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Government

Research For Recovery: A Review of the Drugs Evidence Base

Crime and Justice



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RESEARCH FOR RECOVERY: A REVIEW OF THE DRUGS EVIDENCE BASE

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LIST OF ABBREVIATIONS

AA	Alcoholics Anonymous
ABCD	Asset-Based Community Development model
AC	Acute Care
ACC	Assertive Continuing Care
ACMD	Advisory Council on the Misuse of Drugs
ACPOS	Association of Chief Police Officers in Scotland
ACT	Assertive Community Team
ADAT	Alcohol and Drug Action Team
ADP	Alcohol and Drug Partnership
AOD	Alcohol and Other Drug
ATOS	Australian Treatment Outcome Study
BBV	Blood-Borne Viruses
BME	Black and Minority Ethnic Groups
CA	Cocaine Anonymous
CAPSM	Children Affected by Parental Substance Misuse
CBT	Cognitive Behavioural Therapy
CCAP	California Civil Addict Programme
CCISC	Comprehensive Continuous Integrated System of Care
CoSLA	Convention of Scottish Local Authorities
CRGPD	Cross-Governmental Research Programme on Drugs
CSIP	Care Services Improvement Partnership
CSO	Community Service Order
DARP	Drug Abuse Reporting Programme
DAT	Drug Action Team
DATOS	Drug Abuse Treatment Outcome Study
DfES	Department for Education and Skills
DoH	Department of Health
DHC	Dihydrocodeine
DIP	Drug Interventions Programme
DORIS	Drug Outcome Research in Scotland Study
DRD	Drug Related Deaths
DTORS	Drug Treatment Outcome Research Study
DTTO	Drug Treatment and Testing Orders
DTX	Detoxification
ECA	Epidemiologic Catchment Area
EIU	Effective Interventions Unit, Scottish Executive
EST	Empirically Supported Therapies
EU	European Union
GROS	General Register Office for Scotland
GIRFEC	Getting It Right For Every Child
HEAT	Health, Efficiency, Access and Treatment (targets)
ISD	Information Services Division Scotland
LEA	Local Education Authority
LEAP	Lothians and Edinburgh Abstinence Programme
LGBT	Lesbian, Gay, Bisexual and Transgender
MI	Motivational Interviewing
MMT	Methadone Maintenance Treatment

MRC	Medical Research Council
NA	Narcotics Anonymous
NACD	National Advisory Committee on Drugs
NDEG	National Drugs Evidence Group, Scotland
NDTMS	National Drug Treatment Monitoring System
NIAAA	National Institute of Alcohol Abuse and Alcoholism
NICE	National Institute for Clinical Excellence
NIDA	National Institute on Drug Abuse
NIHCE	National Institute of Health and Clinical Excellence
NIHR	National Institute of Health Research
NSS	National Services Scotland (part of NHS Scotland)
NT	Not currently in Treatment
NTA	National Treatment Agency
NTORS	National Treatment Outcome Research Study
PDU	Problem Drug User
PTSD	Post-Traumatic Stress Disorder
RCT	Randomised Controlled Trial
RIOTT	Randomised Injectable Opioid Treatment Trial
RM	Recovery Management
RMC	Recovery Management Check-ups
ROIS	Recovery Oriented Integrated System
ROSC	Recovery-Oriented Systems of Care
ROSIE	Research Outcome Study in Ireland
SALSUS	Scottish Schools Adolescent Lifestyle and Substance Use Survey
SAMHSA	Substance Abuse & Mental Health Services Administration
SAO	Supervised Attendance Order
SCIE	Social Care Institute for Excellence
SDF	Scottish Drugs Forum
SDMD	Scottish Drug Misuse Database
SIGN	Scottish Intercollegiate Guidelines Network
SIHVSC	Scottish Parliament Social Inclusion, Housing and Voluntary Sector Committee
SMART	Self Management And Recovery Training
SMR (25)	Scottish Morbidity Record (25)
SPS	Scottish Prison Service
SRN	Scottish Recovery Network
TC	Therapeutic Community
TOPS	Treatment Outcome Prospective Study
UKDPC	UK Drug Policy Commission

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EXECUTIVE SUMMARY

Background: The publication of *The Road to Recovery: A New Approach to Tackling Scotland's Drug Problem* by the Scottish Government in 2008 signalled a fundamental shift in the way we think of problem drug use and in the approach to the types of interventions that are appropriate to address it. In particular, the switch to a recovery model represented the recognition that the resolution of addiction problems involves not only the drug user, but also their families and communities. It also recognises that recovery is a complex process likely to endure over a number of years after the point of stabilisation or abstinence, and that it is likely to involve fundamental changes in an individual's social functioning and personal wellbeing, as well as in their place in their community and wider society.

The aim of this review was to assess the current state of the evidence base that will help underpin the delivery of the Scottish Government's drugs strategy – *The Road to Recovery*. The review examined both the published research base and also the policy context in which the strategy sits, – this provides the link between the evidence base on addictions and the wider context of social inclusion, public health and economic development.

Rationale and methods: The project team divided the review into two phases – an initial 'documentary' phase and a subsequent 'testing' phase.

The documentary phase of the project involved the following components:

1. A review of the international literature in relation to what we know about 'recovery' in the addictions field and an evidence-based appraisal of 'what works' in this area.
2. An overview of the international literature on drug treatment effectiveness and of international, UK and Scottish studies that have assessed treatment outcomes.
3. A review of what lessons can be learned from other academic and applied areas – particularly the evidence around the mental health recovery movement, given the prominence this has achieved through the work of the Scottish Recovery Network. Other domains assessed in this area included community development, positive psychology, alcohol outcomes and developmental approaches to crime careers.
4. A review of the recently published literature examining three questions: recovery-focused research; treatment effectiveness; and treatment outcomes.

The synthesis of these four strands of work led to the production of an initial report that was shared with the research advisory group and the National Drugs Evidence Group in Scotland. Initial feedback was collated prior to the 'testing' phase of the review, in which key experts were identified and interviewed, (where possible), about:

- The quality of the evidence base for recovery in Scotland; and more generally, about treatment research;
- Their views on key omissions in the local and international knowledge base;

- What they perceived to be the key steps in moving the evidence base forward in Scotland; and
- Their views on the links between the evidence base and policy in Scotland.

The key findings from each of these stages are outlined below.

What are the evidence requirements of *The Road to Recovery*? There is strong and supportive evidence for the transition from models of acute care to recovery based on: 1) international evidence and extrapolations from the mental health field; 2) alcohol research; and 3) from a growing UK research interest in recovery from drug dependence. However, there remain many unanswered questions in a Scottish context relating to long-term changes to sustained recovery, the role of treatment and other forms of community intervention and engagement, and the catalysts and mediators of change. This will include variability in recovery pathways depending on problem severity and personal characteristics, as well as the recovery supports and recovery capital available. There are three areas that require significant research commitment - recovery-specific research; treatment and interventions; and prevention and public policy. The challenge is to build up sufficient human and research resource to allow these three areas to be linked to ensure that the innovations in recovery practice in Scotland are evidenced and brought to bear in ensuring that the recovery goals of the strategy are achieved.

What do we know about recovery? There is little UK-based research and the international evidence base on recovery is limited by three factors:

- 1) Much of the evidence is dated;
- 2) Much of it is based on alcohol rather than illicit drugs; and
- 3) Almost all the evidence originates from the United States.

Despite this, this review has found that some key conclusions can still be drawn from the existing evidence:

- Sustained recovery is the norm although the time to recover, and the pathways involved are highly individualistic. For this reason, a narrow, 'diagnostic' definition of recovery is not advisable.
- The best predictor of the likelihood of sustained recovery is the extent of 'recovery capital' or the personal and psychological resources a person has, the social supports that are available to them and the basic foundations of life quality, i.e. a safe place to live, meaningful activities and a role in their community (however this is defined).
- Barriers to recovery include psychological problems (mental illnesses and the absence of strengths, such as self-esteem and self-efficacy), significant physical morbidities (including blood borne viruses), social isolation and ongoing chaotic substance use.
- While structured treatment has a key role to play, it is only part of the support that most people will need. Ongoing support in the community is essential for the ongoing recovery journey and often includes mutual aid and other peer support.
- Recovery is not just about the individual, but impacts on families and communities.

Switching to a recovery model requires a fundamental change in the culture and attitudes of professionals and communities.

What is the evidence for treatment? There is a considerable history of cohort studies assessing the short-, medium- and in some cases the long-term outcomes of a range of mechanisms of delivery of drug treatment which consistently show significant improvements across a range of indicators, including health, offending, risk-taking, substance use and social functioning.

Differences in effectiveness between modalities of treatment (such as community detoxification, methadone maintenance and residential rehabilitation) have been less consistently reported in the evidence base, although the Scottish outcome study, DORIS undertaken between 2001 and 2004, reported low rates of sustained abstinence from stabilisation-focused community treatment in Scotland. The more recent USA outcome studies have switched focus from overall effects to the mechanisms of change with increased emphasis on the importance of service functioning and delivery, on therapeutic alliances and the process of client engagement and participation in treatment process. Other key findings have been that:

- There is a consistent evidence base supporting methadone substitution treatment in maintenance settings, based on meta-analytic data, but this requires not only prescribing but adequate psychosocial support and links to 'wraparound' care.
- Scottish outcome research has shown that while methadone maintenance leads to improved outcomes in a range of domains, it is associated with low rates of sustained abstinence.
- Continuity of care is a critical component of effective treatment systems, and there is a strong supportive evidence base around linkage to 12-step and other community 'aftercare' supports.
- There is an ongoing problem with psychosocial interventions – while there is a strong evidence base from trials, there is little evidence that these are routinely translated into everyday clinical practice.

The issue of 'technology transfer' is part of a recent transition to assessing what allows the evidence base to be applied in real clinical settings with increased focus on the structure of services and their organisational functioning.

What can we learn from other disciplines? Scotland has been at the forefront of the mental health recovery movement. The key underlying principles of recovery are:

- the empowerment of the person in recovery.
- focusing on the enabling role of the professional.
- a much greater role for family and community engagement in recovery.

These principles have been key drivers for changing the way that professionals engage with their clients and have required major shifts in professional cultures and workforce development.

From the evidence reviewed here and within the context of this review, there remain concerns (Care Services Improvement Partnership, Royal College of Psychiatrists and Social Care Institute for Excellence, 2007) about the lack of 'hard' evidence in the mental health recovery movement and mental health recovery remains at an early stage in its knowledge base and practical implementation. Much of the evidence to date in this field has been drawn from personal experiences, and systematic analysis has been more limited.

Equally as important as the changing role of professionals and the empowerment of the person in recovery, is the increased role of communities as both a setting for recovery to occur and a foundation for supportive relationships and opportunities for vocational and personal growth, as well as a developmental platform for recovery. Finally, there are lessons to be learned from the criminal justice research field where the assumption is that desistance (or recovery) is the norm and that it is life transitions, rather than interventions, that will be part of a maturationally-based recovery (i.e. individuals will naturally move on from these behaviours without intervention). While all of these approaches necessitate caution, the common themes that they promote are the central role of self-empowerment, the centrality of the community rather than the clinic and the recognition of an ongoing and dynamic process of change.

What are the key findings of the literature review and what do these mean for policy? The analysis of published research papers largely supported the findings of the earlier reviews, with the most dominant themes emerging around recovery emphasising:

- There is clear support for effective engagement in recovery housing and in training and vocational support as parts of a recovery package of care.
- While there is some support for specific psychological or psychosocial interventions, there is increasing evidence that the context of treatment, in particular, the therapeutic alliance (the working relationship between the client and the worker or programme) and the level of client engagement, is an equally important predictor of treatment outcomes, with worker motivation and efficacy central to this effect.
- Effective continuity of care is essential with an increasing international evidence base around the benefits of 'assertive linkage' (active attempts by workers to ensure engagement rather than simply passing on contact details or addresses) to aftercare and community support and for the use of recovery management check-ups.
- There is a strong and consistent evidence base around the benefits of engaging in mutual aid and ongoing support.
- There is some supportive evidence for recovery in three key population groups – adolescents, offenders with drug problems and drug users with co-morbid mental health problems – but the evidence is more limited than in each of the other areas reviewed.

The key recovery finding from the review emphasises the importance of ongoing support after structured treatment, the positive outcomes associated with mutual aid and peer support in the community and the importance of assertive follow-up support

as aftercare. In Scotland, there is no adequate research or evaluation base on aftercare for drug treatment.

What did the key experts conclude? There was an overall consensus that a clear strategy is needed for developing an evidence base that will both support and test key aspects of *The Road to Recovery*. The summary below does not do justice to the considerable diversity of opinion and expertise that was expressed during these qualitative interviews. Some of the common views were that:

- There was general agreement that there has not been enough support for drug research in Scotland and that the local evidence base is poor as we are too reliant on international studies.
- There remain major limitations in what can be done with the local monitoring data, although this is likely to improve and there may be important lessons to be learned from the experiences of the National Treatment Agency (NTA) in England.
- Nonetheless, there were seen to be examples of innovation and good practice, but these frequently lacked the rigorous evaluation and dissemination to justify replication elsewhere.
- There were also concerns expressed about the culture of Scottish drug treatment and interventions, and a recognition that the implementation of a recovery model would not be possible without significant work done on workforce development and training.
- Key areas identified as needing further research were around long-term outcomes, the effectiveness of alternative medications to methadone (buprenorphine and suboxone), the effectiveness of community and residential rehabilitation, and technology transfer work on effective implementation of research.

So what are the conclusions? Recovery is a philosophical approach to addressing drug problems based on personal choice, empowerment and strengthening communities, and it also has a growing evidence base, which clearly demonstrates that recovery-focused approaches can augment and enhance treatment interventions, as well as maximising their benefits to families and communities. The review confirms the need for a more strategic, programmatic approach to developing the drugs recovery evidence base in Scotland. To ensure that the implementation of *The Road to Recovery* is informed by the best possible evidence, the authors suggest the following actions:

1. Introduce a Drug Research Forum under the auspices of the National Drugs Evidence Group.
2. Split the Forum's work into three areas: recovery-specific; treatment and interventions; and prevention and public policy. There are solid foundations for developing a treatment effectiveness programme of work in Scotland that should be linked to, but separate from, the more flexible, exploratory and innovative work around recovery, which in turn will build more on innovative practice and narratives of change.
3. Develop a key focus on the transitions to abstinence and the continuity of care in the course of recovery journeys with a significant focus on community and mutual aid groups.

4. Improve the understanding of treatment delivery and the ‘technology transfer’ of evidence within a framework of generating an improved evidence-based culture.
5. Improve our understanding of the benefits and costs of long-term prescribing and how to generate recovery communities within maintenance treatment services.
6. Task the forum with research prioritisation and negotiation with key bodies around sustainable funding support for research and broader evaluation and audit work within Scotland and as a player in international recovery and addiction work.
7. Develop appropriate collaborations and funding opportunities outside the addictions silo looking to the key areas of ‘recovery gain’ to evaluate and fund recovery-oriented activities.

What we are lacking in Scotland (as in the rest of the UK) is a clear evidence base about the long-term pathways to recovery and their impact on families and communities. The transition suggested within recovery perspectives to a developmental model necessitates a transition in both research and monitoring to a more longitudinal perspective that maps treatment and recovery journeys to sustained recovery (estimated as 5-7 years after achieving abstinence from ongoing street drug use), and that examines the treatment and support factors that precipitate that change. This also necessitates a switch in focus to a model that is focused less on the individual in isolation and more on the community and the family and so assesses outcomes in this wider context including the quality of life of children and partners and active engagement in local community affairs. What this will provide is a coherent model for testing and evaluating current practice; linking standard data monitoring to the development of a knowledge base; and developing a flexible and innovative research model that tests key aspects of implementation of *The Road to Recovery* and allows for a consistent mechanism for assessing the micro- and macro-impact of policy implementation in a systematic and evidence-based manner.

CHAPTER 1: INTRODUCTION

Research Project Overview

1.1 In May 2009, the Justice Analytical Services Division of the Scottish Government commissioned a review of the drugs' evidence base with the aim of establishing what we need to know to implement Scotland's National Drugs Strategy, *The Road to Recovery: A New Approach to Tackling Scotland's Drug Problem*. The review was commissioned to support the aims of Scotland's National Drugs Evidence Group.

1.2 This report provides the evidence which will help the National Drugs Evidence Group make recommendations to Scottish Ministers about where the drugs evidence base is already robust, the lessons that can be drawn from the evidence base, as well as the further research and information priorities required to inform the delivery of the national drugs strategy. Additionally it helps provide the basis for a more integrated, considered and longer-term approach to commissioning and conducting research and analysis in this field in Scotland.

Background

1.3 Scotland's national drugs strategy, *The Road to Recovery: A New Approach to Tackling Scotland's Drug Problem*,¹ was launched in May 2008. The strategy focuses on recovery and reinforces the message that services should support people to move towards a drug-free life as active and contributing members of society. *The Road to Recovery* also emphasises the importance of evidence-informed drugs policy and practice. In order to deliver real change for people who are affected by drug use, it is essential that drugs policy is informed by what works, how it works and why.

1.4 As such *The Road to Recovery* committed to establishing the National Drug Evidence Group in order to advise Scottish Ministers on the evidence priorities required to deliver the new drugs strategy. By overseeing the development of an integrated evidence plan the group is contributing to strengthening the knowledge base for the prevention, identification, management and treatment of drug misuse in Scotland.

1.5 The strategy acknowledged that in some areas good evidence is available to guide decisions, but in other areas the research evidence and data could be improved in order to develop further our understanding of the Scottish drug-using population, the factors affecting people's substance misuse, the harms experienced and the most effective interventions in education, prevention and treatment.

1.6 There is no formal mechanism for identifying research and information priorities around drug misuse in Scotland. New drug-related research in Scotland might be commissioned by a number of bodies including the Scottish Government,

¹ Scottish Government (2008) *The Road to Recovery: A New Approach to Tackling Scotland's Drug Problem*, Edinburgh: Scottish Government, <http://www.scotland.gov.uk/Publications/2008/05/22161610/0>, (accessed 4 March 2010)

the Chief Scientist Office, the NHS's Information Services Division (ISD) Scotland, NHS Health Scotland and research grant bodies, such as the Joseph Rowntree Foundation, the Economic and Social Research Council, the Esmée Fairbairn Foundation and the Robertson Trust. There is a need to explore opportunities for pooling together resources more effectively, assessing capacity in the field and being more strategic in funding research and analysis.

1.7 This review focuses on what the existing drugs' evidence base tells us in relation to the priorities of *The Road to Recovery*. However, the work is also intended to have a wider impact and allow for a more integrated, considered and long-term approach to addressing data requirements and commissioning and conducting research and analysis. In addition, as a key resource setting out existing evidence and future needs, it is intended to facilitate better knowledge exchange with other experts in the substance misuse field and associated areas.

1.8 A number of recent policy and structural developments have occurred that make a comprehensive review of the evidence opportune. These developments have included a number of Scottish Government policies and actions with a direct or indirect relevance to drugs, e.g. *The Early Years Framework*², *Changing Scotland's Relationship with Alcohol: A Framework for Action*³ and *Towards a Mentally Flourishing Scotland*⁴. In addition, as prioritised in the final chapter of *The Road to Recovery*, the environment in which local partnerships tackling alcohol and drugs misuse operate has evolved with an increased emphasis on outcomes-focused planning. A New Framework for Local Partnerships on Alcohol and Drugs⁵ was launched in April 2009.

Aims & Objectives

1.9 The main aim of this review was to show where the evidence base is already strong, what the evidence tells us and what we still need to know in order to implement the drugs strategy.

1.10 Specifically, the objectives of the programme of work were to:

- Map the evidence requirements of *The Road to Recovery*.
- Review the findings of existing evidence, assess the quality and identify key gaps in the literature.
- Synthesise evidence of effectiveness (including cost-benefit analysis) especially in relation to what works in drugs treatment in Scotland, the UK and further afield.
- Identify and assess existing datasets with an appraisal of their potential for further analysis and linkage.
- Frame the gaps in good quality evidence required to implement the Drugs Strategy.
- Pinpoint potential providers of evidence and funders that might help to fill those gaps.

² <http://www.scotland.gov.uk/Topics/People/Young-People/Early-years-framework> [accessed 4th March 2010]

³ <http://www.scotland.gov.uk/Publications/2009/03/04144703/0> [accessed 4th March 2010]

⁴ <http://www.scotland.gov.uk/Publications/2009/05/06154655/0> [accessed 23th April 2010]

⁵ <http://www.scotland.gov.uk/Publications/2009/04/23084201/0> [accessed 4th March 2010]

- Report on the review to the National Drugs Evidence Group.
- Prepare a *draft* framework on current and future research and information priorities for discussion by the National Drugs Evidence Group and the Scottish Government.

