As it is estimated that only 10 - 25% of crime committed is actually recorded, the benefits of effectively addressing drug dependence issues to decrease rates of drug related crime will have a significant flow-on effect for victims and the community that is not fully reflected in official crime statistics.

Social

Problem drug use has significant social impacts on users, family, other individuals, wider community, industry and the public sector.

The key social costs are associated with the break down of familial relationships and impact on parenting skills ¹⁰² ¹⁰³. Parental drug and alcohol problems are the leading cause of children in care, as the needs of child can become secondary to drug addiction – problems with feeding, clothing and caring, health in particular can be a problem through inattention to safety and supervision. Drug abuse in the household is also linked to abuse and serious neglect whether directly through parental action or lack of appropriate supervision and care. Further social costs are linked to behavioural and obedience issues for children, academic impacts with erratic attendance and underperformance, and further health costs with boys more likely to suffer from ADHD. There is a strong link between parental and sibling drug use and later drug use leading to inter-generational impacts.

While the majority of crime related costs are incurred by male problem users, a significant proportion of social costs are linked to problem use by females, especially mothers with young children.

Prison Environment

Drug use is highly likely to influence the environment within prisoners. Prisoners need to be in a fit physical and mental state to get the benefits from many of the rehabilitation programmes that are offered. Drug using prisoners may not only limit their own ability to benefit from programmes but also impact the wider prison environment which limits the potential benefit to other prisoners by forcing greater focus on security and drug dealing.

Treatment

The economic evaluation of drug treatment programmes is most concerned with the success rates of such programmes, the distribution of their impacts across populations and time and their financial costs. The largest drivers of economic benefit will be the success rates of programmes as even small differences in performance will have a large impact on future benefits and cost savings. Unfortunately, the evidence on treatment success rates in the medium- to long-term (more than a few years) is very patchy. The NTORS study of heroin-addicted prisoners¹⁰⁴ found a 38% abstention rate after five years and even among continuing users the amount of drugs taken fell significant. Interestingly, though, in both groups alcohol consumption increased. However, this study is one the few that has followed patients over this long of a period.

The range and scale of drugs for which treatment is being sought will have a significant impact on the modelling of the impact as treatment programmes for stimulants will differ significant from those for opiates¹⁰⁵. The characteristics of drug users involved in programmes – including the degree of dependence - is another important factor alongside the design of the programmes and quality of providers in determining the success rate of specific programmes¹⁰⁶.

¹⁰² Johnson 2006

¹⁰³ Barnard and McKeganey 2004

¹⁰⁴ Gossop et al 2001

¹⁰⁵ Beynon et al 2006

¹⁰⁶ Dowden et al 2003

A key question is what we consider as success from prison-based drug treatment programmes. The most basic measure would be those rehabilitated to the population norm. In reality, success rates for programmes will likely be judged against a series of measures. Substance dependence is a chronic illness where relapses to damaging behaviour are to be expected and need to be addressed over the long-term. The primary success output for treatment programmes will be the reduction in drug taking but this leads to three key outcome measures: health improvement, crime reduction and ability to be involved in activities of normal life. Unfortunately, clear measures of reduced drug taking are particularly difficult to find in the evidence. While we recognise that this is the most appropriate measure, our modelling has instead focussed on the gains from complete rehabilitation as the impacts of partial behavioural change could be included when the evidence becomes available. This could be used to work backwards to find what level of success would be needed to economically justify the costs of treatment, whether these are the aggregate benefits (social, personal and governmental) or just the direct financial benefits in terms of increased output and reduced state expenditure in health, criminal justice and social care.

Conclusion

This paper has highlighted the main sources of costs and benefits to individuals, the government and society and identified the messages coming from the academic and official evidence. These costs relate to the economy, health, social and criminal justice system. The results of this paper have fed into the wider project work that PwC have undertaken to identify the commissioning, process and prioritisation options for drug treatment programmes in prisons. As an extension of this work, PwC have undertaken a numerical analysis based on official and published data to present the scale of economic, social, health and criminal justice costs of problem drug use in relation to key characteristics of users. The details and results of this analysis have been included in Appendix 6.