Overview of Methods

1.11 The aim of the research was to review the evidence base, building on existing reviews, to assess the quality of the evidence available and to identify the evidence gaps specific to *The Road to Recovery*. It also looked to generate a logical method of mapping the evidence requirements of *The Road to Recovery* in research terms, to assess the applicability of evidence to the Scottish context, accounting for other levels of evidence (including unpublished and ongoing work around recovery) and to test this within a framework that utilised existing data sources, data systems and the views of key evidence experts in Scotland.

1.12 While the core of the project involved a literature review combined with a search of local knowledge and evidence, this was embedded within an open and iterative research process that set parameters for the review in terms of the local policy and monitoring framework and that enabled a process of consultation around the preliminary findings and recommendations. The aim was to generate a methodologically robust and replicable systematic search approach, where relevant, and to test this in the context of an expert review process, which was also conducted with research rigour around mapping knowledge and expertise as a developing and evolving process. For this reason, the design involved a number of stages that can be characterised in two broad phases:

1. Review and systematic search of documentary sources.
2. Testing the resulting findings in the local context of Scottish policy and practice.

Key Evidentiary Issues

1.13 Throughout *The Road to Recovery*, reference is made to key evidentiary statements. One of the key aims of this report is to highlight these issues and to provide assessment and comment on the level and strength of evidence underpinning these. This approach has two advantages: first it sets out the scope of the study; and secondly it provides an evidence checklist. A number of these issues are addressed in different chapters within this report and, where this is the case, we have signposted relevant connections.

CHAPTER 2: METHODS

2.1 The methodology for this study was designed to collect evidence and information in a sequential and logical manner. It allows a broad scope for learning about approaches to recovery from other countries and other fields as well as having a clear focus on evidence of treatment effectiveness and the emerging research needs for Scotland.

Summary of Study Methods

2.2 Table 2.1 summarises the four distinct phases to this study. A fuller description of these methods is provided in Paragraph 2.3 to Paragraph 2.18.

Table 2.1: Summary of study methods

Phase 1	Method
Mapping of evidence	Outline of the key evidence requirements of <i>The Road to Recovery</i> and initial analysis of relevant research reviews conducted in Scotland, other parts of the UK and internationally.
	Conduct an initial analysis of core policy documents and synthesise for their evidentiary foundations.
Phase 2	Method
Supplementary reviews of evidence	Conduct a review of national and international literature on recovery
	Conduct a review of national and international literature on treatment effectiveness
Phase 3	Method
Review of literature	Basic search terms were 'recovery', effectiveness' and 'outcomes' linked to each of the domains generated from <i>The Road to Recovery</i> analysis, the search of policy documents and the authors' cumulative awareness of relevant documents.
	A review of the evidence was conducted in each of these areas narrowing the search by English language, last 20 years and published in peer reviewed journals.
Phase 4	Method
Field testing of preliminary analysis	Conduct initial field testing of preliminary analysis and synthesis with advisory group and other expert sources identified.
	Conduct mapping of government and other data sources.
	Conduct mapping of the 'grey literature.

2.3 **Phase 1:** Conducting the mapping exercise of *The Road to Recovery* and the links to relevant evidence. This is linked to a contextual and policy framework, using *The Road to Recovery* as the starting point.

2.4 Two main steps were involved:

- Outline of the key evidence requirements of *The Road to Recovery* and initial analysis of relevant research reviews conducted in Scotland, other parts of the UK and internationally.
- Conduct an initial analysis of core policy documents and synthesise for their evidentiary foundations.

2.5 All primary and secondary references were identified, obtained, logged and stored in Mendeley online secure research database. In essence, this involved tabulating the key evidence sources explicitly referred to in *The Road to Recovery* and identifying their evidentiary foundations – this included published research papers and summaries, and key policy documents (from the addictions field and from other related areas, such as child protection and criminal justice) with reference to the evidence base that is applicable from each of these areas.

2.6 The review of the policy framework underpinning *The Road to Recovery* was conducted as a synthesis rather than analytically to ensure there was no misinterpretation of information, and that the ‘output’ of this process was a set of summary tables of core documents and a ‘trail’ of the evidence included. Therefore much of the synthesis provided for the review is direct quotation, with an attempt to minimise interpretation or inference from the research team. Relevant information has been summarised and comments made about relevance to recovery (on an individual, service and at a systems level), as well as briefly identifying the possible technology transfer issues. The core technology transfer questions have been:

- Is this relevant to the drugs field?
- Is this relevant to recovery?
- Is this relevant to Scotland?
- Are there other issues around applicability?

2.7 The key documents that are referred to in *The Road to Recovery* strategy are discussed in Chapter 6 and a summary analysis of each of these documents is provided in Appendix 1, giving an overview of their relevance to the recovery agenda, to Scotland and to issues of effectiveness and outcomes.

2.8 **Phase 2:** Supplementing the evidence mapping process by conducting two specific reviews of evidence – an international summary of what we know about recovery and a summary of the evidence base around treatment effectiveness and treatment outcomes specific to the drugs field. These are presented as Chapters 3 and 4 respectively in the report.

2.9 A further trawl was conducted to review what is known from other parallel fields, particularly mental health, that can be used to provide guidance around implementing the tenor and principles of *The Road to Recovery*. This is provided as Chapter 5 in the report.

2.10 **Phase 3:** Conducting a systematic trawl of published evidence with a search extended by the policy document analysis and synthesis of key terms and known documents.

- Basic search terms were ‘recovery’, effectiveness’ and ‘outcomes’ linked to each of the domains generated from *The Road to Recovery* analysis, the search of policy documents and the authors’ cumulative awareness of relevant documents.
- A review of the evidence was conducted in each of these areas narrowing the search by English language, last 20 years and published in peer reviewed journals.

2.11 There were four key steps involved in the literature review phase:

- Preliminary search
- Re-defining of search terms
- Review by citation
- Review by abstract.

2.12 The preliminary search strategy for the literature review envisaged a three level search as detailed in Table 2.2.

Table 2.2: Systematic literature search strategy

Substance Domain	Link Domain	Road to Recovery theme
Drug Drug misuse Drug abuse Drug dependence Substance misuse Substance* Drug* Heroin Crack cocaine Cocaine Amphetamines Methadone	Recovery Outcomes Effectiveness	Treatment Intervention Prevention Education Criminal Justice Prison Families Hidden Harm Getting it Right for Every Child

2.13 The research team undertook searches of Ovid MEDLINE, All EBM reviews, EMBASE and PsycINFO,⁶ with limitations of English only articles written after 1990. Initial searches of all the terms under the SUBSTANCE domain combined with one or more of the LINK DOMAIN items yielded over 100,000 results.

2.14 The terms ‘drug’, ‘drugs’, ‘substance’ and ‘substances’ in the SUBSTANCE domain were removed as the search results were not specific to drug misuse and included papers on therapeutic pharmaceutical drugs. The remaining terms were combined with the LINK DOMAIN terms to further focus the search. This resulted in a more relevant set of references, i.e. relevant to drug misuse and dependence, so it was decided to exclude ‘drug’, ‘drugs’, ‘substance’ and ‘substances’ from all future searches. Following several further test searches, the research team combined

⁶ Using Knowledge Network (formerly known as the NHS E-Library), <http://www.knowledge.scot.nhs.uk/home.aspx>, [accessed 4 March 2010]

some of *The Road to Recovery* theme domains since these are inter-related and form natural groupings. This allowed new three level searches to be undertaken according to Table 2.3.

Table 2.3: Linking the search to the recovery agenda

Substance domain	Link domain	Road to Recovery theme
Drug misuse Drug abuse Drug dependence Substance misuse Heroin Crack cocaine Cocaine Amphetamines Methadone	Recovery Outcomes Effectiveness	Treatment and Intervention Prevention and Education Criminal Justice and Prisons Families (Hidden Harm and Getting it Right for Every Child)

2.15 Having undertaken a new search using the three domains above, results were imported into Endnote software and any duplicate articles removed. Table 2.4 shows the results of the second stage search.

Table 2.4: Second stage search yield

Subject	Number of articles
Prevention and Education	1030
Treatment and Intervention	811
Families	565
Criminal Justice and Prisons	118
Total	2524

2.16 In order to further reduce this to a set of core articles the citations to all 2524 articles were sourced and stored in Endnote databases. The citations were reviewed by the research team, based on their relevance to the domains of treatment outcomes, treatment effectiveness and recovery. Further inclusion/exclusion parameters were applied. Thus, articles which assessed only acute effects of interventions, were primarily epidemiological or which had no measures that related to long-term quality of life, sobriety or citizenship components (such as employment, family functioning and stability of living circumstances) were excluded.

2.17 One of the limitations encountered in this process was that the term ‘recovery’ has a wider, generic meaning across health and social care and in common usage than that adopted within *The Road to Recovery* document. This created difficulty when attempting to identify relevant articles using ‘recovery’ as a key search term at the same time as trying to ensure that the search was focused and relevant to the task in hand. The abstracts of all remaining articles were reviewed in order to ensure relevance to the subject area. A small number of papers were removed at this stage, predominately because their relevance to recovery was tenuous. This was then followed by a review of full articles. This was the final elimination process. This excluded papers which were not appropriate but where the abstract had not provided enough relevant information to make this decision. Using this further filtering process

a final set of research articles was established. This is set out by topic area in Table 2.5. These articles provide the evidentiary base for the literature review.

Table 2.5 Final search yield

Subject	Number of Articles	
	Initial	Final
Prevention and Education	1030	37
Treatment and Intervention	811	79
Families	565	62
Criminal Justice and Prisons	118	27
Total	2524	205

2.18 The processes involved in Phase 3 are set out in Figure 2.1.

2.19 **Phase 4:** Initial field testing of preliminary analysis and synthesis with advisory group and other expert sources identified; initial mapping of government and other data sources; initial mapping of the 'grey literature'.

2.20 This phase represented the transition from the documentary phase of the project to the 'testing' phase where the team switched from collation and analysis of original source materials to key informants and unpublished data sources. The aim of the interview phase of the project was to test the applicability of what had been collected to date and to identify other key sources of information. Those other key sources included:

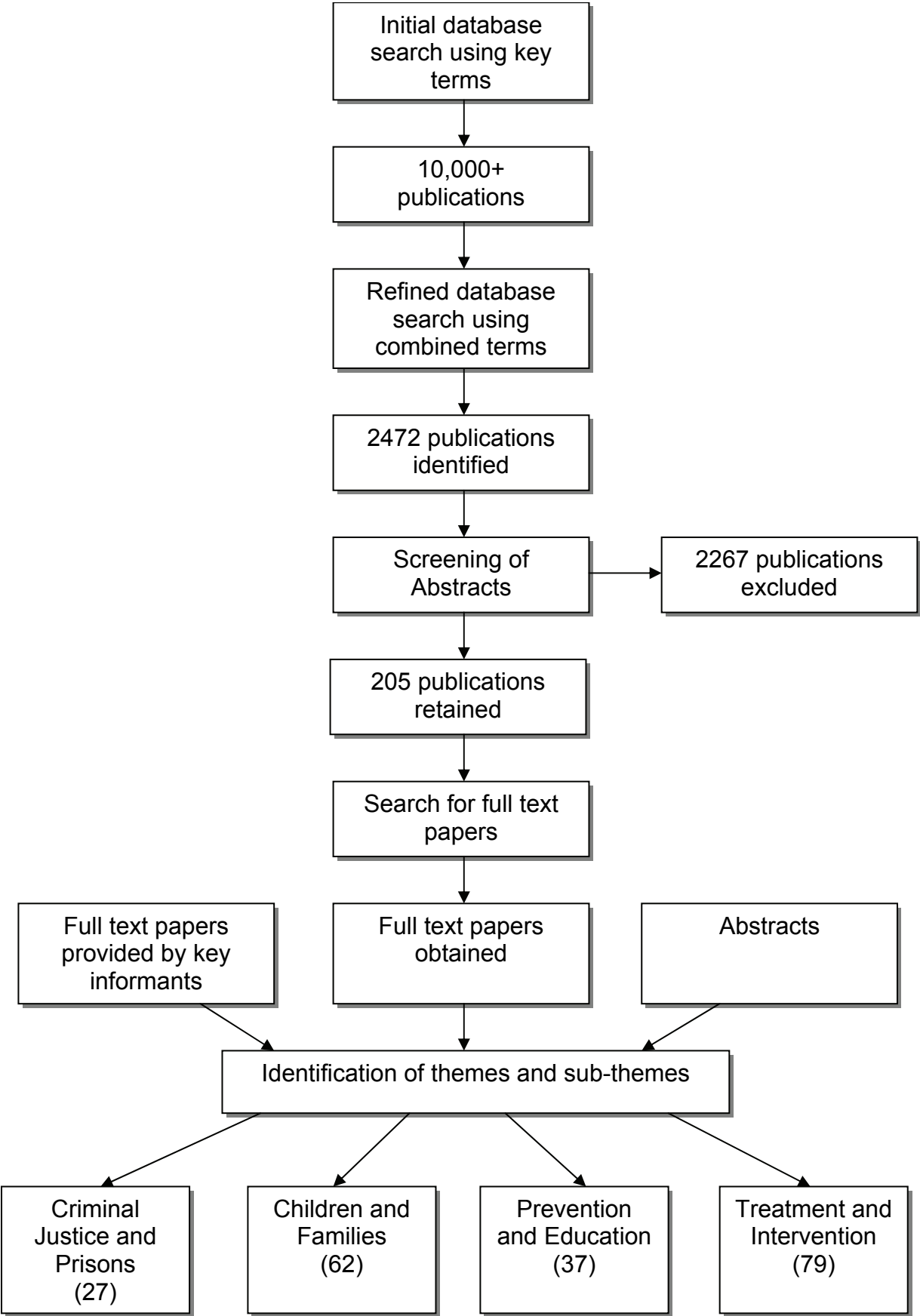
- Routine data collection sources (e.g. information held at NHS NSS Information Services Division, ISD, Scotland⁷).
- Recently published or 'in press' academic research that may not have been picked up in the literature review.
- 'Grey literature' sources.
- Audits or evaluations that have not been published relating to the three core domains of treatment effectiveness, treatment outcomes and recovery.
- The identification of wider sources by key informants.

2.21 Key experts were accessed using the following groups:

1. Research advisory group members (including Government social researchers and policy advisors)
2. Members of the National Drugs Evidence Group
3. Practitioners
4. Other key experts as recommended in the first wave of interviews

⁷ Information Services Division (ISD) Scotland is part of NHS Scotland and is Scotland's national organisation for health information, statistics and IT services, found at http://www.isdscotland.org/isd/CCC_FirstPage.jsp [accessed 4th March 2010]

Figure 2.1: Flow Chart Summarising processes of evidence review strategy



CHAPTER 3: WHAT IS THE RECOVERY EVIDENCE BASE?

3.1 The aim of this chapter is to review the international evidence for key areas of recovery and to consider these in terms of an evidence base for moving towards a recovery philosophy in treatment systems. This chapter was compiled by William White and David Best and reviews the international evidence around recovery. It starts by reviewing the discussions around the meaning of recovery and the evidence around prevalence and predictors of recovery. The second section expands out to look at experiences of recovery in communities and what the implications of recovery are for localities in terms of treatment and recovery-oriented systems of care.

3.2 The majority of the chapter reviews the evidence around recovery in terms of the role of treatment services and the need for effective linkages to post-treatment support. This has been structured so that it broadly follows the client's 'treatment journey' and is sequential, focusing on the relationship between recovery communities and structured treatment at different stages of the journey. All of the material included here is based on peer-reviewed research (albeit some of it summarised in review articles and monographs), and where this evidence does not come from illicit drug using populations, this has been made clear in the text. Finally, the chapter assesses the limited evidence base for recovery in the UK within the context of drug misuse.

3.3 The summary below identifies what the evidence currently tells us and highlights where some of the key omissions are from an evidence perspective that would be relevant to drugs recovery in a Scottish context.

Summary: Key Findings from the Recovery Literature

1. There is a wide range of pathways to recovery and the evidence illustrates the importance of individuals discovering their own path. This is consistent with the individualisation agenda identified for mental health by the Scottish Recovery Network and in the personalisation component of the recovery model outlined in Scotland's national drugs strategy - *The Road to Recovery*.
2. Recovery stabilisation does not happen quickly. For alcohol users, it will typically take 4 to 5 years, and there is evidence that it will generally take longer in opiate users, with estimates suggesting a recovery journey of 5 to 7 years.
3. The best predictors of effective recovery are the extent of recovery capital, or in other words, the personal and social resources that a person has to call on.
4. In contrast, barriers to recovery include early onset and increased complexity of problems, as well as co-morbid physical and mental health problems, including ongoing alcohol and prescription drug use.
5. Treatment has a key role to play in recovery, although the evidence suggests that effective co-ordination of professional treatment and sustained community support will be most effective.
6. Effective recovery not only benefits the individual, but also their family and their community. The evidence shows that when recovery is sustained beyond treatment, it can have a positive impact on the psychological health of the children of parents in recovery; and there are grounds for suggesting that this will be a mediating factor to aspirations and achievements in young people.

7. Although the UK evidence base is limited, and much of the evidence is based on alcohol research, there are increasing grounds for believing that recovery is a viable and empirically established phenomenon for drugs.

What Works for Recovery as a Personal Journey? Foundational Principles

Recovery Definition

- 3.4 In *The Road to Recovery: A New Approach to Tackling Scotland's Drug Problem* (Scottish Government, 2008) recovery is defined as:

'a process through which an individual is enabled to move from their problem drug use, towards a drug-free lifestyle as an active and contributing member of society.'

- 3.5 The report went on to state that:

'recovery is most effective when service users' needs and aspirations are placed at the centre of their care and treatment...an aspirational and person-centred process' (Scottish Government, 2008, p23)

- 3.6 *The Road to Recovery* definition acknowledges the individuality of the recovery process, and the recommended strategy reflects explicit parallels with the success of the Scottish Recovery Network in advancing the cause of recovery in the mental health arena in Scotland.

- 3.7 In the same year, the UK Drug Policy Commission convened a meeting of senior UK practitioners and academics, former drug users and family members to develop a UK 'vision' of recovery. Recovery was characterised as a process of:

'voluntarily sustained control⁸ over substance use which maximises health and wellbeing and participation in the rights, roles and responsibilities of society' (UK Drug Policy Commission, 2008, p6)

- 3.8 The report emphasises the range of routes to recovery and also suggests that this includes 'medically-maintained abstinence' (UKDPC, 2008, p6).

- 3.9 In the USA, the Betty Ford Institute Consensus Panel (2007, p222) defined recovery as:

'a voluntarily maintained lifestyle characterised by sobriety, personal health and citizenship.'

- 3.10 The Consensus Panel further detailed the meaning of sobriety by explicitly stating that:

⁸ Voluntary sustained control has generally been interpreted to include medication-assisted as well as abstinent recovery

‘formerly opioid-dependent individuals who take naltrexone, buprenorphine, or methadone as prescribed and are abstinent from alcohol and all other non-prescribed drugs would meet this definition of sobriety’ (p224)

3.11 Although this definition permits ongoing prescribed drug use, it sets a high threshold around ‘controlled drinking’ and occasional use of cannabis and other illicit drugs – both of which would be excluded by this definition. The Panel further differentiated the stages of recovery as ‘early sobriety’ (the first year), ‘sustained sobriety’ (between one and five years), and ‘stable sobriety’ (more than five years).

3.12 Through this collective definitional work to date, recovery from a substance use disorder has been characterised by three core dimensions of change (White, 2007):

- remission of the substance use disorder;
- enhancement in global health (physical, emotional, relational, occupational and spiritual); and
- positive community inclusion.

3.13 Recovery experiences can vary in the degree and scope of change. These variations span full recovery (i.e. the above three criteria of recovery are met for a defined period of time), partial recovery (decreased frequency/intensity of problems; one or two but not all three recovery criteria met) and amplified recovery (full recovery plus dramatically enhanced levels of functioning far superior to pre-addiction levels, White & Kurtz, 2006). The varying depth and span of change in recovery is evident across diverse pathways (spanning secular, spiritual and religious frameworks of personal transformation) and personal styles of recovery (see later discussion).

Recovery and Help-Seeking Behaviours

3.14 Those seeking specialist addiction treatment differ markedly from the larger pool of individuals experiencing and naturally resolving alcohol and other drug (AOD) problems within the community (Dawson, 1996). These differences constitute the ‘two worlds’ of alcohol and other drug problems (Storbjork & Room, 2008). Individuals with low to moderate AOD problem severity and moderate to high recovery capital (i.e. internal and external assets that can be mobilised to initiate and sustain recovery) often resolve AOD problems on their own through recovery supports within their family or community or through brief non-specialist professional intervention. This style of problem resolution is well-documented in the early research on ‘spontaneous remission’ and ‘natural recovery’ (Biernacki, 1986; Tuchfeld, 1981), and the more recent work by Cunningham and colleagues (2000).