Sources

- Arcidiacono P, Sieg H and Sloan F (2007). "Living Rationally under the Volcano? An Empirical Analysis of Heavy Drinking and Smoking", International Economic Review, 48.1, 37-65.
- Barnard M and McKeganey N (2004) "The impact of parental problem drug use on children: what is the problem and what can be done to help?" *Addiction*, 99, 552-559.
- Becker G and K Murphy (1988) "A Theory of Rational Addiction", Journal of Political Economy, 96.4, 675-700.
- Beynon C, Bellis M and McVeigh J (2006) "Trends in drop out, drug free discharge and rates of re-presentation: a retrospective cohort study of drug treatment clients in the North West of England", BMC Public Health, 6: 205.
- Birmingham L, Mason D and Grubin D (1996) "Prevalence of mental disorder in remand prisoners: consecutive case study", *British Medical Journal*, 313, 1521-1524.
- Bonomo Y and Promios J (2005) "Substance misuse: alcohol, tobacco, inhalants and other drugs", *British Medical Journal*, 330, 770-780.
- Brooke D, Taylor C, Gunn J and Maden A (1996) "Point prevalence of mental disorder in unconvicted male prisoners in England and Wales", *British Medical Journal*, 313, 1524-1527
- Dowden C (January 2003) The Effectiveness of Substance Abuse Treatment with Young Offenders, Department of Justice (Canada).
- Gerada C and Ashworth M (1997) "ABC of mental health: Addiction and dependence I: Illicit drugs", *British Medical Journal*, 315, 297-300.
- Godfrey C, Eaton G, McDougall C and Culyer A (2002) <u>The economic and social costs of Class A drug use in England and Wales</u>, 2000, Home Office Research Study 249
- Gossop M, Marsden J and Stewart D (2001) "NTORS after five years: Change in substance use, health and criminal behaviour during the five years after intake", National Addiction Centre
- Hay G, Gannon M. MacDougall J, Millar T, Eastwood C, and McKeganey,N (2007) <u>National and regional estimates of the prevalence of opiate use and/or crack cocaine use 2005/06: a summary of key findings</u>. Home Office Online

Report 1/07

- Johnson H (June 2006) "Factors associated with drug and alcohol dependency among women in prison", Australia Institute of Criminology, Trends & Issues in crime and criminal justice 318.
- Karberg J and James D (July 2005). "Substance Dependence, Abuse, and Treatment of Jail Inmates, 2002", (United States) Bureau of Justice Statistics Special Report.
- Kling J (2006). "Incarceration Length, Employment and Earnings", American Economic Review, 96.3, 863-876.
- Latendresse M and Cortoni F (2005) "Increasing Employability Related Skills Among Federal Male Offenders: A Preliminary Analysis of the National Employability Skills Program", Correctional Service Canada Research Branch.
- Mason P, Mason D and Brookes N (2003), "A process evaluation of drug treatment in English and Welsh prisons" in Ramsay M (ed) (2003) "Drug use and treatment: seven studies", Home Office Research Study 267, 113-129.
- McDonald Z (2002). "The Employment Prospects of Scottish and English Drug Abusers", University of Leicester Department of Economics Working Paper
- McDonald Z and Pudney S (1998). "Illicit Drug Use and Labour Market Achievement: Evidence from the UK", University of Leicester Department of Economics Working Paper
- McDonald Z and Pudney S (1999). "The Wages of Sin? Illegal Drug Use and the Labour Market", University of Leicester Department of Economics Working Paper
- National Drug Research Institute and the Centre for Adolescent Health (2004), <u>The Prevention of Substance Use</u>, <u>Risk and Harm in Australia: a review of the evidence</u>, Australian Government Department of Health and Ageing, January 2004.
- Ramsay M (ed) (2003) "Drug use and treatment: seven studies", Home Office Research Study 267.
- Rehm J, Baliunas D, Brochu S, Fischer B, Gnam W, Patra J, Popova S, Sarnocinska-Hart A and Taylor B with Adlaf E, Recel M and Single E (March 2006), <u>The Costs of Substance Abuse in Canada 2002</u>, Canadian Centre on Substance Abuse
- Sampson R and Laub J (2003). "Life-Course Desisters? Trajectories of Crime among Delinquent Boys Followed to Age 70", Criminology, 41.3, 301-339
- Singleton N, Pendry E, Taylor C, Farrell M and Marsden J (2003) "Drug-related mortality among newly release offenders", Home Office Research Findings 187.
- Smith K, Taylor D and Sloan F (2001). "Longevity Expectations and Death: Can People Predict Their Own Demise?", American Economic Review, 91.4, 1126-1134.
- Social Exclusion Unit (2002) Reducing re-offending by ex-prisoners
- Office of National Drug Control Policy (United States) (December 2004). <u>The Economic Costs of Drug Abuse in the</u> <u>United States 1992-2002</u>
- Zuvekas S, Cooper P and Buchmueller T (April 2005) "Health Behaviours and Labor Market Status: The Impact of Substance Abuse", (United States) Agency for Healthcare Research and Quality Working Paper 05013.