3.15 Compared to persons experiencing and resolving AOD problems in community samples, adults and adolescents entering specialist addiction treatment are distinguished by:

- greater personal vulnerability (e.g. family history of substance use disorders, maltreatment as a child, early pubertal maturation, early age of onset of AOD

use, conduct disorder during early adolescence, substance using peers, and greater cumulative lifetime adversities);

- greater severity of use (longer duration of use, dependence, polysubstance use, opiate dependence) and intensity (frequency, quantity, and high-risk method of ingestion and high-risk using contexts) and greater alcohol or drug related consequences;
- higher rates of developmental trauma, post-traumatic stress disorder, and co-occurrence of other medical/psychiatric illnesses;
- greater personal and environmental obstacles to recovery; and
- less recovery capital (White and Cloud, 2008).

3.16 In other words, the treatment seeking population is characterised by typically lower levels of personal and social capital and by greater levels of vulnerability. The need for addiction treatment, particularly prolonged or repeated treatments, is often a proxy for social and cultural marginalisation and the need for sustained guidance into full participation in communities and society (Storbjork & Room, 2008). Natural recovery is the predominant pathway of resolution for transient substance-related problems and less severe substance use disorders, whereas, professionally-directed treatment with sustained recovery support is the dominant pathway of entry into recovery from substance dependence (Dawson, et al, 2006; Cunningham et al, 2000; Price et al, 2001).

Natural Recovery

3.17 Granfield and Cloud (2001) differentiated the turning point that led to stopping drug use from the need for ongoing strategies to sustain abstinence, with the latter often involving alternative activities, changing social networks and increased reliance on family and non-using friends. As Granfield and Cloud (2001) have found:

‘those who possess larger amounts of social capital, perhaps even independently of the intensity of use, will be likely candidates for less intrusive forms of treatment’.

3.18 Within this context, social capital includes the social supports that the individual can draw on, like family and friend support, but will also include the commitment to standard societal values. Blomqvist (1999) reported data on a comparison of recovery in drug and alcohol users, finding that drug users typically had more pre-resolution negative events than alcohol users (particularly around legal and psychological factors) and that these strains persisted over the course of the recovery journey.

3.19 Nonetheless, Blomqvist also found that three-quarters of the sample also reported at least some positive factors in their reasons to stop, such as finding a new partner. Blomqvist concluded that natural recovery was more likely to be associated with a combination of positive and negative motives, while treated recovery was more typically associated with hitting ‘rock bottom’. Blomqvist (1999) has argued that the allocation of resources and opportunities in life will shape the likelihood of recovery journeys and the options available to people. In a study conducted in Scotland, McIntosh and McKeganey (2000) discussed the need for a change in self-perception and identity and talked of the need to ‘repair’ the user’s identity, based on

interviews with 70 individuals in recovery. At the time of the interviews, the individuals' average age was 29, they had a using career of around 9 years and had not used for an average of four years. McIntosh and McKeganey also emphasised the importance of differentiating between the factors associated with striving for and achieving initial recovery and factors associated with sustaining that recovery journey. They found that avoidance factors, such as being tired of the lifestyle and physical health problems, typified desistance efforts while approach factors, such as family and jobs, were more likely to predict sustained recovery.

3.20 An alternative approach to mapping natural recovery involves the use of population survey methods, either by including sections on addiction experience and history in omnibus-type population surveys, or by conducting door-to-door community assessments specific to mental health and addiction, such as the Epidemiological Catchment Area survey. Sobell, Campbell and Sobell (1996) reported rates of 75% and 77% recovery without formal help in former problematic drinkers. In a further Canadian study based on population survey data, Cunningham (2000) assessed recovery from a range of substances described by the sample as problematic at some point in their lives and reported that the use of any formal treatment ranged from 43.1% for cannabis to 90.7% for heroin, with 59.7% of cocaine users seeking formal treatment at some point in their recovery journeys.

3.21 Bischof et al (2001) analysed general population surveys in northern Germany to compare current alcohol-dependent drinkers with remitters who had sought no formal help and found that the remitters had a later onset of dependence and had fewer years of dependent drinking, but higher average daily alcohol consumption. The authors also found that the remitters were more likely to live in a stable relationship and be more satisfied with work and with their financial situation.

Recovery Prevalence and Predictors

3.22 Recovery is the rule rather than the exception: most (50% or more) people with significant AOD problems (meeting diagnostic criteria for a substance use disorder) will eventually resolve those problems (see White, 2008a for review, based on a combination of natural recovery studies, and long-term substance use follow-up studies discussed below). The prognosis for long-term recovery varies markedly by degree of problem severity and by personal, family and community recovery capital (White and Cloud, 2008; Granfield & Cloud, 1999, 2001). There are two clinically important corollaries to this statement: (i) the earlier the age of onset of problem development, the longer the addiction career before recovery stabilisation; and, (ii) the earlier the onset of first treatment (by age and years of use), the earlier the onset and stabilisation of recovery (Dennis et al, 2005). The scales of eventual recovery or sustained addiction may be tipped as much by community recovery capital as by intrapersonal factors (White, 2009b).

Pathways and Styles of Recovery

3.23 There are many (secular, spiritual and religious) pathways of long-term recovery. Pathways constitute broad organising/sense-making frameworks for change. There are also varied styles of recovery within these broad pathways (White & Kurtz, 2006). Styles of recovery encompass variations in:

- Goals (abstinence versus stable, long-term moderation),
- Personal identity (recovery positive, recovery neutral, and recovery negative),
- Degree of affiliation with others in recovery (this will include the extent of social learning and engagement in shared activities, as well as the coherence of views and beliefs about recovery),
- Type of resources mobilised for recovery support (solo recovery, peer-supported recovery, professionally-supported recovery, medication-supported recovery), and
- The temporal aspects of the change process, e.g. transformative change, incremental change or drift (White & Kurtz, 2006).

3.24 Pathways and styles of recovery also vary by gender, across the life cycle (age of recovery initiation) and across cultural contexts (White, 2006a). These pathways and styles are mirrored by different approaches to addiction treatment and peer-based recovery support. Responses to all professional treatments and peer-based recovery support structures include persons who optimally respond, partially respond, or fail to respond (Morgenstern et al, 1996). There may also be individuals whose symptoms worsen following helping/support interventions. In medicine, these latter effects are referred to as iatrogenic illness—clinical deterioration caused by the treatment intervention (Moos, 2005), although this may also be indicative of a personal downward spiral that treatment is not able to arrest. Thus, in the UK, there is a small proportion of the sample studied by Skodbo and colleagues (2007) whose offending and drug use actually increased after the engagement with treatment in the criminal justice system although it is not possible to attribute this causally to the effects of the treatment. One possible explanation suggested for this was poor levels of treatment engagement and delivery.

Recovery Initiation

3.25 Multiple factors can interact to facilitate recovery initiation. These can take the form of push (avoidance) factors and pull (approach) factors or constitute a process more aptly described as drifting out of addiction and into recovery (Granfield and Cloud, 1999). Push factors include crises in personal identity, family and significant other concerns, health concerns, economic concerns, legal troubles, fear of future consequences, and the decrease in positive drug experiences. Pull factors include exposure to positive recovery role models, family and social support, new opportunities, windows of opportunity for lifestyle change (e.g. relocation, job change), and emergence of new beliefs (e.g. religious conversion) (Bess et al, 1972). Recovery initiation involves reaching a tipping point in the interaction between these push and pull factors—what Baumeister (1996) depicts as the ‘crystallisation of discontent’ and White (1996) describes as the ‘synergy of pain and hope’.

3.26 The recent growth in peer-based recovery support services as an adjunct or alternative to addiction treatment is based on the belief that exposure to the personal stories and lives of people in recovery can serve as a powerful catalyst of personal transformation for people suffering from severe AOD problems, and can form the basis of important social learning and reinforcement of recovery messages and values. Peer-based recovery support services can also play a significant role in eliminating or minimising the obstacles to treatment participation and recovery

initiation via motivational priming, education about treatment and recovery, logistical support (e.g. transportation, child care, recovery-conducive housing), assistance in reconstructing social relationships, mobilising family support and countering any efforts to sabotage recovery initiation, and coaching to counter social stigma related to treatment participation (White, 2009a; Dennis et al, 2009).

Stages of Recovery

3.27 There is a growing body of scientific literature positing stage theories of addiction recovery (DeLeon, 1996, 2007; Frykholm, 1985; Klingemann, 1991; Prochaska et al, 1992; Shaffer & Jones, 1989; Waldorf, 1983; Waldorf et al, 1991). These studies suggest that:

- Addiction recovery, like the active process of addiction, is often characterised by predictable stages and milestones;
- The movement through the stages of recovery is a time-dependent process;
- Within each stage of recovery are developmental tasks, skills to be mastered, certain perspectives to be developed, and certain issues to be addressed before movement to the next stage can occur;
- Treatment interventions must be strategically selected to resolve key issues and achieve mastery over key developmental tasks inherent within each individual's current stage of recovery; and
- Treatment interventions appropriate to one stage of recovery may be ineffective or pose iatrogenic risks when utilised in another stage of recovery. The greatest risk may be around detoxification at the wrong stage of recovery and without the necessary personal and social capital to sustain abstinence (White and Cloud, 2008).

3.28 When research on recovery stages is viewed as a whole, four broad stages of recovery are evident:

- 1) Pre-recovery problem identification and internal/external resource mobilisation (destabilisation of addiction and recovery priming);
- 2) Recovery initiation and stabilisation;
- 3) Recovery maintenance; and
- 4) Enhancements in quality of personal/family life in long-term recovery and across the personal/family life cycle.

3.29 One of the most consistent conclusions drawn from studies on the stages of recovery is that those influences that later sustain recovery ('maintenance factors') are different from those factors that serve to initiate early experiments in recovery ('triggering mechanisms') (Humphreys et al, 1995). In the study of UK recovery reported by Best and colleagues (2007), the focus at the point of desistance was typically around maturing out factors and physical or psychological health symptoms, and the maintenance of recovery was more commonly around social factors to do with families and peer support.

Zones of Action and Experience in Recovery

3.30 Recovery from severe AOD problems involves completion of key developmental tasks across five spheres of action and experience. These spheres include:

- **Physical**, e.g. safe and secure shelter; detoxification and management of drug hunger; avoiding/addressing secondary drug dependence; resolving addiction-related and co-occurring health problems (including transition to alcohol dependence or the use of prescription of over the counter medications); re-established rituals of self-care related to nutrition; sleep and hygiene; and, managing anhedonia.
- **Psychological**, e.g. weakening the addiction-sustaining defence beliefs; developing drug-free coping strategies; emotional catharsis; managing emotional ambivalence about recovery (grieving loss of drug and drug-focused relationships); developing techniques to respond to high-risk (of relapse) situations; tempering other potentially excessive behaviours (e.g. food, sex, work, money); initial story reconstruction. This will also involve the construction of psychological building blocks such as self-esteem, self-efficacy and a positive identity that are essential for recovery growth.
- **Spiritual/life meaning and purpose**, e.g. experiencing hope; drawing meaning from having survived death; experiencing connection to previously hidden resources within and outside the self; experiencing a sense of rebirth; daily rituals of self-reflection; experiencing breakthroughs in self/world-perception.
- **Relational**, e.g. re-negotiating relational roles and rules; managing intimacy and sexuality in a drug-free state; reaffirmation of key family rituals; re-embracing and redefining parental responsibilities; disengaging from pathology-bonded relationships; building a sobriety-based support network; cultivating recovery role models; helping others and community. There is a strong link to the agenda set by Hidden Harm and Getting it Right for Every Child (see Appendix 1) that link the relational part of recovery to the broader agenda of ensuring that recovery is focused on families and communities and not only on those experiencing recovery.
- **Lifestyle reconstruction**, e.g. shedding language, dress, symbols, music and other trappings from the culture of addiction; disengaging from criminal enterprises; establishing a new relationship with work and money; resolving legal problems; restructuring daily rituals; developing drug-free leisure activities (White, 1996).

3.31 There is a limited evidence base about the sequencing and order of these changes, but they will be individual and will depend on contextual factors, as well as variations in recovery capital and personal resource. The evidence base in Scotland, in particular, is extremely limited but a range of online resources are becoming available (e.g. Wired In website⁹ and the Scottish Drugs Recovery Consortium). These have the potential to provide the anecdotal foundations and community supports for recovery that may form the foundations for more formal research and evaluation. Rather than being a linear process, work on the tasks within each zone waxes and wanes over the course of long-term recovery (White, 1996). Persons

⁹ <http://wiredin.org.uk> [accessed 5th March 2010]

seeking recovery have, for many years, looked to others in long-term recovery to offer guidance through these key developmental tasks (White, 2009a), providing a core form of social learning.

*Cultures of Addiction and Recovery*¹⁰

3.32 Individuals can be as dependent upon a culture of addiction—its language, values, roles, rituals, and relationships—as they are on the drugs that form the centrepiece of these cultures. The language of addiction as a ‘chronic, relapsing condition’ that permits no escape generates in workers and clients alike a pessimistic model for treatment that can become a self-fulfilling prophecy. Such cultures have been extensively described in the early ethnographic literature on addiction (Agar, 1973; Preble & Casey, 1969; Spradley, 1970; Waldorf, 1973). Elaborate cultural rituals can also surround the recovery experience, including rites of passage such as graduation ceremonies and celebrations of sobriety birthdays. The transition from addiction to recovery is often a journey from one culture to another, each with its own distinct trappings (e.g. language, values, symbols, institutions, roles, relationships, and rituals of daily living; White, 1996).

Common Elements across Recovery Pathways

3.33 There is a growing appreciation for the variety of recovery experiences, but there are also common themes and elements shared by these diverse pathways and styles of recovery. Such common elements include:

- Crisis (threat/opportunity forces re-evaluation of person-drug relationship).
- Discovery (of previously hidden resources within or beyond the self).
- Commitment (‘Sobriety Priority’).
- Rigorous self-evaluation (e.g. ‘fearless and searching moral inventory’).
- Reframing within a new world view (the once revered drug is now personally stigmatised).
- Confession (honest disclosure about oneself and one’s past).
- Story/identity reconstruction (the stigmatised drug is now embedded in a new life story and a new set of values) and storytelling.
- Participation in a community of shared belief (e.g. secular, spiritual, or religious recovery support fellowships) for all but acultural styles of recovery.
- Lifestyle reconstruction (reconstruction of relationships and daily rituals, e.g. changes in ‘people, places and things’).
- Restitution (making amends for past injury to others).
- Service (extending help to others).
- Life meaning and purpose (addiction recovery is integrated into a broader vision and mission for one’s life).
- Above changes embedded in daily rituals of recovery maintenance: centering rituals, mirroring rituals, acts of self-care, acts of service (White, 1996; Zemore et al, 2004).

¹⁰ Excerpted from White (2009a)

*Recovery and Social Support*¹¹

3.34 The resolution of severe alcohol and other drug problems is mediated by processes of social and cultural support (Brady, 1995; Laudet et al, 2006; Longabaugh et al, 1993; Spicer, 2001). Both general and abstinence-specific social support influences recovery outcomes, but abstinence-specific support is most critical to long-term recovery (Beattie & Longabaugh, 1999; Groh et al, 2007). The risk of relapse following recovery initiation rises in relation to the density of heavy drug users in one's post-treatment social network and declines in tandem with social network support for abstinence (Bond et al, 2003; Dennis et al, 2007; Mohr et al, 2001; Weisner, Matzger, & Kaskutas, 2003; Best et al, 2008). Social support is one of the primary mechanisms of change within recovery mutual aid societies and may be particularly effective in enhancing recovery for individuals embedded in heavy drug using social networks (Humphreys, Mankowski et al, 1999; Humphreys & Noke, 1997; Project MATCH Research Group, 1998; Bond, Kaskutas, & Weisner, 2003). The presence or absence of family and peer support for abstinence is a particularly powerful influence on the recovery outcomes of adolescents treated for a substance use disorder (Godley & Godley, in press).

Recovery Durability

3.35 The point of recovery stability/durability (at which the risk for future lifetime relapse drops below 15%) is typically between 4 and 5 years of sustained recovery for alcohol dependence, but potentially longer for other drug dependencies (e.g. opioid addiction, see White & Kurtz, 2006 for review). Little is known about the dynamics of relapse following a prolonged period of stable recovery (White & Schulstad, 2009). Recovery careers—their initiation and durability—are profoundly influenced by the interaction of problem severity/complexity and personal recovery capital. Recovery capital is the quantity and quality of internal and external resources that can be mobilised to initiate and sustain the resolution of severe alcohol and other drug problems (Granfield and Cloud, 1999). Internal assets can be thought of as personal recovery capital and external assets can be thought of in terms of family and community recovery capital (White & Cloud, 2008). Thus, recovery capital will change over time and is amenable to measurement as a mechanism for assessing appropriate interventions.

3.36 A person seeking recovery with moderate drug problem severity but high recovery capital might well achieve and sustain recovery on their own, through screening and brief professional intervention, or through support from an indigenous or non-specialised service resource, e.g. recovery support group. A person with high drug problem severity and complexity but exceptionally high recovery capital might be appropriate for outpatient detoxification and outpatient treatment despite a level of problem severity that, viewed in isolation, would justify inpatient care. In contrast, a person with low drug problem severity but high risk factors paired with extremely low recovery capital might be in need of residential treatment, ongoing professional support and prolonged peer-based recovery support (White and Cloud, 2008). Finally, a person with high problem severity and low recovery capital will likely require services of high intensity, broad scope (e.g. outreach, assertive case

¹¹ Excerpt from White (2009b)

management, and sustained recovery coaching), and long duration (White and Cloud, 2008). This is similar to the 'quadrant model' proposed for dual diagnosis by Mueser and Drake (2007) and adopted in *Mental Health in Scotland: Closing the Gaps - Making a Difference* (Scottish Government, 2007) and requires a sophisticated and flexible approach to assessing client functioning across multiple domains.

Family and Community Recovery

3.37 The family as a unit and individual family members can be harmed by the addiction of one or more family members. The need to repair the health of family members and family functioning as a whole can be conceptualised as a process of 'family recovery' (White, 2008a). Family recovery involves repair of family rules, roles and relationships across three family subsystems (adult intimate relationships, parent-child relationships, sibling relationships) and altering (increasing or decreasing) the family's interactions with the outside world. Family recovery from severe AOD problems is extremely stressful and potentially destabilising, spans years, and can be enhanced by professional and peer support (Brown & Lewis, 1999).

3.38 AOD problems are often transmitted intergenerationally within families. It is unclear the extent to which recovery in one generation influences resistance to or recovery from AOD problems in the next generation, although the evidence from Callan and Jackson presented below (1985) would provide some hope that parental recovery can act as a barrier to inter-generational transmission. Strategies to break these intergenerational cycles of problem transmission warrant experimentation and rigorous evaluation. The concept of recovery can also be applied to larger social systems to the extent that a community's ability to sustain its own health and survival has been compromised by injuries resulting from the magnitude of AOD problems. Therefore, in this context, one can also speak of the need for 'community recovery' (White, 2007).

3.39 One of the key challenges of a recovery model is to reconcile traditional outcome approaches, based largely on measuring pathology severity and remediation in treatment, with 'hard' indicators that reflect both individual growth and strength and that focus on the social and community aspects of recovery. These are likely to include measures of community engagement and activity; effective parenting and family engagement; and meaningful engagement in activities including, but not restricted to, employment. This includes the direct effects of parental support but also the indirect effects of better family integration that result from ongoing parental engagement in mutual aid groups (Andreas & O'Farrell, 2009). However, it is both the longevity of the recovery process and the expected individual variability in goals and their achievement that make this a challenging model for quantitative researchers to engage with. This issue is explored further in Chapter 6 and again in the concluding chapter (Chapter 8).

What Works in Relationship to Communities of Recovery and Related Recovery Support Institutions?¹²

Community Perspectives

3.40 There is growing recognition that recovery initiation in institutional settings does not assure sustained recovery maintenance in the community environments of home and work settings (Weisner, Matzger, & Kaskutas, 2003; Westermeyer, 1989). New recovery community support institutions are helping anchor recovery within these natural environments. Addiction recovery mutual aid societies are growing in size and achieving wide geographical dispersion and philosophical diversification (Humphreys, 2004; White, 2004). There are historically significant recovery community building activities underway, including the spread of recovery homes, recovery schools, recovery industries, recovery ministries/churches, and new recovery community organisations and service roles (Jason, Davis, Ferrari et al, 2001; Valentine, White, & Taylor, 2007; White & Finch, 2006; White, 2006b). However, in spite of anecdotal evidence of this in the UK, there has been little formal evaluation, with the Scottish Government funded evaluation of LEAP (The Lothians and Edinburgh Abstinence Programme) being one of the few examples. A new grassroots addiction recovery advocacy movement, exemplified on the Wired In¹³ and Faces and Voices of Recovery¹⁴ websites, is:

- 1) calling for a reconnection of addiction treatment to the larger and more enduring process of addiction recovery;
- 2) advocating a renewal of the relationship between addiction treatment institutions and grassroots recovery communities; and
- 3) extolling the power of community in the long-term recovery process (Elise, 1999; Morgan, 1995; White, 2002, 2009b). The growth of associations, community champions and recovery-oriented institutions in communities creates a social learning foundation for what can be the 'contagion' of recovery in local communities and increased visibility of recovery communities.