Appendix 6 – Economic Modelling Framework

Introduction

The economic framework models the lifetime economic output, health, crime and social impacts of a problem drug user (PDU) compared to an 'average' person, or a representative of the general population. The model estimates the lifetime costs for a male and a female in each group. By using differing assumptions for the costs incurred by a representative of the PDU and general population it is possible to calculate the additional or incremental costs that a PDU incurs over their lifetime in comparison to the average person. The output of the model is an estimate of the potential avoided economic, health, crime and social costs for each year a PDU cedes from drug use and resumes a life similar to that of an average person.

The approach of this model is derived from the economic framework (see Appendix 5), which set out the key economic costs and benefits related to illegal drug use by prisoners that PwC identified through reviewing literature from academic and government sources.

Inputs - characteristics

Using available literature and data from academic and government sources assumptions in the following input areas were developed for a representative PDU and average person:

- Gender
- Earning and employment outcomes
- Health expectations mortality and morbidity
- · Likelihood of incarceration, arrest, and court appearances
- · Likelihood of children in care or becoming PDU

Outputs - covered usage

The key outputs for the model are the incremental avoided costs that may be achieved where problem drug users are able to adopt a lifestyle aligned with the aggregate population average in terms of economic, health and social activity, adjusted for the characteristics of the population in treatment.

Outcome - additional benefits and cost reduction

The differential in characteristics between the general and PDU populations are used to identify the differences in their economic activity with regards to employment rates and earnings. It sets out the remaining years of economic activity and their expected earnings to represent economic contribution.

Health outputs are measured by looking at the difference in health years and mortality between the PDU and general population. The value of these extra years are quantified by looking at the valuations on additional years of life and healthy life that emerge from healthcare and insurance spending.

Crime impacts are calculated by looking at the differential impact between crime in the general population and the PDU population. The mechanism lowers criminal activity rates to the national average among the drug using population and then lower the direct costs from crime by a similar proportion.

Social impacts will be calculated by looking at the impact of drug abuse on subsequent generations.

Using representative example

Given the availability of data, we have used a representative example model to highlight the economic benefits to particular types of individuals, e.g. female or younger prisoners. This would allow an understanding of how benefit would be distributed between certain groups. It could in future be linked to the development of programme mix and population data to highlight those interventions which had the highest probability and potential of impact.