3.41 These efforts mark a growing focus on the 'ecology of addiction recovery' – how the relationships between individuals and their physical, social, and cultural environments promote or inhibit the long-term resolution of severe alcohol and other drug problems.

3.42 Early engagement with community supports and mutual aid is not straightforward and individuals will frequently need support and encouragement. Timko and colleagues (2006) assessed the effects of an intensive referral approach to 12-step facilitation programmes in a USA treatment setting, self-help groups arranged the recruitment of a volunteer to meet the patient and take them to a meeting. This was associated with significantly greater attendance than standard referral by advice or leaflet and resulted in greater engagement with 12-step at six-month outcome point as well as better drug and alcohol use outcomes at the follow-up. In other words, it is critical that bridges are built between professional and

¹² Excerpt/abstracted from White, 2009b

¹³ <http://wiredin.org.uk> [accessed 5th March 2010]

¹⁴ <http://www.facesandvoicesofrecovery.org> [accessed 5th March 2010]

community groups and that professionals make the time and effort to familiarise themselves with the community support groups available for their clients.

3.43 Families, kinship, social networks and communities can be considered in need of recovery when the health and performance of its members and the system as a whole have been severely impaired by alcohol or drug problems (White, 2007). In this view, parallel processes exist between the wounding and healing of the individual, the family and the community. Much of what is known about the recovery of individuals (De Leon, 1996; White, 1996) is paralleled in the recovery of families (Brown & Lewis, 1999), kinship and social networks (Galanter, Dermatis, Keller, & Trujillo, 2002), and whole communities (Williams & Laird, 1992).

3.44 Individuals with severe AOD problems can be viewed as victims of their own vulnerabilities or as symptoms of system dysfunction (i.e. by-products of a breakdown in the relationship between the individual, the family and the community). In historically oppressed communities, hope for individuals and families is best framed within a broader vision of hope for people, e.g. attaining social justice; addressing disparities in health, stigma, and discrimination; and widening doorways of community participation and contribution for all people (White, 2009a). There are three essential treatment-related strategies to enhance the healing power of the community in the long-term recovery process: outreach, in reach, and recovery community building (see community development section in Chapter 4).

1. **Outreach** is the extension of professional addiction treatment services into the life of the community, including supporting clients within their natural environments following the completion of primary treatment. Outreach strategies include community education efforts, early case identification and engagement via formal outreach, screening and brief intervention programmes, linking local harm reduction and recovery support resources, delivering services in non-traditional service sites, and enhancing the community visibility of people in long-term recovery.
2. **In-reach** is the inclusion of indigenous community resources within professionally directed addiction treatment. In-reach strategies include engaging each person's family and social network in the treatment process, establishing strong linkages between indigenous recovery support groups and addiction treatment institutions; and utilising consumer councils, alumni associations and volunteer programmes to saturate the treatment milieu with people representing diverse styles of long-term recovery. This might involve joint training between formal treatment providers and community and mutual aid groups; information sharing fora; joint assessments and case reviews and regular visits and exchanges. This is one mechanism for overcoming a 'silo' model where professional treatments exist in a separate and unconnected realm to the recovery activities in communities and in voluntary organisations. Thus, services that have introductory sessions from AA and NA groups and who include people in recovery in the brief and full assessment processes are examples of integration of community and treatment models, based on an in-reach approach.
3. **Recovery community building** encompasses activities that nurture the development of cultural institutions in which persons recovering from severe AOD problems can find relationships that are recovery-supportive, natural (reciprocal), accessible at times of greatest need (e.g. nights and weekends) and potentially

enduring. Recovery community building activities include cultivating local recovery community (advocacy) organisations and peer-based recovery support groups, promoting the development of local peer-based recovery support services/institutions focusing on such areas as recovery-focused housing, education, employment and leisure (White, 2009b).

Role of Recovery Mutual Aid Group Participation in Long-Term Recovery¹⁵

3.45 Scientific studies regarding the effects of participation in recovery mutual-aid societies on long-term recovery outcomes are limited in scope and methodological rigour, although the span and rigour have increased significantly in the past decade (Humphreys, 2006). Most of what is known about mutual-aid and recovery outcomes is based on studies of the effects of involvement in Alcoholics Anonymous of individuals following addiction treatment. Seen as a whole, these studies conclude that participation in recovery mutual-aid societies typically enhances long-term recovery rates, elevates global functioning, and reduces post-recovery costs to society among diverse demographic and clinical populations (Kelly & Yeterian, 2008; White, 2009a). Individual responses to recovery mutual-aid groups are variable, including those who respond optimally, those who respond partially, and those who fail to respond (Morgenstern et al, 1996). Recovery mutual aid participation has multiple active ingredients, including motivational enhancement for recovery, reconstruction of personal identity, reconstruction of family and social relationships, enhanced coping skills, and the personal effects of helping others. The effects of recovery mutual aid involvement are interdependent with the timing, frequency, intensity, and duration of involvement. For clients in addiction treatment, affiliation with and benefits from recovery mutual-aid societies are influenced by counsellor attitudes toward mutual aid, the style of linkage (assertive versus passive, degree of choice, and personal matching), and the timing of linkage (during treatment versus following treatment). The potential positive effects of recovery mutual-aid participation are often not achieved due to weak linkage procedures and high early dropout rates (See further discussion below).

3.46 There is also increasing evidence that post-treatment engagement in mutual aid has benefits to the children of substance-using parents. Andreas and O'Farrell (2009) reported on the impact of AA attendance after formal treatment on the psychiatric well-being of children of alcoholic fathers, as outlined above and discussed in chapter 6 and the conclusion. They found that fathers' greater involvement in AA groups predicted children's lower externalising problems. Similarly, Callan and Jackson (1985) assessed adolescent children of recovering alcoholics in Queensland, Australia and found that the children of fathers in long-term recovery from drinking rated their families as happier, more cohesive, more trusting and more affectionate than families where the fathers still drank. While this was not based on randomisation, the difference between groups would suggest that it was the influence of the 12-step engagement that predicted improvement in child functioning. Thus, there is an emerging evidence base to indicate the familial benefits of parental recovery, and mutual aid engagement, measured by both self-report and diagnostic indicators.

¹⁵ Excerpted/abstracted from White, 2009a

What Works in terms of Recovery Management and Recovery-Oriented Systems of Care?

3.47 Brief episodes of crisis-induced abstinence, biopsychological stabilisation, and the resulting flush of health and great intentions do not constitute sustainable recovery and are as likely to be milestones in one's addiction career as a portal of entry into long-term recovery (Scott, Foss, & Dennis, 2005; Venner et al, 2005). Scientists, clinical leaders and recovery advocates are calling for a shift in the design of addiction treatment from a model of acute biopsychosocial stabilisation or palliative care to a model of sustained and assertive recovery management that would emulate the best treatment practices used to manage other chronic health conditions (Dennis & Scott, 2007; McLellan, Lewis, O'Brien, & Kleber, 2000; O'Brien & McLellan, 1996; White, Boyle, & Loveland, 2002; White & McLellan, 2008). Interest is also growing in public health and harm reduction strategies that integrate environmental and clinical strategies of AOD problem resolution (Kellogg, 2003; Tatarsky, 2003). Recovery is not an alternative to harm reduction.

3.48 The acute care (AC) model of specialised addiction treatment has measurable positive effects when compared to no intervention or alternative non-specialised interventions, but these effects vary widely by programme, counsellor, and population served. Recovery-oriented systems of care (ROSC) are networks of formal and informal services developed and mobilised to sustain long-term recovery for individuals and families impacted by severe substance use disorders. The system in ROSC is not a local, state, or federal treatment agency but a macro level organisation of a community, a state, or a nation. The model that White (2008a) has outlined is based on the idea that 'strategic recovery champions' will work to shift not only the attitudes of individual professionals, and the practices in specialist services, but that overall treatment systems (such as the Alcohol and Drug Partnerships, ADPs, in Scotland) will be re-structured over time to be recovery-oriented in the sense that the ethos of the system will be around client empowerment and choice, and the distillation of hope for individual, family and community recovery.

3.49 Recovery management (RM) is a philosophical framework for organising addiction treatment services to provide pre-recovery identification and engagement, recovery initiation and stabilisation, long-term recovery maintenance, and quality of life enhancement for individuals and families affected by severe substance use disorders (White, 2008a).

3.50 One particular version of the recovery-oriented system of care is the Recovery Oriented Integrated System (ROIS) developed by George de Leon (e.g. De Leon, 2007), based on 40 years of research work primarily focused on the therapeutic community (TC) setting. Therapeutic communities in the drugs field grew up in the USA in the 1960s and 1970s and were based on the idea that collective endeavour and group processes among those in recovery were inherently therapeutic and that the professional and specialist input was less important in this rehabilitative setting. Therapeutic communities, such as Phoenix House and Daytop, have become iconic models for therapeutic group processes and have been replicated across the world both in community and prison settings.

3.51 This has been widely used in the criminal justice system in the USA to facilitate re-entry of offenders into the community on their release. The model relies on a variety of services and endeavours, as well as group treatment providers working together and sharing ideas and a common language, to enable the individual to establish the main building blocks of recovery. However, the basic building block of the ROIS is the 'cadre' of individuals setting out on recovery journeys who will support each other and who will act in effect as a 'micro-TC' that will graduate through stages of recovery as a group and who will be the basic support unit for that cohort of clients. The TC model embeds the individual within a collective group entity to a much greater extent than the ROSC model which promotes a much greater personalisation model of recovery within a community environment, although there is limited empirical evidence that supports this model in a community context (De Leon, 2007).

3.52 The basic idea is that treatment and aftercare must be integrated to sustain the individual in the recovery process, and that for this to happen there must be a shared recovery approach among provider agencies in delivering coherent packages of support. This model has been piloted in the North-West of England (Gilman, 2008), based on the notion of the Drug Action Team as the strategic visionary and the lead for the overall model of integration at the level of service. This then creates the therapeutic space that allows cohorts of individuals in recovery to support each other on a recovery process that is much too long and intensive to be restricted to what is available through acute treatment services.

Measuring Effectiveness of Treatment Systems within a Recovery Model

3.53 Recovery-focused performance measures include three dimensions of systems evaluation:

- 1) measures of infrastructure stability and adaptive capacity;
- 2) recovery-focused service process measures; and
- 3) long-term recovery outcome measures¹⁶.

3.54 Infrastructure stability and adaptive capacity reflect the capacity of an organisation to undergo systems transformation processes (e.g. from an Acute Care to a Recovery Management model of care) and the capacity of an organisation to fulfil its commitment for continuity of contact and support over time to individuals and families seeking long-term recovery. Recovery-oriented service process measures are intermediary outcomes (e.g. early identification, engagement and retention) that are linked to the final goal of long-term individual and family recovery. Long-term recovery outcome measures represent the major fruits of recovery, defined here as the resolution of alcohol and other drug problems; the progressive achievement of global (physical, emotional, relational) health; and positive community integration (elimination of threats to public safety; life meaning and purpose, self-development, social stability, and social contribution) (White, 2008a). The scope of recovery outcome measures include a focus on quality of life markers and effective

¹⁶ The "Person in Recovery Self-Assessment" form developed as part of the "Tools for Transformation" series (Philadelphia Department of Behavioural Health and Mental Health Retardation Services, 2006) is one instance of a new measure that attempts to provide outcome indicators linked to long-term and sustained recovery.

engagement with families and communities on the one hand, and on the other greater prominence for meaningful activities such as working and volunteering and less of a focus on pathology. Thus, the recovery model does not presume the overall resolution of all symptoms, favouring instead a model based on strengths and opportunities rather than the final resolution of all illness symptoms.

Attraction and Access of Treatment

3.55 Only 10% of persons meeting criteria for a substance use disorder receive specialty sector addiction treatment in any year in the USA, and only 25% of persons meeting criteria for a substance use disorder will receive such specialised treatment in their lifetime (SAMHSA, 2003; Dawson, Grant, Stinson, et al, 2006). According to the UK Focal Point Report (Department of Health, 2008), there were 12,902 presentations to drug treatment in Scotland in 2006/07, compared to 104,062 in England, with Scotland having a slightly higher rate of opiate presentations as primary drug (67.0% compared to 64.1%) and a much lower rate of presentations for cocaine powder or crack (5.6% in Scotland and 14.1% in England). The same report also estimated the rate of problem drug use per 1,000 population as 9.97 in England and 15.39 in Scotland. Treatment seeking in Scotland (new presentations as a proportion of estimated PDU population) was lower at 25.0% than the 31.3% in England in 2006/07.

3.56 Multiple factors impede an individual's ability to seek help for AOD problems. These may include misperceptions of the severity of AOD problems; misjudgements regarding self-capabilities to resolve AOD problems, treatment-related social stigma, the lack of critical treatment supports such as transportation or day care, and resistance to complete abstinence as the only proffered treatment goal (Cunningham et al, 1993; Ellingstad et al, 2004; Grant, 1997; Tucker et al, 2004; Wechsberg et al, 2007). The Acute Care model attracts only a small percentage of persons admitted to addiction treatment, with most persons entering treatment under external coercion at a late stage of problem development (Institute of Medicine, 1990; Wild, 2006). This does not imply that coerced treatment is ineffective compared to voluntary treatment, but the status of mandated treatment for the bulk of those entering treatment signals that treatment services are reaching people primarily at later stages of their addiction careers when prognoses for long-term recovery have been compromised. Efforts need to be made to reach people at far earlier stages of problem development when recovery capital is still available to enhance long-term outcomes, and this is likely to result from both the in-reach and outreach models (outlined above).

3.57 High pre-treatment drop-out rates (initial contact without service initiation—ranging from 25% to 50%) are linked to personal ambivalence, lack of geographical or financial access, waiting lists, and personal obstacles to participation, based on research that assessed failures to engage in community treatment in the USA (Gottheil et al, 1997). Promising practices to increase early engagement include social marketing of AOD problem resolution options and successes, assertive models of outreach, lowered thresholds of engagement, interim services for those on waiting lists, short-term case management to enhance engagement, regular check-ups for those resisting immediate service entry, telephone prompts through the early engagement process, family mobilisation strategies, extended clinical hours, and

delivery of services in non-stigmatised sites (White, 2008a). Thus, the recovery management check-up model described below uses peers to engage with those completing treatment to encourage and motivate and to enhance re-engagement rates in the event of early relapse (Dennis et al, 2009).

Screening, Assessment, and Level of Care Placement

3.58 Early screening and brief interventions for AOD problems are effective strategies for reaching persons with AOD problems who are involved in non-specialised community-based service settings, particularly primary health care settings (National Institute of Alcohol Abuse and Alcoholism [NIAAA], 2002). RM models of assessment differ from the AC models in key dimensions: assessment processes are not just about pathologies, and focus on the broader context of family life and life in the community, and crucially are about building on strengths rather than simply listing and attempting to resolve pathologies. Assessment and recovery planning are also seen as ongoing and real-time, with the aim of monitoring and supporting current needs. Where level of care decisions in the AC model focus primarily on problem severity and complexity, such decisions in the RM model are heavily influenced by the assessment of personal, family, and community recovery capital (White et al, 2002), and attempt to promote strengths as the building blocks of recovery.

3.59 Promising practices related to screening, assessment, and placement include AOD problem screening in primary care settings, Internet-based screening services, use of standardised global assessment instruments, family-focused assessment protocol, and regular recovery community resource mapping (White, 2008a).

Service Team Composition

3.60 Recovery Management models of addiction treatment increase the involvement of medical, psychiatric, and other allied professionals (such as social work and primary care professionals) and of peer-based recovery support specialists. Recovery Management models of care also emphasise multi-agency models of intervention and embrace a larger goal of breaking intergenerational cycles of problem addiction transmission, thus providing a framework for the integration of primary prevention, early intervention, treatment and long-term recovery support strategies.

3.61 In the UK mental health field, there has been the recent development of Assertive Community Teams (ACTs) that are predicated on the idea that recovery-oriented treatment must have an increasingly community focus (e.g. Phillips et al, 2001). This is based on the evidence that this type of programme is effective in reducing hospitalisation, is no more expensive than traditional care, and is more satisfactory to consumers and their families than standard care.

3.62 Promising practices that enhance service team composition include providing primary medical/psychiatric care in tandem with addiction treatment, the use of recovery coaches to provide continuity across levels of care, increased use of volunteers, and the creation of multi-agency, multi-disciplinary service teams (White, 2008a).

Service Relationship/Engagement

3.63 Pre-treatment dropout rates in addiction treatment exceed 50% of those who initially call regarding services (Gottheil et al, 1997). Less than half the people admitted to addiction treatment services in the USA successfully complete treatment (SAMHSA, 2002), although the retention rates reported in the NTA's Annual Report for 2009 indicate markedly higher retention rates in England, where 92% of people engaged in treatment were successfully retained in treatment for 12 weeks or more (NTA, 2009; NTA, 2010). For people who do not complete addiction treatment, both those who drop out and those who are extruded via administrative discharge constitute those who are in greatest need of such treatment (Stark, 1992; Samantaray et al, 1997).

3.64 In the UK, there is an additional problem which relates to the low intensity of treatment delivery. Best and colleagues (2009) have shown that in statutory treatment services in the UK, many clients are seen infrequently (often fortnightly) and for short periods of time (typically for around 45 minutes per session), and that the delivery of evidence-based psychosocial interventions is minimal in terms of the delivery of structured interventions such as cognitive-behavioural or motivational interventions (for a wider discussion of psychosocial interventions see chapter 4). Thus, the question of whether treatment is effective is often replaced by a conundrum of why clients receive so little of it with the consequent implications for the delivery of recovery-oriented interventions. The problem identified in this study of mainly UK NHS services was not only that there was sub-optimal delivery of therapeutic interventions; there was also little evidence that clients were being offered real recovery options within the treatment service.

3.65 The service relationship in the Recovery Management model shifts from that of a professional expert 'treating' a 'patient' to that of a consultant providing sustained support to individuals and families as they progress through multiple stages of long-term recovery. Recovery management emphasises use of a 'choice philosophy' (importance of clients setting their own treatment goals and formulating their own recovery action plans; Borkman, 1998; White, 2008b; SAMHSA, 2005a).

3.66 Promising practices in enhancing engagement and retention include the use of motivational interviewing, using more senior staff to induct new enrollees into treatment, participation incentives, altering administrative discharge policies and practices, using a choice philosophy to expand the range of client decision-making, increasing the focus on therapeutic alliance in training and supervision, and monitoring engagement indicators for each service unit and for counsellor (White, 2008a). Although this is a more resource intensive approach, it is associated with earlier client engagement in the treatment process which in turn is linked to better retention and improved outcomes (Simpson, 2004).

Service Dose, Scope and Quality

3.67 Length of service contact is the best single predictor of post-treatment addiction recovery status (Hubbard et al, 1989; Hubbard et al, 2002; Simpson et al, 1999; Simpson, 1997), a finding that was repeated in the NTORS project in England (Gossop et al, 2003). In the USA, length of time in treatment has decreased through

the modern evolution of addiction treatment, with the majority of clients discharged from addiction treatment receiving less than the minimum 90 days of service contact recommended by the National Institute on Drug Abuse. Expanding the scope of ancillary medical, psychiatric, and recovery support services in addiction treatment can elevate long-term recovery outcomes, but such service comprehensiveness is not the norm within the addiction treatment service sector (McLellan et al, 1994; McLellan, Hagan, Levine, et al, 1998). Progress is being made integrating evidence-based practices (such as the use of manualised psychological interventions) within mainstream addiction treatment, but treatment methods continue that are ineffective or potentially harmful (McLellan et al, 2003; White & Kleber, 2008).

3.68 Promising practices related to the dose, scope, and quality of addiction treatment services include greater use of stepped care, more assertive linkage to recovery support groups and post-treatment recovery support institutions (e.g. recovery homes, recovery schools, and recovery ministries), co-location of medical/psychiatric/social services, increased emphasis on evidence-based treatments, increased monitoring of fidelity to preferred service methods via clinical supervision, and increased communication between clinicians and researchers (White, 2008a).

Assertive Linkage from Treatment to Communities of Recovery

3.69 Participation in recovery mutual aid groups can elevate long-term recovery outcomes for diverse populations (White, 2009a). The effects of recovery mutual aid involvement reflect multiple mechanisms of change and vary by the number of meetings in early recovery, duration of participation, and intensity of participation (See Kaskutas, in press, and Kelly & Yeterian, 2008 for recent reviews). Combining addiction treatment and recovery mutual aid for persons with severe substance use disorders is more effective than when either is used alone (Fiorentine & Hillhouse, 2000).

3.70 The positive effects of recovery mutual aid groups are compromised by weak linkage and progressive attrition in participation over time. Half of all USA clients completing treatment do not participate in recovery support groups after discharge, and of those who do, 40% to 60% discontinue participation within a year of treatment discharge (Tonigan et al, 2002; Tonigan et al, 2003; Kelly & Moos, 2003; Donovan & Wells, 2007). Assertive linkage to a recovery support group is more effective than passive referral (verbal encouragement to attend), but the linkage process in most treatment programmes is of the passive variety (Forman, 2002; Timko et al, 2006). Participation in other recovery community institutions (e.g. recovery homes, recovery schools, recovery industries, recovery support centres, recovery ministries/churches) may enhance long-term recovery, but evaluation of this potential is at an early stage (For review, see White, 2009).