Model Structure

The model was based on the analysis used in three aggregated studies of the impacts and costs of illegal drug use in England & Wales, Canada and the United States. These studies were:

- Godfrey C, Eaton G, McDougall C and Culyer A (2002) <u>The economic and social costs of Class A drug</u> use in England and Wales, 2000, Home Office Research Study 249
- Rehm J, Baliunas D, Brochu S, Fischer B, Gnam W, Patra J, Popova S, Sarnocinska-Hart A and Taylor B with Adlaf E, Recel M and Single E (March 2006), <u>The Costs of Substance Abuse in Canada 2002</u>, Canadian Centre on Substance Abuse
- Office of National Drug Control Policy (United States) (December 2004). <u>The Economic Costs of Drug</u> Abuse in the United States 1992-2002

These studies had the most complete quantitative analysis of all the national studies that we looked at but in each case the reports made it clear that they had to make significant assumptions and also to leave out areas where there were likely to be significant costs (e.g. social costs through family and community breakdowns).

General Assumptions

Lifetime costs of problem drug users (PDU's) are calculated over 100 years, discounted at 3.5% in accordance with HM Treasury Green Book recommended methodology. The incremental, or additional, cost of PDUs is compared to the cost of an average person, which is also described as the Base Case.

Where there were a number of variables or assumptions to choose from, the more conservative estimate was taken. Hence, the bias in the model is towards under-estimating the costs in each element.

Health

Health costs estimate the extent to which a PDU is likely to incur higher health costs than an average person based on assumptions on mortality, morbidity, additional likelihood of contracting HIV / AIDS, hepatitis, higher average visits to GP, hospital, accident and emergency (A&E), etc. The key incremental health cost components are outlined as follows.

Excess mortality costs

The average mortality, or death, rate for the population was sourced from the Office of National Statistics (ONS). For PDU's this death rate was accelerated based on a study by Bargagli, et. al 2005 which estimated that injecting drug users in London have a mortality rate of 1.38% for male users, and 0.8% for female users. As mortality rate estimates for this study were not age specific, these rates were used for the ages 16 – 44, after which the mortality rate was then halved.

The PDU excess mortality rate was then calculated by subtracting the Base Case mortality rate from the PDU mortality rate. This excess rate was then multiplied by the nominal value of a life of £50,000, which was sourced from Jones (2001).

The net present value (NPV) of excess mortality of male lifetime PDU is £262,049, and £284,491 for a female. This difference is largely driven by the higher life expectancy of females.

Excess morbidity costs

The ONS General Household Survey on the proportion of population reporting 'good' state of general health by sex and age was used to determine the morbidity of the average person. This was then accelerated for the PDU by including an estimate of their risk ratio of contracting HIV / AIDS and hepatitis. While the general population are also at risk of contracting these diseases, it is assumed that this would be factored into the base rate of general health. Moreover, including these diseases is a good way of reflecting the generally lower health outcomes of PDUs.

It is assumed that around 0.02 of the total PDU population have HIV / AIDS, and around 0.56 are infected with Hepatitis B or C. These figures were derived from the Godfrey, et al (2002) study on the cost of problem drug users. The rate of PDUs with hepatitis was also confirmed by a study by the Health Protection Agency (2007) which found that almost half of injecting drug users have hepatitis C. The estimates from both the Godfrey and the HPA study are based on injecting drug users only, hence a weighted average was applied to the total PDU population (which is assumed in the Godfrey study to comprise 80% of total PDU population).

The PDU excess morbidity rate was then calculated by subtracting the Base Case morbidity rate from the PDU morbidity rate. This excess rate was then multiplied by the nominal value of a year of ill health, which was quantified at £16,670 which is one third of the £50,000 value of a life.

Direct health costs

The additional direct health costs of PDUs were calculated by taking assumptions in the Godfrey study on the average number of GP visits, rate of A&E admissions, rate of hospital inpatient stays, and the number of neonatal cases of babies born with drug withdrawals. The comparative assumptions for the average person were derived from Department of Health (DH) statistics.

The NPV incremental direct health costs for a male PDU are £19,146, and £10,360 for a female. The reason for the large difference between male and female estimates is because the UK study from which the direct health costs were derived does not differentiate between males and females. As females typically have higher lifetime health costs, the difference between the average female and the PDU female was not as pronounced as for the male scenario.

Productivity

Lost earnings

Calculating lost earnings attempts to incorporate the lower lifetime earnings of PDUs compared to an average person due to lower labour force participation rates. The ONS Labour Force Survey was sourced for the full-time and part-time employment rates of the general population. The employment rates of PDU's were assumed to be 75% lower than the average population. This was derived from the Godfrey et. al study which used data that suggested around 80% of PDU are mostly unemployed. Both males and females were assumed to have a working life from 15 to 64.

The bottom quartile of average earnings was used for both the PDU and Base Case scenarios. This earnings profile was used to compare the PDU to someone in similar situation with the exception of the drug use, based on the assumption that PDUs typically have lower education and earning outcomes. Based on the ONS Annual Survey of Hours and Earnings the weekly male full-time earnings are £347, male part-time £77, female full-time £283 and female part-time £85.

The NPV increment lost earning costs are £209,786 for a male lifetime PDU and £112,790 for a female lifetime PDU. This relatively large difference is due to females generally having lower earnings, lower labour force participation rates and higher incidence of part-time work.

Lost productivity

Estimating the lost productivity of PDUs is based on the assumption that while all people are at risk of unproductive periods of time away from the work due to time spent in hospital or in gaol, or due to premature death, the risk and proportion of time is going to be significantly greater for PDUs.

The number of days likely to be lost to premature death is calculated based on mortality risk. Number of days spent in hospital is calculated based on DH statistics on total number of inpatient days, this is escalated for PDUs based on estimates in the Godfrey et. al study. The days spent in incarceration for the average population is the current prison capacity of 80,000 multiplied by 365, divided by the national population. The number of days spent in incarceration for PDU is based on the Godfrey et. al. study. The total number of lost days is then multiplied by earnings expectation for that year, which was calculated for the lost earnings figure.

The NPV incremental lost productivity is £6,630 for a male lifetime PDU and £3,968 for a female lifetime PDU.

Criminal Justice System

The criminal justice system costs are derived by calculating the proportion of the general population and the PDU population likely to be arrested for acquisitive crimes, drug supply and provision, the number of days spent in incarceration and police custody and the number of court appearances. For the general population the total rates for these activities are divided by the total population. For PDUs assumptions in the Godfrey et. al. study are used. The total cost for each of these activities is also taken from the Godfrey study, which were escalated by the GDP deflator in order to take account of inflation.

The NPV incremental criminal justice system costs for a male lifetime PDU is £213,200, and £190,097 for a female lifetime PDU. The Godfrey et. al. study did not provide different assumptions for males and females, hence the overall results are likely to overestimate the criminal justice systems costs for females.

Social costs

While it is acknowledged that there are a large range of social costs associated with problem drug use, due to the difficulties in valuing these, only the likely costs of children in care have been included.

The Home Office study Hidden Harm estimated that between 250,000 and 350,000 children have parents who are PDUs, and that 9% of these children are in care. It was assumed that the cost of a child in care is around £510 per week, which was derived from the Godfrey et. al. study.

These costs of children in care were only calculated for females in order to avoid double counting. The NPV incremental social cost for a female PDU is £61,353.

Intergenerational costs

Intergenerational costs were incorporated in order to factor in the higher likelihood of children of PDUs also becoming PDUs. The Hidden Harm report estimated that between 2-3% of all children have PDU parents, however an Australian study estimated that around 26% of incarcerated women grew up in families with drug problems. This implies that children that grow up with PDU parents / families are 10 times more likely to become problem drug users and be incarcerated during their life. Therefore, if there is a 0.6% chance of becoming a problem drug user in the UK, ¹⁰⁷ then children of PDUs are likely to have a 6% chance that they will become PDU themselves. The average incremental lifetime cost of a PDU, which was calculated at £833,094 for this study, was then applied to the estimate of the number of PDU with children. This was discounted at a rate of 41% to reflect that these costs would not be incurred for another 25 years into the future. Similar to the social cost of children in care, the intergenerational costs were only applied to females.