3.71 Promising practices related to linkage to communities of recovery include enhanced institutional linkages between treatment institutions and communities of recovery, use of assertive linkage procedures, orientation and linkage to Internet-based recovery support groups, and expanding treatment philosophies to embrace diverse religious, spiritual, and secular pathways of recovery (White, 2008a).

Post-Treatment Monitoring, Support and Early Re-Intervention

3.72 Post-treatment monitoring and support can significantly elevate long-term recovery outcomes, but only a small percentage (20% to 36%) of adolescents and adults completing addiction treatment receive post-treatment continuing care in the USA (Dennis et al, 2003; Godley et al, 2001; McKay, 2005; Scott et al, 2005). Recovery Management models of continuing care are distinguished from Acute Care models by several critical factors: Post-treatment monitoring and support is provided to all clients, not just those discharged; responsibility for continued contact is with the service staff rather than the client; saturated support is provided in the first 90 days following discharge from treatment; and 'recovery check-ups' are provided for an extended period of time (up to five years). The timing and duration of post-treatment support exert a greater influence on long-term recovery outcomes than the total number of support contacts or the length of each support contact (Ritsher et al, 2002). The telephone and the Internet constitute two underutilised media for post-treatment monitoring, support and early re-intervention.

3.73 Promising practices related to post-treatment monitoring and support include enhancements aimed at participation (behavioural contracts, prompts, financial incentives), removing barriers to participation, extending time-span of support via recovery check-ups, telephone- and Internet-based systems of continuing care, and expanding the range of environments in which continuing care occurs, e.g. home- and work-based follow-up (White, 2008a).

Treatment/Recovery Outcomes

3.74 As discussed, reported treatment outcomes vary by definitions of key measures, e.g. abstinence, sobriety, recovery, lapse, relapse, success. Post-treatment evaluations consistently report improved odds of sustained abstinence, reduced AOD consumption by those who use, a reduction in AOD-related problems, and reductions in crime and risk of HIV infection (See White, 2008 for review). The majority of people completing specialised addiction treatment resume some AOD use in the year following treatment (Anglin et al, 1997; Institute of Medicine, 1998). Findings from large-scale outcome studies in the USA show that post-treatment relapse rates are higher for men, adolescents, persons dependent on opiates, and persons with co-occurring substance use and psychiatric disorders. Between one-quarter and one-third of all clients discharged from addiction treatment will be re-admitted to treatment within one year, and 50% will be re-admitted within two to five years (Grella et al, 2003; Simpson et al, 2002; Simpson et al, 1999). The majority of persons entering addiction treatment already have one or more prior admissions (SAMHSA, 2005b). Clients discharged from addiction treatment have high post-treatment mortality rates—1.6 to 4.7 times greater than age-matched populations without substance use disorders (See White 2008 for a review). Stable recovery can be preceded by years of cycling in and out of sobriety experiments (Scott et al, 2005). Such findings underscore the need for post-treatment monitoring, sustained support, and, when needed, early re-intervention.

The Evidence Base for Recovery in the UK

3.75 The primary source of recovery evidence in the UK, at least from a drugs' perspective, comes from 70 semi-structured interviews conducted by McIntosh and McKeganey and published in papers in 2000 and 2001. The participants were recruited through snowball sampling, advert and from follow-up contact with former users of treatment services, and covered a wide range of routes to recovery and extent of recovery duration. Unusually, 52% of the sample was female (compared to the 25-33% typically reported in prevalence and treatment studies). Among the key desistance factors identified were developing new activities and relationships and developing a commitment towards new and changed lifestyles, at least in part by developing an identity as a non-addict. The authors identified two main mechanisms by which former users avoided relapse:

*'(1) the avoidance of their former drug-using network and friends and
(2) the development of a set of non-drug-related activities and relationships' (McIntosh and McKeganey, 2000).*

3.76 In *Beating the Dragon*, McIntosh and McKeganey (2001) also reported on the key role of meaningful activities in providing a distraction from drugs; in establishing a new and more positive sense of self and in providing new relationships that were able to support that new sense of identity. They also comment on the relatively minor role of treatment in recovery stories:

'it was notable how little time our interviewees spent talking about the contribution of drug-misusing services when describing their recovery' (McIntosh and McKeganey, 2001, p131)

3.77 Instead, interviewees focused much more on the transition in their own personal identities and their family functioning.

3.78 In 2008, Best and colleagues published the findings of a survey of 107 former problematic heroin users who have achieved long-term abstinence about their experiences of achieving and sustaining abstinence. The cohort was recruited opportunistically from three sources, drawing heavily on former users working in the addictions field. On average, the group had heroin careers lasting for just under 10 years, punctuated by an average of 2.6 treatment episodes and 3.1 periods of abstinence - the most commonly expressed reason for finally achieving abstinence was 'tired of the lifestyle' followed by reasons relating to psychological health. In contrast, when asked to explain how abstinence was sustained, clients quoted both social network factors (moving away from drug using friends and support from non-using friends) and practical factors (accommodation and employment) as well as religious or spiritual factors.

3.79 Overall, while there is a considerable volume of research published around recovery, the majority of this work has been carried out in the USA and much of it involves alcohol. In the UK, much of the evidence base around recovery is based on mental health and there is limited evidence available on the typical recovery careers of heroin users in the UK or of the factors that are associated with desistance. Even less is known about the careers of primary stimulant users or those of polydrug users

or about the impact of either co-morbid mental health problems or primary recidivism on the careers of illicit drug users and their subsequent transitions to long-term recovery.

3.80 The story of recovery remains an incomplete one with the need for considerable translation and interpretation to apply the existing evidence to a drug context in Scotland. Nonetheless, there are grounds for assuming some generalisable principles from the diversity of recovery evidence presented above and from the general principles of recovery – the need for a systems transformation in services to a philosophy based on empowerment and hope; to the recognition that recovery is a long-term goal that will take place in communities and not in specialist treatment settings (typically over a 5-7 year period for heroin users); that the pathways will vary across individuals and substances, according to severity and complexity, but that the predictors of sustained recovery will be strengths and not pathologies; and that the presence of local recovery champions and groups will make a difference to the recovery experience.

CHAPTER 4: TREATMENT OF DRUG DEPENDENCE AND EVIDENCE OF EFFECTIVENESS

Summary: Key Findings from the Effectiveness and Outcomes Literature

1. International studies consistently show that treatment leads to improved outcomes across a range of treatment modalities including community and residential treatment and both abstinence and maintenance oriented interventions.
2. This is true across a range of treatment modalities, which demonstrate value for money for treatment delivery, with the most recent UK study, DTORS, suggesting a cost effectiveness ratio of 2.5:1 for savings in health and social care compared to treatment costs.
3. Retention in treatment for 90 days has been shown to be the threshold for 'treatment gain' in community settings.
4. There is a strong evidence base supporting methadone substitution treatment in maintenance settings, but this requires not only prescribing but also adequate psychosocial support and links to 'wraparound' care.
5. Scottish outcome research has shown that while methadone maintenance leads to improved outcomes in a range of domains, it is associated with low rates of sustained abstinence.
6. Continuity of care is a critical component of effective treatment systems, and there is a strong supportive evidence base around linkage to 12-step and other community 'aftercare' supports.
7. There is an ongoing challenge for the delivery of psychosocial interventions – while there is a strong evidence-base from trials, there is little evidence that these are routinely translated into everyday clinical practice.
8. 'Technology transfer' research of the kind undertaken in the Treatment Effectiveness Initiative in England is essential to improve the quality of treatment for staff and clients.

4.1 It is now clear that drug misuse treatments can be effective in reducing drug use and other problem behaviours. Studies conducted over the past three decades have compared treatment with no treatment (or minimal treatment), and post-treatment with pre-treatment problem behaviours. Studies showing the effectiveness of drug misuse treatments have been conducted with clients with different types of drug problems, with different treatment interventions, and in different treatment settings.

4.2 In a comprehensive and detailed review, McLellan (1997) concluded that specialist drug misuse treatment in both community and residential settings is effective in terms of reduced substance use, improvements in personal health and social functioning, and reduced public health and safety risks. Similarly, in a meta-analysis of 78 studies of outcomes among clients who received either minimal treatment or no treatment, Prendergast et al (2002) found that the effects of treatment for drug use and crime outcomes were positive, significant, and clinically meaningful. The authors concluded that drug misuse treatment has been shown to be effective in reducing drug use and crime, and that it may be more appropriate to stop asking whether treatment for drug abuse is effective, and instead to ask how

treatment can be improved, and how it can be tailored to the needs of different clients.

4.3 Treatment interventions should be appropriately responsive to the diverse needs of drug users who present to treatment with complex mixtures of substance use and other problems. The nature, severity and complexity of their problems may be expected to affect the ways in which treatment is provided. However, surprisingly little is known about the processes of treatment delivery, or how to identify 'active' and 'inert' components of treatment processes.

4.4 No single treatment is likely to be universally effective for drug dependence. A range of different interventions are required. Despite widespread recognition of the importance of providing treatments that are appropriate to the diverse needs of clients, many programmes offer only a single type of treatment. In such situations, those patients who are a good fit for a given approach are more likely to remain in treatment, and those who are less well suited are more likely to drop out (Carroll, 1997).

4.5 The idea of matching patients to treatment is widely accepted, but it is unclear precisely how this should be done in clinical practice. Existing treatment services seldom routinely conduct comprehensive assessments for large numbers of treatment seekers, who are then selectively referred to a diverse and well-developed system of treatment services. A more modest expectation is that interventions within each programme should be tailored to patient needs. But even this limited application of patient-treatment matching requires a level of sophistication in assessment procedures and availability of comprehensive services that is uncommon in the real world.

Pharmacologically Assisted Treatments

Detoxification

4.6 Detoxification procedures are used to alleviate the acute symptoms of withdrawal from dependent drug use (Department of Health and the devolved administrations, 2007). Detoxification is a preliminary phase of treatments aimed at abstinence and represents an intermediate treatment goal. Detoxification is not, in itself, a treatment for drug dependence, and, on its own, it is not effective in producing long-term abstinence. Drug users who received detoxification-only treatment derived no more therapeutic benefit than formal intake-only procedures (i.e. with no specific treatment).

4.7 The criteria by which the effectiveness of detoxification should be judged are: *acceptability* (is the user willing to seek and undergo the intervention), *availability*, *symptom severity*, *duration* of withdrawal symptoms, *side-effects* (the treatment should have no side-effects or only side-effects that are less severe than the untreated withdrawal symptoms), and *completion* rates.

4.8 Giving gradually reducing doses of oral methadone is one of the most commonly used procedures for the management of withdrawal from opiates. In a residential setting, detoxification is often managed over periods of 10-28 days. The

most widely used (and cheapest) option is outpatient/community detoxification. However, low completion rates are typically reported for opiate dependent patients detoxified in out-patient programmes. When detoxified on an outpatient basis, as few as 17-28% of those dependent on opiates achieve abstinence from opiates for even as little as 24 hours after treatment (Gossop et al, 1986; Dawe et al, 1991). This compares with completion rates for inpatient detoxification of between 80%-85%, using a standard 10-14 day detoxification window (Gossop et al, 1986; Gossop and Strang, 1991).

4.9 Medications such as clonidine and lofexidine have also been used in detoxification treatments. Clonidine and methadone produce broadly similar reductions in withdrawal symptoms, though patients experience more withdrawal symptoms in the first few days of clonidine treatment. Lofexidine has comparable clinical efficacy to clonidine, but fewer side effects, particularly postural hypotension (Buntwal et al, 2000). Lofexidine and clonidine could both be used successfully for out-patient detoxification, but treatment with clonidine requires more input in terms of staff time (Carnwath and Hardman, 1998). Detoxification with lofexidine can be achieved over periods as short as 5 days (Bearn et al, 1998). Encouraging results regarding the effectiveness of lofexidine are now available from a number of studies (Bearn et al, 1998; Buntwal et al, 2000), and within the past decade, lofexidine has been increasingly widely used in detoxification programmes across Scotland and the rest of the UK.

Maintenance Treatments

4.10 Methadone maintenance is the most thoroughly evaluated form of treatment for drug dependence. Methadone maintenance has higher treatment retention rates for opiate-dependent populations than do other treatment modalities for similar clients. Although methadone dosages need to be clinically monitored and individually optimised, clients have better outcomes when stabilised on higher rather than lower doses (Institute of Medicine, 1990; Department of Health and devolved administrations, 2007). In a meta-analysis of methadone maintenance studies, results showed consistent, statistically significant associations between methadone maintenance treatments and reductions in illicit opiate use, HIV risk behaviours and drug and property crimes (Marsch, 1998). For methadone maintenance treatment to be optimal, it has to be delivered as part of a package that includes both psychosocial interventions and 'wraparound' care such as support with housing, employment and training, debt management and physical and psychological health support.

4.11 In a Scottish context, Hutchinson et al (2000) reported on a one-year follow-up of GP-centred oral methadone and found that daily opiate injecting dropped from 78% to 2% and mean monthly number of acquisitive crimes dropped from 13 to 3, although only 29% remained continuously on methadone throughout the course of the study. The research was conducted in Glasgow, based on an analysis of new entrants into a methadone treatment programme, most of whom were not involved in treatment prior to the engagement with the index treatment.

4.12 In practice, methadone treatments are extremely diverse. Programmes differ in their structures, procedures and practices, in terms of the numbers of patients

treated, type and qualifications of staff, the amount and type of counselling and medical services provided, methadone doses, policies about urine testing, take-home methadone, and many other aspects of treatment (Stewart et al, 2000b).

4.13 Buprenorphine is increasingly used as a maintenance medication (Ling et al, 1998). It has been found to be of comparable effectiveness to methadone as a maintenance agent in terms of reducing illicit opioid use and retaining patients in treatment in a USA treatment context (Johnson et al, 2000). Buprenorphine is safer than methadone in terms of the risk of overdose since it produces relatively limited respiratory depression, and is well tolerated by non-dependent users.

4.14 In Scotland, Robertson et al (2006) conducted an open-label randomised trial comparing dihydrocodeine (DHC) and methadone in specialist treatment and GP settings in Edinburgh. Two hundred and thirty-five patients were randomised and, although there was greater attrition from the DHC group, no differences were reported in either the primary outcome measure, retention in treatment, nor in the secondary outcome measures of illicit opiate use, crime, physical and mental health, injecting, overdose, or engagement in education or work.

Psychosocial Treatments

4.15 Other treatments that are currently widely used to treat drug dependence are variously referred to as cognitive behavioural treatments or psychosocial treatments. These treatments have been developed based on the assumptions, theories and research traditions of psychology, and especially of social-learning theory.

4.16 *Relapse Prevention* combines behavioural skills training, cognitive interventions, and lifestyle change procedures (Marlatt and Gordon, 1985). Its primary goal is to teach drug users who are trying to change their drug taking behaviour how to identify, anticipate, and cope with the pressures and problems that may lead towards a relapse (Marlatt, 1985).

4.17 When 3-month and 6-month residential relapse prevention programmes were compared in a randomised trial, both were found to lead to significantly improved outcomes at follow-up, with results also suggesting that continued treatment beyond 3 months appeared to be beneficial in terms of delaying time to first drug using relapse (McCusker et al, 1995). A review of controlled clinical trials concluded that, for a range of different substances of abuse, there is evidence for the effectiveness of relapse prevention over no-treatment control conditions: relapse prevention was found to be of comparable effectiveness but not superior to other active treatments (Carroll, 1996).

4.18 Primary cocaine users with depression showed better treatment retention and reduced ongoing cocaine use when treated with relapse prevention compared to clinical management. Although all groups sustained gains they made in treatment, significant continuing improvement across time in patterns of cocaine use was seen for patients who had received relapse prevention compared with clinical management (Carroll et al, 1994).

4.19 *Motivational Interviewing (MI)* is now widely used to treat drug misuse. Motivational Interviewing is seen primarily as a counselling *style* rather than a treatment procedure. It can be useful in many stages of treatment but particularly in helping people who are still at the early stages of change. It has been found to be more beneficial for patients with lower initial motivation for treatment than for patients with higher initial motivation (Rohsenow et al, 2004). A systematic review of randomised trials of MI interventions found significantly improved outcomes in the majority of studies (Dunn et al, 2001). A meta-analysis of controlled trials also found that interventions using adaptations of motivational interviewing were superior to no-treatment and placebo comparison groups in terms of reduced substance misuse problems, but not for reductions in HIV risk behaviours (Burke et al, 2003).

4.20 *Contingency Management* provides a system of incentives and disincentives which are designed to make continued drug use less attractive and abstinence more attractive, with consequences made contingent upon behaviour. Contingency management techniques can be effective in reducing continued drug misuse among methadone patients (Strain et al, 1999), including their use of cocaine, and benzodiazepines. Many contingency management interventions have been conducted with patients in methadone treatment programmes since methadone dose, dose frequency, or the take-home option, lend themselves readily for use as reinforcers. Incentives have been found to be effective in leading to increased attendance at counselling sessions.

4.21 *Twelve step treatments, residential rehabilitation, and Therapeutic Communities* differ in several respects, but also share many common features. All owe their origins, to a greater or lesser extent, to the influence of Alcoholics Anonymous (AA), and they all share a common focus on abstinence as the overriding goal of treatment. These treatments see recovery from addiction as requiring a profound structuring of thinking, personality, and lifestyle, and involving more than just giving up drug taking behaviour.

4.22 An influential recent development has been the growth of relatively short-term, residential 'Twelve-Step Facilitation', 'chemical dependency' or 'Minnesota Model' programmes. These are generally closely linked to Twelve Step principles of AA/NA, and they typically provide a highly structured three to six week package of residential care involving an intensive programme of daily lectures and group meetings designed to implement a recovery plan based upon the Twelve Steps. This will typically involve an initial therapeutic rehabilitation phase, in which clients will work with therapists individually and in groups to analyse their true personality and their patterns of behaviour. Much of the focus of this initial phase will be around dealing with the issues that led the individual into active addiction which will be a challenging process for which a supportive therapeutic milieu is essential. This will then gradually switch to a focus on 'starting on the path to a new life' which will be about having a clear therapeutic philosophy and approach but embedded within developing the key skills needed for a new life.

4.23 Benefits of 12-step affiliation have been reported among drug misusers accessing community based treatment. A major study of drug use outcomes among cocaine-dependent patients studied 12-step group attendance and active 12-step participation accessing community based treatment (Weiss et al, 2005).

Participation in 12-step groups was predictive of reduced drug use among cocaine-dependent patients. Active 12-step participation by cocaine-dependent patients was found to be more important than meeting attendance, and the combination of drug counselling plus increasing 12-step participation was associated with the best drug outcomes. Consistent with other 12-step studies, it suggests that attendance and active engagement with 12-step is associated with marked improvements in substance use. NA/AA has also been found to be effective as a complementary intervention, and drug misusers frequently use both Twelve-Step and other types of drug treatment programmes as integrated services rather than as competing alternatives (Fiorentine and Hillhouse, 2000). Some studies have found favourable outcomes for those who attend NA/AA following other types of treatment (Ouimette et al, 1998).

4.24 The importance of post-treatment aftercare is widely accepted. The period immediately after leaving treatment is one of high risk of relapse, and adequate support should be provided for the patient during this period. However, only a minority of programmes have sufficient resources to provide any form of aftercare. Treatment programmes can use NA/AA as an aftercare resource merely by encouraging their clients to attend meetings. Ouimette et al (1998) found that patients who received no aftercare had the poorest outcomes: patients who participated in outpatient treatment plus twelve-step groups achieved the best outcomes at follow-up, in terms of reduced drinking days and days to relapse. Post-treatment NA involvement has been associated with better outcomes for drug patients in a number of studies.

4.25 Residential rehabilitation programmes are one of the longest established forms of treatment for drug addiction. Studies from the UK and the USA have shown improved outcomes after treatment in residential rehabilitation programmes. In DATOS, drug use outcomes after one year were good for clients who were treated in long-term residential and short-term inpatient treatment modalities in the USA. Regular cocaine use (the most common presenting problem for residential rehabilitation in the USA, but not in the UK where primary opiate use still predominates) was reduced to about one-third of intake levels among clients from both the long-term and short-term residential programmes, as was regular use of heroin (Hubbard et al, 1997). Rates of abstinence from illicit drugs have also been found to improve after residential treatment. In the UK, NTORS (see below) found that 51% of the drug misusers from residential rehabilitation programmes had been abstinent from heroin and other opiates throughout the three months prior to 2-year follow-up: rates of drug injection were also halved, and rates of needle sharing were reduced to less than a third of intake levels (Gossop et al, 2001). There was also good evidence that those who were abstinent at two years had generally sustained that over the period since the index treatment, suggesting that even short-term residential detoxification can be associated with significant positive change in substance use.

4.26 Casemix issues are relevant to the evaluation of residential programmes because such programmes often accept the most chronic and severely problematic cases. It is an explicit intention of stepped care treatment approaches that residential services should be used for the more difficult cases.

Longitudinal Treatment Outcome Studies

4.27 Large-scale, prospective, multi-site treatment outcome studies have played an important role in improving our understanding of treatment effectiveness. They provide valuable information about drug misusers, the stages of their addiction careers, their various and complicated involvements with treatment services, and the changes that occur in their drug use and other problem behaviours across extended periods of time after treatment. Such studies are rare, however, because of the high costs in money, effort, and organisational commitment necessary to implement, coordinate and sustain such data collection systems over many years.

4.28 One of the earliest follow-up studies was the investigation of 100 New York City male substance users admitted to Lexington Hospital in 1952 and 1953 (Vaillant, 1966, 1973). The majority of the sample was found to have relapsed after leaving Lexington, but drug use trends over time were toward reduced opiate use. Vaillant found 22% were abstinent after 5 years, and 37% after 10 years.

4.29 More recently, a number of major studies have been conducted. Table 4.1 summarises the key sources of treatment outcome studies conducted since this initial assessment and findings from each of these studies are summarised below.

The Drug Abuse Reporting Programme (DARP)

4.30 DARP was conceived in 1968 to monitor and evaluate the emerging USA federal addiction treatment system. DARP collected admission records for 44,000 patients at entry to 52 treatment agencies. Data were collected through intake interviews, during-treatment progress reports, and a series of follow-up interviews from 3 to 12 years after treatment. Over 6,000 patients were selected to participate in the first wave of post-treatment follow-up interviews which were conducted, on average, 6 years after admission. A second wave of follow-ups was conducted with a sample of 697 addicts, approximately 12 years after admission, with a follow-up rate of 70% (Simpson and Sells, 1990). DARP investigated four treatment types as well as a comparison group which enrolled but never started treatment. The four treatments were methadone maintenance, residential therapeutic communities, outpatient drug free (services that rely on counselling with an emphasis on abstinence), and outpatient detoxification. Reductions were found in the use of opiates and other drugs after treatment across all of the treatment modalities. Among those patients who had been daily users of opioids before treatment, more than half (53%) reported no daily opioid use at one year. Opioid use continued to decline over time until year 6, when it stabilised at 40% for 'any' use and 25% for 'daily' use. At some point during the 12 years following treatment, three-quarters of the sample had relapsed to daily opioid use, but at the year 12 interview, nearly two thirds (63%) had not used opioids on a daily basis for a period of at least 3 years.

4.31 Time in treatment was observed to be an important determinant of outcomes with a minimum of 3 months in treatment being linked to positive changes in drug use behaviour. Post-treatment outcomes became more favourable as time spent in treatment increased. No long-term effect was found for 21-day detoxification. For methadone maintenance, drug-free outpatient treatment, and the therapeutic communities, significantly higher percentages of patients who stayed in treatment for

Table 4.1 International treatment outcome studies included in the review

Name	Country	Dates	Sample	Treatment populations
Drug Abuse Reporting Programme (DARP)	USA	1968-1980 (12 year follow-ups)	44,000 at intake; over 6,000 followed up; 697 at 12 years	Methadone maintenance, therapeutic community, out-patient drug free, out-patient detoxification
Treatment Outcome Prospective Study (TOPS)	USA	1979 – 1986 (2 waves with 3-5 year follow-up)	11,750 patients at enrolment	Methadone maintenance, residential treatment and out-patient drug-free treatment
Drug Abuse Treatment Outcome Study (DATOS)	USA	1989 – 1991 (measures at 1 and 3 months in treatment and 12 months after)	10,010 at intake – 4,500 followed up at 12 months	Long-term residential; short-term inpatient; methadone maintenance and out-patient drug free
California Civil Addict Programme (CCAP)	USA	Intake waves in 1962 and 1964 and follow-ups to 24 years	581	Heroin addicts enrolled in the civil addict programme
National Treatment Outcome Research Study (NTORS)	England	Initiated in 1995 with one year, two year and five year outcomes	1,075 at intake from 54 programmes; 769 at one-year follow-up	Methadone maintenance and community detox; in-patient detox and residential rehabilitation
Drug Treatment Outcome Research Study (DTORS)	England	2006-2007, using a 12-month window;	1,796 baseline interviews; 886 interviewed at 3-5 months and 504 at 12 months	342 structured community or residential drug treatment services
Australian Treatment Outcome Study (ATOS)	Australia	Baseline, 3 and 12 month follow-ups; 2 and 3 year outcomes in one site (Sydney)	745 treatment sample and 80 non-treatment heroin controls	Methadone or buprenorphine maintenance; detoxification and residential rehabilitation; small non-treatment control group
Research Outcome Study in Ireland (ROSIE)	Ireland	Started in 2003 with a 6-month, 1-year and 3-year follow-up window	404 active treatment group with a sub-sample of 26 needle exchange users	Methadone maintenance / detoxification; structured detoxification; abstinence treatment
Drug Outcome Research in Scotland (DORIS)	Scotland	Initiated in 2001 with 8, 16 and 33 month follow-ups	1,007 individuals recruited from 28 specialist treatment agencies (community and residential) and five prisons delivering drug treatment	Substitute prescribing; non-substitute prescribing; counselling; residential rehabilitation and prison

longer than 90 days had favourable outcomes. For methadone, those staying longer had better outcomes (Simpson, 1981).

The Treatment Outcome Prospective Study (TOPS)

4.32 TOPS also provided longitudinal data on patients entering USA federally-funded drug abuse treatment programmes. The first intake data were collected in 1979. TOPS enrolled a total of 11,750 patients entering treatment in 41 addiction treatment programmes in 10 USA cities between 1979 and 1981. The treatment modalities studied were residential programmes, methadone maintenance, and outpatient drug-free programmes. Patients were interviewed on admission into treatment, and at 1 month, 3 months, 6 months, 9 months and 1 year after admission. For the follow-up interviews, a sample was followed up at 3 months, 1 year, 2 years and then 3-5 years after treatment.

4.33 TOPS showed that treatment was effective in reducing use of heroin and other illicit drugs during and after treatment. Levels of violent crime were reduced during treatment, and these remained lower than baseline levels after treatment. TOPS also reflected some of the changes in illicit drug use that were taking place in the USA at the time. Patterns of drug use among TOPS patients had changed substantially from DARP, though more than three quarters (77%) of TOPS admissions still reported opiates as their primary drug (Hubbard et al, 1989).

4.34 TOPS identified a number of differences between those starting on methadone maintenance programmes and those entering residential treatment. Patients entering residential treatment were more likely to be younger than those in the methadone maintenance group, and had more serious medical, mental health, family and legal problems. There were also differences between the patients in these two modalities in their drug use prior to treatment. Approximately two-thirds of the methadone patients reported weekly or more frequent heroin use in the year before treatment compared to only about one-third of the residential patients. The residential patients were more likely to be users of drugs other than opioids and to be multiple drug users.

4.35 Length of time in treatment was found to be one of the most important predictors of positive outcomes, with relatively long periods in treatment necessary to produce changes. Significant reductions in regular heroin use were only evident for methadone and residential patients following one year of treatment.

The Drug Abuse Treatment Outcome Study (DATOS)

4.36 DATOS was initiated in 1989 and investigated the links between patient outcome, treatment process, and programme structure. Treatment programmes were purposely chosen to represent treatment delivered in typical programmes. Intake data were collected on 10,010 adults, from 99 treatment programmes in 11 cities across the USA. Data were collected at 1 and 3 months during treatment and 12 months after treatment. The treatment programmes were: methadone maintenance, short-term residential (hospital inpatient and chemical dependency), long-term residential (therapeutic community), and outpatient drug-free treatment. The 12-month follow-up sample of 4,500 was drawn from 85 programmes, with the

follow-up stratified by treatment modality, drug pattern, impairment level, and length of time in treatment.

4.37 In DATOS, cocaine was the predominant drug. The patients treated in long-term residential, short-term inpatient, and outpatient drug-free programmes reported a 50% reduction in cocaine use at follow-up. Reductions were greater for patients treated for 3 months or more. Among the long-term residential patients, reductions in illegal activity and increases in full-time employment were related to treatment stays of 6 months or longer. The patients who remained in methadone maintenance programmes reported less heroin use than patients who left treatment.

California Civil Addict Program (CCAP)

4.38 CCAP was a 24-year follow-up study of 581 heroin addicts admitted to a treatment programme between 1962 and 1964 and who were followed up in 1974-75 and again in 1985-86. By the second follow-up point, 27.7% had died and a further 25.0% tested negative for opiates (Hser, Anglin and Powers, 1993). The strongest predictors of mortality in the study were self-reported disability, heavier drinking and smoking, and greater involvement in crime. For many of this cohort, substance use and criminal involvement continued into their 40s, and the authors concluded that the eventual cessation of heroin use is a slow process, and that for many, if they have not stopped by their late 30s, they were unlikely to do so. Predictors of ongoing substance use at the final follow-up included more polydrug use, heavier criminal involvement and low employment. Among the survivors, rates of treatment engagement were low both among the ongoing substance use and the desistance groups.

The National Treatment Outcome Research Study (NTORS)

4.39 As a result of cross-national differences in patterns of drug use, the types of treatment services provided and socio-environmental factors, it was unclear to what extent the USA findings could be generalised to different patient groups experiencing different treatment systems in different countries. It was for these reasons, that the National Treatment Outcome Research Study (NTORS) was established in the UK. NTORS was the first large-scale prospective longitudinal cohort study of treatment outcomes for drug misusers to be conducted in the UK. NTORS investigated outcomes over a 5-year period for drug dependent patients treated in one of four residential or community treatment modalities. The modalities were selected to be representative of the main treatment modalities within the UK. Residential modalities were specialist inpatient treatment, and rehabilitation programmes. The community treatments were methadone maintenance, and methadone reduction programmes.

4.40 During 1995, 1075 patients were recruited from 54 treatment programmes in England. Patients presented with a range of extensive, chronic and serious drug-related problems. The most common drug problem was long-term opiate dependence, often in conjunction with polydrug and/or alcohol problems. Many patients had psychological and physical health problems, and high rates of criminal behaviour were reported. One year after intake to treatment, outcome data were obtained for 769 patients (72%). Subsequent follow-ups at 2 and 4-5 years were conducted with a random stratified sample of patients. Clinical improvements were

found in terms of reductions in use of heroin and other illicit drugs, reduced injecting and sharing of injecting equipment, improvements in psychological health, and reductions in crime. Frequency of heroin use after one year, for example, was reduced to about half of the intake levels, and heroin use remained at this lower level throughout the full 4-5 year follow-up period. The sharing of injecting equipment was more than halved among patients who had been treated in both residential and community settings.

4.41 Rates of abstinence from illicit drug use increased among the patients from both the residential and the methadone programmes. Among the residential patients, almost half (49%) were abstinent from heroin after 4-5 years compared to around one-third of community treatment clients, and the percentage of residential patients who were abstinent from all six illicit target drugs (heroin, crack cocaine, cocaine powder, amphetamine, non-prescribed methadone and non-prescribed benzodiazepines), had increased from 1% at intake to 38% after 4-5 years. As in the American outcome studies, time in residential treatment was related to improved post-treatment outcomes. Many patients were drinking excessively at intake to treatment and although there were some improvements in alcohol use at follow-up, the changes in alcohol consumption were disappointing. Many patients were still drinking heavily at follow-up. NTORS recommended that drug treatment services should introduce or strengthen interventions specifically targeted at drinking problems among drug misusers.

Drug Treatment Outcomes Research Study (DTORS)

4.42 DTORS is the English follow-up to NTORS, using a 12-month window to assess treatment outcomes, supplemented by a qualitative assessment of 'treatment-related issues' and a cost-effectiveness analysis. In total, 1,796 drug users from 342 agencies across England were recruited – including referrals from criminal justice agencies. Where clients were recruited via the criminal justice system, there were typically more complex offending patterns, more frequent use of crack cocaine, more unstable accommodation and greater separation from the family. They were also more likely to be from BME groups. The median value of drugs used in the 4 weeks prior to treatment was £706 – and 39% reported committing acquisitive crime in this period.

4.43 Of the initial cohort, 1,131 were successfully followed up at 3-5 months and 504 at 11-13 months. From the Key Implications summary (Home Office Research Report 24, 2009), the conclusion was that DTORS outcomes were equivalent or more positive for treatment effectiveness than those found in NTORS. Employment rates increased from 9% at baseline to 11% at follow-up one and 16% at follow-up two – however, the proportion of participants classed as unable to work also increased over the course of the study follow-ups. Similarly, offending reduced from a self-reported level of 40% at baseline to 21% at first follow-up and 16% at second follow-up. The proportion of clients with children under 16 who had all their children living with them fell from 22% at baseline to 15% at first follow-up but then increased to 34% by the final follow-up. There were consistent reductions in all of the major substances assessed over the course of the follow-up periods, however, at the time of writing, these changes had not been broken down by treatment modality.

Australian Treatment Outcome Study (ATOS)

4.44 Based upon NTORS, several other longitudinal outcome studies have now been implemented. One of these was the Australian Treatment Outcome Study. Drug misusers were recruited upon entry to maintenance therapies (methadone or buprenorphine), residential rehabilitation, and detoxification; a further sample was recruited of 80 heroin users who were not currently in treatment. The study followed up heroin users for 1 year in three Australian states, and a further 2 years in New South Wales, where the majority of the cohort resided.

4.45 There were reductions in heroin use from baseline to 2-year follow-up (99% versus 35%), with this rate remaining stable to 3-year follow-up (Teesson et al, 2008). Reductions in heroin use were accompanied by reductions in needle sharing and injection-related health problems. There were also substantial reductions in criminal involvement and improvements in general physical and mental health. Positive outcomes were associated with more time in maintenance therapies and residential rehabilitation and fewer treatment episodes. As in other studies, ATOS drew attention to the importance of stable retention in treatment as a consistent predictor of superior treatment outcome (Darke et al, 2007).

Research Outcome Study in Ireland Evaluating Drug Treatment Effectiveness (ROSIE)

4.46 The Irish treatment outcome study started recruitment in 2003, and followed up 404 opiate users for three years from their entry to a drug treatment programme. The study measured drug use, involvement in crime, injecting-related behaviour, physical and mental health and social functioning among those participating in the study. Heroin use reduced from 81 per cent at the start of the programme to 47 per cent after one year (NACD, 2007). Reductions were also found for use of cannabis and cocaine. The largest reductions in drug use and involvement in crime were found during the first year and these reductions were sustained at the three-year follow-up. More participants were employed at follow-up than at treatment entry.

Drug Outcome Research in Scotland (DORIS)

4.47 The Scottish drug outcome research study was a prospective cohort study which recruited 1,007 drug misusers from 33 agencies across Scotland, including five prisons, a cohort that have not typically been included in other outcome studies and which is likely to have a significant effect on the offending profile and on the ability to offend and use drugs in this part of the sample. The study involved follow-up assessments at 8 months, 16 months and 33 months post-intake to the study, achieving a 70% follow-up rate at the 33-month follow-up point. While there are initial improvements to 8 months, these taper off at the subsequent follow-up points. The authors concluded that, compared to other community programmes, residential rehabilitation clients were twice as likely to be abstinent at 33 months, while methadone maintenance treatment was associated with reductions in heroin use but was not successful in promoting abstinence. In a paper drawn from the study, McKeganey et al (2006) reported on 695 follow-ups at 33 months and found that only

5.9% of females and 9.0% of males were abstinent from opiates in the 90 days prior to interview¹⁷.

4.48 In an analysis of uptake of employment during the period of the DORIS study, McIntosh, et al (2008) reported that 20.1% of the follow-up sample at the final data collection point (140/695) had been in paid employment since the previous interview. The main predictors of achieving employment were being younger, having lower levels of involvement in crime, and receiving support from the treatment agency with training and education or with obtaining a job. Treatment modality was not linked to employment status. In a similar regression-based model based on the DORIS data, Bloor et al (2008) used 16-month data to assess changes in drug consumption and related outcomes. While the authors reported decreases in psychological dependence over the first 16 months of the study window, baseline levels were not linked to offending behaviour at 16 months, although current perceived dependence did relate to both substance use and offending behaviour.

4.49 Overall, the DORIS study found evidence of a strong association between substance use and crime and, consistent with other studies, reported decreases in acquisitive crime in the treatment population, but concluded that these reductions were the consequence of changes in substance use rather than a direct treatment effect on offending behaviour. This relates to an ongoing debate about the impact of drug treatment on offending and whether this is an indirect consequence of reduced drug use leading to a reduction in the need to engage in acquisitive crime. The DORIS conclusion is that the effect is primarily indirect and that treatment is impacting more on the need for income generation than directly on recidivism risks.

Overview of the Treatment Outcome Studies

4.50 A meta-analysis of drug treatment studies conducted by Prendergast et al (2002) included 78 studies conducted between 1965 and 1996. The analysis concluded that drug abuse treatment has a statistically and clinically meaningful ability to reduce both drug use and offending. The biggest predictor of crime reduction was the younger age of the samples, and, for predicting reductions in drug use, the key predictor variables were implementation fidelity of the therapeutic model, and where there was little commitment to a single theoretical approach. Treatment modality was not related to overall effectiveness although the review suggested that therapeutic communities were better suited to clients with more severe and complex drug histories. However, it is important to recognise that there are marked variations across outcome studies, not only in terms of the cultural context of drug use and treatment, but in the measures used, the methods for recruitment and follow-up and the parameters for successful outcomes. In particular, this affects what constitutes positive substance use outcomes, with threshold differences involving ongoing use of prescription drugs (such as buprenorphine and methadone), alcohol consumption and use of non-opiate drugs such as cannabis.

¹⁷ There has been considerable debate about the definition of abstinence in outcome studies, particularly around prescribed drugs with no clear consensus on how 'abstinence' should be defined with regard to ongoing substitute prescribing.

4.51 An important feature of these treatment outcome studies is that they investigated the outcomes for patients after treatment provided in existing services under day-to-day clinical circumstances. In effectiveness research, the design is weighted towards high external validity, enabling the results to be generalised beyond the confines of the specific study, for example to other populations or settings, as is the case in the above studies. This means, however, that there were no randomisations to conditions and generally the studies did not have control groups (DARP used a 'quasi-control' group of those who dropped out after the assessment process, and a similar control approach was utilised in the Australian outcome study). The complex and complicated environment in which treatment policy is made and implemented requires this sort of information, and there is increased acknowledgment of the need for evidence of effectiveness to guide decisions about treatment policy and provision.

4.52 Cost-effectiveness and cost-benefit studies have been conducted on the data from these outcome studies. These show that when the crime-related costs of drug use were calculated, treatment was cost-effective and cost-beneficial. In most cases, the cost of treatment was recouped during treatment, and further cost-benefits accrued as a result of reduced post-treatment drug use.

4.53 The economic costs imposed on society by problem drug users are largely due to criminality, in addition to healthcare costs and lack of economic productivity. High rates of criminal behaviour are typically found prior to treatment with crime costs greatly outweighing all of the treatment costs. After treatment there was a marked reduction in criminal activity. In NTORS, the increased expenditure for treatment interventions yielded an immediate cost saving in terms of the reduced victim costs of crime, as well as cost savings within the criminal justice system. For every extra £1 spent on drug misuse treatment, there was a return of more than £3 in terms of costs savings associated with victim costs of crime, and reduced demands upon the criminal justice system (Gossop et al,1998). However, the extent of the saving may be greater depending on the profile of economic costs and benefits included in the analysis. More recently, from the English DTORS project, Davies et al (2009) concluded that there was a benefit to cost ratio of 2.5:1 from a health economic analysis and that while the net cost of structured drug treatment was £4,531, the offset savings in other health and social caring settings was £6,450.

4.54 The total economic and social cost of illicit drug use in Scotland was estimated to be just under £3.5billion in 2006. Costs associated with problem drug use accounted for 96% of the total cost, which equated to just under £61,000 per problem drug user (Casey et al, 2009). The authors have argued that estimating the economic and social costs of illicit drug use in Scotland is impeded by the lack of Scottish crime cost data that can be used in conjunction with data about crimes carried out by problem drug users.

4.55 In DATOS, Flynn et al (1999) also calculated that there were substantial economic benefits from treatment for cocaine dependence, based solely on costs of crime. These reduced costs of crime during and after treatment substantially outweighed the costs of treatment and demonstrated the value of investing in the treatment of cocaine addiction. Even without the numerous other tangible and intangible benefits that may have occurred in addition to the reductions in costs of

crime to society, the fiscal resources expended in treating cocaine-dependent patients provided a return that justified the cost of treatment.

4.56 The true cost savings to society are likely to be even greater than these crime-focussed estimates. Using the NTORS data, the changes in crime and health care consequences that were associated with specific costs of the index treatment were calculated. The most useful ratio may be the consequences related to the net change in total treatment investment. This yields a net treatment investment in the two years after intake of about £1.5 million, and a ratio of consequences to net treatment investment of 18:1 (Godfrey et al, 2002). What is suggested here is that the savings are both immediate and long-term in terms of the impact on chronic as well as acute health problems.