The NPV incremental intergenerational costs are £20,513.

¹⁰⁷ Based on the Godfrey et al study that there are around 400,000 PDU's in the UK.

Findings

Based on the assumptions outlined above the total NPV increment costs of a male lifetime PDU is around £827,000, and £859,000 for a female. This estimate only seeks to provide an indicative guide on the magnitude of additional costs incurred by a lifetime of problem drug use, rather than to provide an accurate estimate that could be applied to a particular user.

We also estimated the potential costs cost savings if intervention were immediately effective at the following ages:

- 21 year old male £736,000
- 30 year old male £560,000
- 21 year old female £737,000.

References

- The Advisory Council on the Misuse of Drugs (2003), Hidden Harm Responding to the needs of children of problem drug users
- Bargagli, A.M. et al (2005), 'Drug-related mortality and its impact on adult mortality in eight European countries', in European Journal of Public Health, vol. 16, no. 2, p.198-202.
- Department of Health (2007) (DH) statistics on total number of Accident and Emergency admissions, DH website, last updated February 2007
- Godfrey C, Eaton G, McDougall C and Culyer A (2002) <u>The economic and social costs of Class A drug use in England and Wales, 2000</u>, Home Office Research Study 249
- Health Protection Agency (2007), <u>Shooting Up: Infections among injecting drug users in the United Kingdom 2006.</u>
 An update: October 2007
- HES Online (2005), The Information Centre (England), <u>Hospital Episode Statistics 2005-06</u>, Primary diagnosis: 4 character: P04.4 Fetus and newborn affected by mat use of drugs of addiction and P04.4 Fetus and newborn affected by mat use of drugs of addiction
- HM Treasury (2003), <u>The Green Book Appraisal and Evaluation in Central Government</u>
- Johnson H (June 2006) "Factors associated with drug and alcohol dependency among women in prison", <u>Australia Institute of Criminology</u>, Trends & Issues in crime and criminal justice 318.
- Jones, C.I. (2001), 'The Economic Return to Health Expenditures', <u>FRBSF Economic Letter</u>, no. 2001-36, 14 December 2001, Federal Reserve Bank of San Francisco.
- Office of National Drug Control Policy (United States) (December 2004). <u>The Economic Costs of Drug Abuse in the United States 1992-2002</u>
- Office for National Statistics Office (ONS) mortality statistics
- ONS <u>General Household Survey 2001/02</u>, Table 7.3: Proportion of population reporting 'good' state of general health: by sex and age, 2001/02
- ONS <u>Living in Britain</u>, Table 7.19 Average number of NHS GP consultations per person per year by sex and age: 1972 to 2005, and Table 7.30 Average number of nights spent in hospital as an inpatient during the 12 months before interview, by sex and age: 2005.

- ONS NOMIS Labour Force Survey (2007), Annual survey of hours and earnings
- Rehm J, Baliunas D, Brochu S, Fischer B, Gnam W, Patra J, Popova S, Sarnocinska-Hart A and Taylor B with Adlaf E, Recel M and Single E (March 2006), <u>The Costs of Substance Abuse in Canada 2002</u>, Canadian Centre on Substance Abuse.

This report has been prepared for and only for the Department of Heterms of our engagement letter dated 13 th September 2007 and for liability or duty of care for any other purpose or to any other person may come save where expressly agreed by our prior consent in write	no other purpose. We do not accept or assume any o whom this report is shown or into whose hands it
© 2008 PricewaterhouseCoopers LLP. All rights reserved. "Pricewate LLP (a limited liability partnership in the United Kingdom) or, as the enetwork or other member firms of the network, each of which is a se	context requires, the PricewaterhouseCoopers global