Bridging the Effectiveness Gap: Translating Research into Routine Practice

4.57 Carroll and Rounsaville (2007) have argued that clinical trial research has yielded a number of 'empirically supported therapies' (ESTs) in the addictions field that are widely available and have a significant evidence base, including motivational interviewing to improve retention in treatment and contingency management as an effective supplement to treatment for stimulant dependence. Yet the question they raise is why, in standard clinical practice, there is very little evidence that these interventions are commonly deployed. They argue that this is not simply a question of training or dissemination but involves complex organisational issues and greater understanding of context effects.

4.58 McLellan (2006) has referred to this as the 'research to treatment gap' and has suggested that the gap should be understood in terms of individual therapist effects (based on training, support and values), the length of the treatment available and the setting it occurs in, and the role of other key components of treatment such as medication, physical and psychological health and support or wraparound services. In response to recurring calls for studying contents of the 'black box of treatment' during the course of large-scale outcome studies in the USA (e.g. Hubbard et al, 1989; Simpson & Brown, 1999; Simpson & Sells, 1983), there has been a growing trend during the past decade for addiction treatment scientists to focus on therapeutic process, especially engagement.

4.59 This issue has been addressed in the Treatment Process Model developed by Simpson (2004). The starting point for this work is that variability in treatment outcomes can be predicted more strongly on the basis of organisational variations in the service provider than on the characteristics of the clients who access services. Large-scale national studies in the USA of relationships between organisational functioning indicators and client performance demonstrate they are interrelated (Broome et al 2007; Greener et al, 2007; Lehman et al 2002). Namely, programmes with better resources, more confident treatment staff, clearer definitions of clinical purpose and mission, open communication networks, and less stress-provoking pressures have clients who report significantly higher levels of therapeutic engagement and satisfaction with the services they received.

4.60 Recent studies show more clearly that organisational dynamics shape the attitudes of clinical staff about potential clinical innovations, with staff from well-

functioning settings more open to change and adopting evidence-based practices (Fuller et al, 2007; Joe et al, 2007; Saldana et al, 2007). There is growing recognition that implementing clinical innovations is a stage-based process and its overall strength depends on the durability of every element. Merely disseminating good ideas – especially when they are complicated or they demand special resources – is unlikely to result in their use. As Simpson (2009) has argued, it is in the services where there is better organisational functioning and more systematic and consistent implementation of evidence-based ideas that greater client engagement in treatment occurs. This in turn will lead to more active treatment participation by service users and stronger therapeutic alliances which will result in greater changes in psycho-social functioning and better treatment outcomes.

4.61 In the initial application of this work in the UK involving around 1,000 service users in the Midlands and North-West of England, Simpson (2009) found broadly similar patterns of client functioning in treatment with the exception that UK clients reported significantly poorer psychological functioning¹⁸, while the broad pattern of worker satisfaction and organisational functioning was consistent with the findings from the USA about treatment delivery. As in the USA, there were huge variations in the effectiveness and quality of the drug treatment programmes included in the study. In a follow-up study of criminal justice clients, Best et al (2009) found that among offender populations in drug treatment there was a strong association between levels of criminal thinking and poor engagement in treatment, lower motivation to be in treatment and generally suppressed psychological and social functioning.

4.62 The key conclusion from a range of outcome studies in a wide diversity of contexts and treatment settings is that structured treatment generally results in improvements in substance use, offending, social functioning, physical and psychological health, and risk taking. Treatment effects generally take place early in the treatment process and are sustained in well implemented treatments. However, overall gains in treatment studies may mask variability in the quality of treatment with increased research emphasis on the key ingredients of effective treatment – well qualified and supported staff in a service with a clear treatment philosophy, delivering packages of evidence based care that addresses clinical needs, that provides appropriate psychosocial interventions and that provides appropriate links to ‘wraparound’ care in the community and to ancillary needs specific to the individual. Treatment has generally been found to more than pay for itself in terms of savings to the health and criminal justice systems as well as in improvements in personal wellbeing.

Research gaps:

- *There is a major gap in the UK literature around the variability in service quality and the technology transfer issues of delivering evidence-based treatments consistently across clients and services. While the literature would suggest clear and consistent gains in functioning amongst a wide-range of populations entering all of the main treatment modalities, there is a much*

¹⁸ The poorer rates of psychological functioning may result from the effects of long-term prescribing treatment and limited psychosocial interventions in the UK sites (Best et al, 2009), but direct comparisons studies would be needed to test this claim.

poorer understanding of why some clients, and indeed some services, have markedly worse outcomes or how these outcomes (relating primarily to health, substance use, offending and risk) are associated with the longer-term change patterns that predict sustained recovery.

- *Linked to this, most of the outcome studies have looked at entry to a single treatment modality and have not tracked outcomes following multiple episodes or treatment pathways. This means that there is currently little research evidence on the optimal combinations of treatment.*
- *A third limitation in the outcome literature is that the focus is typically on ‘front-end’ treatments with little differentiation in UK studies between different types or intensities of residential programmes (and almost no comparisons between different treatment modalities), and little attempt to encapsulate the impact of either ‘wraparound’ or ‘aftercare’ (community recovery) on long-term outcomes.*
- *The outcomes literature is also limited in that none of the studies include community rehabilitation models or ‘quasi-residential’ treatment as a modality in spite of the increasing proliferation of such services in the UK*

Footnote: Addressing the Gaps in the Evidence Base

4.63 While the switch to a research focus on ‘technology transfer’ has resulted from concerns that there are significant translation problems from trial-based research studies to routine practice – and the resulting suggestion that what is required is not better evidence-based interventions but ways of actually delivering what we have in routine practice – an important footnote to this chapter is a recognition of a critical literature about the evidence base. This is best summarised in an editorial by Jim Orford (2008) who has argued that the existing literature fails to recognise that most of the evidenced psychological treatments are, at heart, the same, and that the focus on content in research has ignored key questions of context. In particular, Orford argues that the therapeutic relationship has been neglected as a research topic, compounded by a failure to recognise the importance of ‘unaided change’ (also referred to as natural recovery), that the study timescales have been inappropriate for a chronic condition and that, in addition to ignoring key aspects of the therapeutic relationship, broader questions of context, such as family and social circumstances, have also been ignored. Orford argues that:

‘instead of focusing on the comparison of techniques, the focus should be upon exploring common change processes....a broader and longer-term view needs to be taken which would involve, among other things, study of treatment organisations, networks of health and social care agencies and clients’ family and community settings, as well as behavioural trajectories over time.’ (Orford, 2008, p5).

4.64 This is brought into sharp focus by the analysis of treatment in Birmingham by Best and colleagues (2009) showing that clients received only infrequent contact with clinicians and that much of that time was spent on case and risk management. The challenge is to ensure that personalised treatment is delivered within a meaningful and supportive therapeutic relationship that enables and supports wider life recovery.

4.65 This echoes an argument from the mental health recovery movement advanced by Whitewell (2005) that no specific treatments are effective and that new treatments are only effective to the extent that they tap into positive expectations, contact with a support system, positive human values and the restoration of physical health. Whitewell criticises 'evidence-based practice' as a way of cleansing medicine of messy subjectivism' (Whitewell, 2005, p131). Thus, the notion that we have a gradually improving body of knowledge of what works that is imposed on a blank canvas of clients and services is a model that many recovery advocates would be unwilling to accept.

CHAPTER 5: LEARNING FROM PARALLEL FIELDS

Summary: Learning from Parallel Fields

1. There are strong parallels to learn from the mental health field where Scotland has been at the forefront of the recovery movement.
2. However, debate remains about the quality of the mental health recovery evidence base, particularly around long-term outcome studies and the effectiveness of recovery treatment systems.
3. At the heart of the mental health recovery movement is a re-drawing of the landscape characterising what services do, what the role of professionals is and what the status of the 'client' is in the recovery process.
4. The empowerment of people in recovery requires a partnership that gives families and communities a much greater and more powerful role.
5. There is a long history of community development work that is highly relevant to generating communities of recovery, based on asset development and the power of local associations and institutions to assist in the transformation of communities.
6. At the heart of this movement are the twin tenets of hope and empowerment with professionals in the role of enablers rather than experts from the criminal justice field. The normative assumption is for desistance (recovery), with the developmental criminology approach emphasising the key role of life events such as relationships and jobs in determining long-term change pathways.

5.1 In this chapter we look at some of the learning around recovery and recovery-related phenomena from other academic disciplines. While the most immediate parallel is with mental health, and this is outlined in some detail below, there are other areas of relevance that can be examined where existing work has important implications, albeit where caveats about applicability and translation must be carefully considered.

Mental Health and Recovery

5.2 Slade (2009) sets out a vision for recovery in mental health as a future:

'in which the goal of mental health services is more explicitly the promotion and support of personal recovery. Clinical recovery has value, as one approach to supporting personal recovery. However, a primary focus on personal recovery would fundamentally change the values, goals and working practices of mental health services.' (Slade, 2009, p40).

5.3 Slade goes on to speak of four key dimensions of personal recovery – hope, identity, meaning and personal responsibility, while Davidson and Strauss (1992), spoke of four stages in a personal recovery journey:

1. Discovering the possibility of taking ownership and responsibility
2. Taking stock of one's strengths and limitations
3. Putting aspects of the self into action
4. Using this enhanced sense of self as a resource in recovery

5.4 *A Common Purpose: Recovery in Future Mental Health Services*, a Joint Position Paper by the Care Services Improvement Partnership (CSIP), the Royal College of Psychiatrists and the Social Care Institute for Excellence (SCIE) suggests that there is a lack of empirical evidence around recovery in mental health. The Position Paper asserts that:

'The recovery literature has arisen largely from personal experience with more recognisably scientific evaluation and theory following later, and although rich in personal meaning it remains light on systematic analysis.' (Care Services Improvement Partnership et al, 2008, p5)

5.5 However, it suggests that this may be intrinsic in an approach that celebrates the individuality of the pathways to personal recovery and a tradition that is based on the writings of people experiencing that recovery journey. Nonetheless, the paper cites evidence (Calabrese and Corrigan, 2005) on psychotic conditions where high levels of recovery and improvement (50% to 75%) are demonstrated over lengthy periods of time (20 to 35 years) with outcomes of improvement including independent living and the absence of symptoms of illness.

5.6 Similarly, Harding et al (1987) conducted a 32-year follow-up study of the most difficult to place third of a population of psychiatric in-patient residents – at the follow-up point 81% were able to look after themselves. Twenty-five percent were fully recovered and 41% showed significant improvements, while only 11% of people with severe and enduring mental illness did not show any improvement and remained within the treatment and support system. More recently Warner (2010) reviewed the evidence of recovery and reported, from over 100 studies, that 20% of schizophrenics make a complete recovery and 40% a 'social recovery' (defined as economic and residential independence and low social disruption), with work and empowerment two of the key features of the recovery process.

5.7 Among the key themes set out in *A Common Purpose* was a shift in emphasis from a pathology model to one with an increasing focus on hope, strength and wellbeing; a process of empowerment for people in recovery; the central role of social inclusion and the discovery of a sense of personal identity. The focus on services was about the need for individualising treatment and the need for staff to offer a caring and personal focus to those in recovery. The report also suggested that:

'in order to support personal recovery, services need to move beyond the current preoccupations with risk avoidance and a narrow interpretation of evidence-based approaches towards working with constructive and creative risk-taking and what is personally meaningful to the individual and their family.' (Care Services Improvement Partnership et al, 2008, p6)

5.8 This is consistent with the findings of Kirkpatrick et al (2001) that professionals who project messages of hope are a greater help to their clients, and that clients confer extra value on professionals who are seen to go the extra mile and to act in the role of a critical friend (Berg and Kristiansen, 2004). This supplements the key finding by Norcross et al (2002) that the relationship between client and

therapist accounts for the largest amount of variance in outcomes that is not accounted for by pre-admission client characteristics.

5.9 For the Scottish Recovery Network, Brown and Kandirikirira (2007) used a recovery narratives model as part of a methodology that acknowledges the uniqueness of the lived experience of people in recovery, and identified a range of both internal and external elements involved in recovery process. The internal elements included:

- self-belief
- belief that recovery is possible
- meaningful activities in life
- positive relationships
- an understanding of the illness
- active engagement in recovery strategies.

5.10 The external factors included:

- supportive friends and family
- being told recovery is possible
- being valued
- having responsive formal support
- living and being valued in the community
- having life choices accepted

5.11 Defining a clear sense of self was seen as being as important as managing or overcoming symptoms. This sense of identity transformation was linked to the idea of finding value in the self and being valued by others. While the narrators were generally positive about services, there was a perception that services need to be more responsive to the diverse and changing needs of people. This includes supporting people to make choices and take risks as part of a move towards self-determination.

5.12 Also in the Scottish context, Shinkel and Dorrer (2007) have identified some key areas of recovery oriented culture change that have potential application in the addictions field, relating to workers' attitudes and beliefs about the recovery prospects of their clients:

- belief in and understanding of recovery
- respectful relationships
- focus on strength and possibilities
- care and support directed by the service user
- participation in recovery of significant others
- challenging stigma and discrimination
- provision of holistic services and supports
- community involvement

5.13 To this end, Thornicroft (2006) has identified key strategies for promoting empowerment of service users:

- ensure full participation in formulating care plans
- provide access to Cognitive Behavioural Therapy (CBT) to address negative self-stigma
- create user-led and user-run services
- develop peer support worker roles in mental health services
- advocate for employers to give positive credit for experiences of mental illness
- support user-led evaluations of treatment and services

5.14 *Key learning points from mental health and recovery:*

1. *Recovery is possible and takes place across large numbers of individuals.*
2. *Recovery is likely to be linked to empowerment and to engaging in meaningful activities.*
3. *Developing a sense of agency and self are critical to this process.*
4. *Hope is central to the process of recovery, and it is essential that workers do what they can to support and transmit optimism and empowerment and that they are seen to 'go the extra mile'.*

Alcohol and Recovery

5.15 Much of the key literature on recovery and alcohol has been addressed in Chapter 3 of this report. In one of the earliest outcome cohort studies, Vaillant (1993) reported on an 18-year follow-up of a sample of 106 problem drinkers finding that 39% were abstinent at the final follow-up point – but Vaillant pointed out, as Laub and Sampson (2004) have done in relation to crime careers, that changes are not always predictable and that it is the dynamics of life course transitions and turning points (such as opportunities for work, for new relationships, for parenting and for new places to live and communities to live in) that determine long-term outcomes to a much greater degree than risk or protective factors in childhood or adolescence.

5.16 In a study of long-term remission among treated and untreated problem drinkers, Moos and Moos (2006) reported a 62% remission rate in helped drinkers compared to 43% in the drinkers who did not seek help from treatment services. In the untreated group, those who improved had more personal resources and fewer alcohol-related deficits, leading the authors to conclude that:

'the likelihood of relapse rises in the absence of personal and social resources that reflect maintenance factors for stable remission.' (Moos and Moos, 2006, p219)

5.17 Much of the work on alcohol recovery has focused on 'natural recovery', also referred to as auto-remission, in which individuals complete their recovery journeys without recourse to formal treatment engagement. Using population survey methods, Sobell, Campbell and Sobell (1996) reported rates of 75% and 77% recovery without formal help in former problematic drinkers. In a further Canadian study based on population survey data, Cunningham (2000) also assessed natural recovery rates for a range of substances other than alcohol, and reported that the use of any formal treatment ranged from 43.1% for cannabis to 90.7% for heroin, with 59.7% of cocaine users seeking formal treatment at some point in their recovery

journeys, providing epidemiological evidence that, at a population level, the majority of people overcome a range of alcohol and drug problems without recourse to specialist treatment provision.

5.18 Bischof et al (2001) analysed general population surveys in northern Germany to compare current alcohol-dependent drinkers with remitters who had sought no formal help and found that the remitters had a later onset of dependence and had fewer years of dependent drinking, but higher average daily alcohol consumption than the treatment seekers in the period prior to treatment seeking. The authors also found that the remitters were more likely to live in a stable relationship and be more satisfied with work and with their financial situation.

Community Engagement and Recovery in the Community

5.19 At the heart of work done around the concept of community engagement or development has been the concept of 'empowerment' defined by Zimmerman and Rappaport (1988) as:

'a process by which individuals gain mastery or control over their own lives and democratic participation in the life of their community.'
(Zimmerman and Rappaport, 1988)

5.20 One of the key principles that has been emphasised by community engagement writers is that empowerment is for the individual and the community, and Perkins et al (1990) have argued that it is essential that empowerment has a collective orientation, that it is inclusive and evolving as the community grows and shifts.

5.21 Baldwin (1987) has outlined what he sees as core principles for effective community development which include: asking community members to identify the geographic boundaries of their communities; compiling a neighbourhood resources directory and a linked directory of workers who are based in that community; developing action plans for each community and target; and focusing on community members' quality of life as experienced as a core outcome indicator.

5.22 One of the core texts in this field – *Building Communities from the Inside Out* (Kretzmann and McKnight, 1993) has described the Asset-Based Community Development model (ABCD). The ABCD model is based on the idea that the resources needed to develop a community are already there within it in terms of individuals, associations and organisations and that the solutions to local community problems do not result from increasing involvement of more professionals from outside. Indeed, Kretzmann and McKnight argue that external resourcing is not enough and that:

'it needs to be realistically recognised that if all the outside resources did suddenly begin to be available in low income neighbourhoods, without an effective and connected collaboration of local individuals, associations and institutions, the resources would only create more dependency and isolation before they were finally dissipated.'
(Kretzmann and McKnight, 1993, p374)

5.23 Applying this to drugs recovery, this would suggest a 'bi-productionist' approach where, at least in the initial stages, drug users in recovery will need effective links and supports from local agencies and institutions and empowerment will be a gradual but planned process. It is not simply the case of handing over power and resources without condition.

5.24 The mechanism that Kretzmann and McKnight propose is an inventory of the skills and capacities of local people, supplemented by engagement with local associations and institutions with local associations seen as having a key role in empowering individuals, building strong communities, creating effective citizens and making democratic activities work. Additionally, they see a key role for local organisations like hospitals, the police, schools and the local authorities in economic regeneration through:

'local purchasing, hiring locally; developing new business; developing human resources; freeing potentially productive economic space; local investment strategies; mobilising external resources and creating alternative credit institutions.' (Kretzmann and McKnight, 1993)

5.25 But the core of their model is to ensure that the drive for change and regeneration originates within the community. For recovery groups, this will involve identifying the interests and the skills of those in recovery and allowing them the support and access to resources to provide the basket of recovery groups required.

5.26 This area of work has also addressed the question of the role of professionals in community development work. Gottlieb (1982) reported that the most appropriate forms of professional engagement in community activities were indirect, involving consultation and referral, with much less support for more direct forms of professional engagement. While some form of professional help was welcomed by most community members in Gottlieb's work on self-help groups, autonomy was highly valued by the groups with considerable group commitment deriving from self-direction from group members. As Levine (1988) has argued, the criteria for effectiveness of community projects are different from those of professional bodies, and professionals will frequently need to 'learn' about the self-determining and voluntary nature of self-help community activity before they can make a positive contribution. Orford (1992) has argued that there is a culture change required by services and staff if they are to be sensitive to community groups and to support the transition of community members to maximise effects.

5.27 What is clear is that the community can play a significant role in supporting treatment gains. Using a randomised design to assess the effectiveness of the Community Network Development Project for mental health clients, Edmunson et al (1984) compared standard aftercare to developing a support system of community champions and volunteers. At 10 months after treatment, rates of re-hospitalisation were lower by 50% (17.5% compared to 35%) in the group assigned to community support and self-help groups.

5.28 Furthermore, reviews of studies comparing professional workers and volunteers have tended to favour the latter group as help agents. In a review of 42 studies conducted by Durlak (1979), involving psychiatric in-patients and out-

patients, 28 studies showed no outcome differences between professional and 'paraprofessional' help across a range of psychiatric conditions. In only one case did a study find in favour of the professionals and 12 studies suggested better outcomes when help was provided by paraprofessionals (the final study had mixed findings). Although this study has been subjected to subsequent challenge, Hattie, Sharpley and Rogers (1984) conducted a meta-analysis of the studies reviewed by Durlak, with the analysis concluding that:

'on the whole, paraprofessionals are more effective than (or at least as effective as) professionals.' (Hattie, Sharpley and Rogers, 1984, p536)

5.29 As to why self-help groups may offer something that professional support cannot, Orford (1992), in a review of a diverse range of community groups not linked specifically to addiction or mental health, has suggested eight key functions of self-help organisations:

- emotional support
- the provision of role models
- a powerful ideology
- relevant information
- ideas about ways of coping
- the opportunity to help others
- social companionship
- a sense of mastery and control

5.30 *Key learning points from community development work:*

1. *Communities are where recovery takes place in the long term and communities themselves will have a recovery journey.*
2. *The focus should be on strengths in the community based on an inventory of assets categorised (individual skills and resources, associations and institutions in that locality).*
3. *There is empirical support for the capability of peers and volunteers in delivering community-based programmes effectively.*
4. *Communities have a key role to play in sustaining and enhancing treatment gains.*
5. *There are a wide range of functions that community groups can play in the recovery journey, that are both dedicated to overcoming addictions and to broader social growth.*

Positive Psychology and Social Inclusion

5.31 The ideas that provided the foundations for community psychology have more recently been supplemented by the work of Martin Seligman around 'positive psychology' (Seligman, 2003). This has signalled a switch from a pathology model to one based on hope, spirituality, empowerment, connection, self-identity and purpose. In this model, positive living – which would be the aim for recovering drug users and for those with mental health problems – is around living an engaged life of fulfilling potential and having a positive sense of meaning and identity, irrespective of the management of symptoms.

5.32 It is the ethos of this framework that is so important and the transition it implies for methods and approaches to both research and intervention. Seligman (2003) argues that:

'Psychology as usual is about repairing damage and about moving from minus six up to minus two. Interventions that effectively make troubled people less so are usually heavy-handed, and the balance between the exercise of will and the push of external forces tilts towards the external.Building strengths and virtues and using them in daily life are much a matter of making choices. Building strengths and virtue is not about learning, training or conditioning, but about discovery, creation and ownership.' (Seligman, 2003, p136)

5.33 Thus, the key to a positive method is not the focus on pathology but the expression of strength, even in the presence of significant difficulty.

5.34 This notion of building on personal resources is consistent with the focus of meaningful activities within the social inclusion work model, and is predicated on the social constructionist idea that the growth of key self-concepts – esteem, efficacy, identity and management – are underpinned by interpersonal activities and social engagement. Carew, Birkin and Booth (2010) have argued that:

'The experience of being in work is not only beneficial for individuals but also has broader benefits for families and communities.....Having a parent in work improves the life chances of children. Work influences the prosperity of communities and enables greater social cohesion.' (Carew, Birkin and Booth, 2010, p28)

5.35 Davis (2010) has gone on to argue that professionals have a key role to play in this social inclusion and community development agenda. He has argued that:

'people in society who have the power to exclude must firstly understand and value the identity and experience of excluded people and secondly, work with them and society to share hope, promote choice and create opportunity.' (Davis, 2010, p33)

5.36 Thus, social inclusion relies on collaborative relationships between professionals and communities to empower and enable – but not to direct or control.

Criminal Careers and Long-Term Desistance

5.37 The relevance of the criminal justice perspective to recovery concepts is around what has been termed the 'lifecourse' or developmental model of criminology which has attempted to map changes over time. Within this perspective, Thornberry (2005) has argued that:

'the advent of developmental life-course theories of delinquency is perhaps the most important advance in theoretical criminology during the latter part of the twentieth century.' (Thornberry, 2005, p156)

5.38 In this approach the key factors to be understood are onset, course and desistance, with much of the evidence deriving from longitudinal studies.

5.39 The most important work within this tradition is *Shared Beginnings, Divergent Lives* (Laub and Sampson, 2004) which provides follow-up data to the age of 70 of a cohort of young male offenders initially recruited and identified in the teenage years. In other words, this is a 55-year cohort follow-up study which assessed the longitudinal predictors of desistance from crime. Laub and Sampson concluded that the key determinants of long-term change were:

- attachment to a conventional person (spouse)
- stable employment
- transformation of personal identity
- ageing
- inter-personal skills
- life and coping skills

5.40 They found that:

'the stronger the adult ties to work and family, the less crime and deviance among both delinquents and non-delinquent controls.'
(Sampson and Laub, 2005, p15)

5.41 The long-term outcomes from their study would suggest that desistance is the eventual pattern for all men. There are two key inferences that can be drawn from this list – the first is the omission of any criminal justice interventions or techniques and the second is the relatively low importance of adolescent risk factors.

5.42 This theme has been picked up in a more recent study by LeBel and colleagues (2008) in their attempt to differentiate between 'subjective' and 'social' factors in criminal desistance. In essence, the challenge they attempted to address was whether work and stable relationships are symptoms of already established changes in values and beliefs about offending, or whether getting married and/or finding suitable and stable employment act as catalysts for changes in beliefs about offending and commitment to mainstream values. Both positions, however, accept the premise that it is changes in 'social capital' – the stake the offender has in conventional society – that will determine desistance from offending. The authors conclude that both types of change are essential but that causal ordering cannot be determined at this stage.

5.43 As identified by Hser and colleagues (2007), based on longitudinal data to examine predictors of desistance in heroin users followed up over a 33-year window using the CCAP data described in Chapter 4, self-efficacy and psychological wellbeing were the clearest predictors of stable recovery. Hser and colleagues emphasise key developmental concepts such as trajectories and turning points that have been used extensively in the study of crime careers, although they concede that there is a dearth of information about cessation factors. One of their observations is that career pathways appear to differ for different substances, with cocaine use increasing through the 20s to early 30s and then declining but heroin use continuing to increase. In terms of the typology of heroin users developed by

Hser and colleagues, the authors differentiate between stable high-level users, decelerating users and early quitters. The last group (who constituted just under half of their longitudinal sample) had heroin careers of typically less than ten years. This early quitting population of heroin users had higher frequencies of use in the first 2-3 years of use but then showed marked reductions and were abstinent by year 11.

Overview and Interpretation

5.44 The most immediate area for learning – and for pragmatic co-working - is around recovery and mental health, where Scotland has been at the forefront of the development of a recovery movement. The key concepts of changes in culture and working practice, the increased empowerment of the service using population and their active involvement in self-determination on an individual and group basis, the transition to assertive community approaches and the development of peer-led recovery communities are all likely to be essential elements of the recovery movement in the drugs field. The gradual emergence of an evidence base in this area – predicated on different academic values and approaches, such as the prioritisation and emphasis on narrative and the deployment of qualitative methods – are areas that need to be examined closely in developing a recovery evidence base in the addictions field.

5.45 Likewise there is an evidence base around community working that is well established and which has traditionally used the more quantitative techniques of academic psychology to evidence both individual and epidemiological markers of recovery. However, there are ‘translation’ problems for both of these fields and replications and testing are required to map the appropriate areas for cross-learning. Nonetheless, the recovery movement in mental health in particular, has mapped out the territory that requires to be assessed and has provided both data and techniques that will inform the evolution of an equivalent evidence base for drug recovery in Scotland.

CHAPTER 6 – ANALYSIS OF THE EVIDENCE CITED IN THE ROAD TO RECOVERY AND LITERATURE REVIEW

Summary: Learning from the Literature Review

1. For criminal justice populations, there is international research support for the effectiveness of therapeutic communities in prison and continuity of care on release. UK studies have provided some support for quasi-coercive interventions, with effects varying depending on implementation and delivery factors.
2. Around families, there is considerable empirical support for family engagement in treatment with evidence of improved outcomes for the individual in treatment and improved functioning within the family. Positive results have also been shown for parenting training and for specialist interventions for pregnant drug users.
3. Although the evidence on recovery for adolescents is limited, there is some support for improved outcomes resulting from mutual aid engagement by adolescents.
4. Within a broad framework of developing recovery capital, there is clear support for the effective use of recovery housing, training and vocational support as parts of a recovery package of care.
5. While there is some empirical support for integrated treatment, the evidence base around co-morbidity and recovery remains limited.
6. While there is some support for specific psychological or psychosocial interventions, there is increasing evidence that the context of treatment (in particular, the therapeutic alliance and the level of client engagement) is an equally important predictor of treatment outcomes, with worker motivation and efficacy central to this effect.
7. Effective continuity of care is essential with an increasing international evidence base around the benefits of assertive linkage to aftercare and community support and for the use of recovery management check-ups.
8. There is a strong and consistent evidence base around the benefits of engaging in mutual aid and ongoing support.

Introduction

6.1 This chapter provides analysis of the evidentiary foundation of *The Road to Recovery* strategy and a review of the published literature on recovery as it relates to drug misuse. This is done in two stages as set out below:

- An appraisal of the evidence sources cited in the report; and
- A review of the published literature.

6.2 Full descriptions of the methods used for each of these stages are set out in Chapter 2.

Analysis of the Evidence Cited in *The Road to Recovery*

6.3 The strategic direction of *The Road to Recovery* is predicated on a range of key policy and guidance documents, some of which are specific to drug misuse and others which have a broader remit. In order to identify the research strengths and

gaps and to inform further investigation, the key sources cited within *The Road to Recovery* were analysed and an appraisal made on the evidentiary foundation of each, how they relate to recovery and their relevance to Scotland. In total 30 documents were reviewed; it is important to note that many of these sources relate to policy documents rather than research or guidance documents. These are summarised here under the thematic headings used within *The Road to Recovery* and throughout this chapter. These are:

- Criminal justice and prisons.
- Families and children.
- Prevention and education.
- Treatment and intervention.
- Making it work.

6.4 Summary reviews of each of the documents are set out in Appendix 1.

Criminal justice and prisons

6.5 Chapter 4 in *The Road to Recovery*, Law Enforcement, sets out the government's approach to addressing the supply of illegal drugs, promoting recovery through criminal justice interventions and reducing or stabilising drug misuse amongst prisoners.

6.6 The evidence base for addressing the supply of illegal drugs was provided by the Serious Organised Crime Agency with supplementary information on seizures and international markets provided by available Scottish Government statistics. By the nature of this information and the surveillance undertaken to collect and collate this data it is unclear the extent to which gaps exist. For these reasons this report makes no further comment on this area.

6.7 *The Road to Recovery* sets out the range of criminal justice interventions now provided in Scotland, including Arrest Referral, Mandatory Drug Testing, Drug Courts and Drug Treatment and Testing Orders (DTTOs). Two cited studies provide evidence of effectiveness on pilot studies of Drug Courts and DTTOs.

6.8 Chapter 4 in *The Road to Recovery* also addresses the issue of drug problems in prisons. The key evidentiary source used in this section is the national offender management strategy, *Reducing Re-offending: National Strategy for the Management of Offenders* (Scottish Executive, 2006e). This sets out a target of 2% reduction in reconviction rates in all types of sentences by March 2008. Its focus in achieving this is on inter-agency working for sharing of resources, expertise and information.

6.9 The strategy notes the gaps in current research, asserting that "*We would understand more about the effectiveness of work with offenders if more of the data available came from studies which track individuals through the system rather than from statistical snapshots*" (p28).

6.10 The strategy also suggests that data should examine the rates of re-offending and the seriousness of offences.

6.11 The SPS Prisoner Survey 2007 (SPS, 2007) cited in *The Road to Recovery* was repeated in 2008 (SPS, 2008). While providing good, relevant data on the prevalence of drug use and drug problems at intake it does not provide information on the nature, quality or continuity of drug treatment in prisons, nor about ongoing needs for recovery in and after prison.

Families and children

6.12 Chapter 5 in *The Road to Recovery*, Getting it right for children in substance misusing families, opens with the statement that, "Current best estimates indicate that 40,000-60,000 children may be affected by parental substance misuse. It cites *Hidden Harm: Responding to the needs of children of problem drug users* (ACMD, 2003) as the source for this estimation, which was itself derived from data from the DORIS study (see Chapter 4) combined with estimates of problem drug use prevalence. Calculations based on these sources also estimate that there are between 10,300 and 19,500 children in Scotland who are living with a problem drug user (p27). These figures are based on a retrospective analysis of existing datasets yet remain the key evidentiary foundation of prevalence in Scotland.

6.13 There are two main sources used for epidemiological estimation - the ACMD (2003) report 'Hidden Harm' estimated that there were between 250,000 and 350,000 children of problem drug users in the UK, representing 2-3% of all under-16 year olds, while the 2004 Alcohol Harm Reduction Strategy for England estimated that there were 780,000 to 1.3 million children living with adults with an alcohol problem. However, it was recognised that there are limitations to both of these estimates.

6.14 More recently, Manning et al (2009) used a secondary data analysis method based on household surveys conducted in the UK, including the Scottish Crime Survey (2000) which showed that 1% of children (around 12,000 children) had witnessed force being used against an adult in the household by their partner whilst drinking alcohol and 0.6% (almost 6000 children) whilst using drugs. The authors concluded that around 8% (up to 978,000) of children lived with an adult who had used illicit drugs within that year, 2% (up to 256,000) with a class A drug user and 7% (up to 873,000) with a class C drug user. Around 335,000 children lived with a drug dependent user, 72,000 with an injecting drug user, 72,000 with a drug user in treatment and 108,000 with an adult who had overdosed. Elevated risk of harm may exist for the 3.6% (around 430,000) children in the UK who live with a problem drinker who also uses drugs and where problem drinking co-exists with mental health problems (around 500,000).

6.15 According to the ACMD Hidden Harm report (2003), parental drug use can compromise a child's health and development from conception onwards. Parental substance misuse has been associated with genetic, developmental, psychological, psychosocial, physical, environmental and social harms to children (ACMD, 2003; ACMD, 2006; Barnard and McKeganey, 2004; Jaudes et al, 1995). The unborn child may be adversely affected by direct exposure to alcohol and drugs through maternal substance use (Eyler and Behnke, 1999; Guerrini et al, 2007; Huizink and Mulder,

2006). The risk is contingent on the age of the mother, nature and patterns of substance use and context (Suchman and Luthar, 2000). Inadequate monitoring, early exposure to substances, positive role modelling of drugs and the failure to provide a nurturing environment can influence the likelihood of use. The limited research attempting to unveil the types of harm associated with parental substance misuse is largely restricted to retrospective cohort studies. Much of this work has attempted to identify adverse childhood experiences (ACEs) in the context of parental alcohol misuse among unhealthy/disordered adult populations (Kestila et al, 2008; Zlotnick et al, 2004).

6.16 The Hidden Harm report cites the death of a child living with a problem drug user as evidence on the risk to children in substance misusing families. There is no research cited which addresses the prevalence and nature of non-fatal harm to children across Scotland.

6.17 The focus of the remainder of Chapter 5 in *The Road to Recovery* moves to policy, guidance and practice relating to the identification and protection of vulnerable children. The only other evidence source directly cited in this chapter is the Scottish guidance document, “*Getting it right for every child in kinship and foster care*” (Scottish Executive, 2007).

6.18 *Getting it Right for Every Child* followed a series of publications at Scottish and UK level since 2002. These publications are set out in Table 6.1 with reference to their evidentiary foundation and research gaps identified. Research gaps identified within the reports are highlighted as quotations as opposed to those gaps identified by the research team which are presented in normal text. The information presented here highlights the lack of evidence base underpinning recent policy and guidance and the identified research gaps.

Prevention and education

6.19 Preventing Drug Use (Chapter 2) in *The Road to Recovery* cites 11 sources of evidence. The first four of these (p12) relate to the association between drug misuse and deprivation and a further three make brief reference to the links between drug misuse and mental health problems, homelessness and alcohol problems. There is no evidence presented on the prevalence of problems or the effectiveness of prevention and education strategies in these populations.

6.20 The prevalence of drug use amongst Scottish school children is cited from the *Scottish Schools Adolescent Lifestyle and Substance Use Survey* (SALSUS, 2006). The remaining three sources of evidence relate to the effectiveness of drug education in Scottish Schools and the joint Scottish Government and COSLA policy statement on early years and early intervention.

6.21 The study into the effectiveness of drug education in Scottish schools was conducted by University of Stirling and University of Edinburgh in 2005 and published in 2007. The methods included a literature review, a postal survey of schools, sample observations in schools and qualitative research with young people. A total of 100 classroom observations were carried out.

Table 6.1: Summary of documentary evidence chain on Families and Children

Year	Evidence source	Evidence type	Information gaps
2002	It's everyone's job to make sure I'm alright: Report to the Child Protection Audit and Review (Scotland)	Case audit of 188 child protection files which yielded 11 interviews with children; analysis of Childline and Parentline calls; MORI Scotland survey of public knowledge and understanding of child protection system; questionnaire survey of academics, statutory and voluntary agencies and MSPs.	Insufficient needs assessment of newborn children of substance using parents and parents with a history of neglect.
2003	Hidden Harm. Responding to the Needs of Children of Problem Drug Users (U.K)	Witness testimony; secondary data analysis on prevalence; survey analysis of treatment, maternity and social services. Survey had overall response rate of 55%.	<i>'A programme of research should be developed in the UK to examine the impact of parental problem drug use on children at all life stages from conception to adolescence'</i> .
2003	Getting Our Priorities Right: Good Practice Guidance for Working with Children and Families Affected by Substance Misuse (Scotland)	No up-to-date data presented.	No clear presentation of evidence and no research about implications on recovery for individuals or families.
2004	Hidden Harm – Scottish Executive Response to the Report of the Inquiry by the Advisory Council on the Misuse of Drugs (Scotland)	No up-to-date data presented.	Need for improvements in data collection, training for workers and integration between drug services, children's services and child protection services. Particular emphasis in the report is placed on criminal justice and the potential role of Drug Treatment Testing Orders (DTTOs) in targeting women offenders.
2004	Protecting Children and Young People: Framework for Standards (Scotland)	No up-to-date data presented.	<i>'Taking account of the needs of the child and their parents, professionals, working together'</i> (p17) to focus on needs and risks, personal and family strengths, support networks and resources available; and the research and information gaps that need to be filled and the resources and options to fill them.
2006	Hidden Harm - Next Steps: Supporting Children - Working with Parents (Scotland)	Policy update document. No up-to-date data presented.	Although recommendations are laid out, little indication of effective practice and examples of success.
2007	Looked After Children and Young People: We Can and Must Do Better (Scotland)	No up-to-date data presented.	Care Commission tasked to review the health of looked after children and young people. Focus on partnership approaches <i>"with local authorities to deliver a more robust and comprehensive data collection and reporting"</i>

			<i>framework” (p16).</i>
2007	Getting It Right for Every Child in Kinship and Foster Care (Scotland)	No up-to-date data presented.	There is little focus on recovery or its impact on the family within the document and no presentation of up-to-date evidence.

Table 6.2: Further sources – Prevention and education

Year	Evidence source	Evidence type	Information gaps
2002	Evaluation of the 'Know the Score' Drugs Campaign	80 interviews with representatives of organisations involved; 8 workshops involving 140 participants; survey of Drug Action Teams and secondary analysis of data on enforcement, publicity, and campaign activities.	Evaluation limited by <i>'lack of specificity, or measurability of the objectives of the campaign'</i> , the absence of a baseline and locally set objectives (p30).
2006	Review of Choices for Life (Scotland)	Survey data supplemented by discussion groups and in-depth interviews with teachers. Pre and post intervention assessments using qualitative and quantitative methods with large sample size (around 1,700 at each time point) – but no follow-up assessment of impact on behaviour.	No outcome analysis to assess impact on drug uptake in secondary school; authors concluded that <i>'there was limited follow-up education to capitalise on (this) interest'</i> (p7). Authors recommended that the views of participants are taken at intervals as they progress through school. <i>'Over the long term, this would allow actual behaviour to be related to attend (sic) at Choices events rather than relying on current perceptions of future behaviour'</i> (p31)
2006	Pathways to Problems; Hazardous Use of Tobacco, Alcohol and Other Drugs by Young People in the UK and Its Implications for Policy (UK)	None – review of existing information. Not a systematic review; expert testimony to ACMD group consisting of a range of eminent practitioners, policy makers and academics.	Report identified need for large scale periodic surveys of 11-15 year olds; a longitudinal study or a representative group of 15-30 year olds and improved evidence on good parenting and stable family life. <i>'In the light of the evidence that classroom-based drugs education has very limited effectiveness in reducing rates of drug use, there should be a careful reassessment of the role of schools in drug misuse prevention'</i> (p12).
2007	Review of Research on Vulnerable Young People and their Transitions to Independent Living (Scotland)	Review article Not a systematic review – described by the authors as 'a thorough scoping exercise', including published and 'grey' literature.	<i>'There are not any long-term studies in Scotland on outcomes for young people leaving care. There are, therefore, no studies which attempt to disaggregate the impact of individual factors and interventions on young people'</i> (p11). Review does not mention the impact of recovery on effective transitions.

6.22 The study concluded that, *'Overall, it is clear that there is much good practice in Scotland in drug education, but more can be done to enhance its effectiveness, particularly through clearer guidance on evidence-based methods and approaches, and on continuity and progression; further training and support to boost teachers' knowledge, skills and confidence; and more attention to resources'* (p204).

6.23 The joint Scottish Government and COSLA policy statement on early years and early intervention provides a framework for a strategic approach to the early years prioritising resources across local government, the health service and the public sector.

6.24 The document contains no up-to-date data. The focus on capacity building in individuals, families and communities and on maximising life chances is consistent with a recovery model and has an emphasis on 'what works and on evidence-based approaches'. However, it is not made clear how this will be done and what the link to adult or community recovery will be – the document does not have vulnerable parents as a target.

6.25 The authors identified and reviewed a further four reports which are relevant to the scope of this work. These are summarised in Table 6.2 with fuller detail in Appendix 1.

Treatment and intervention

6.26 *Promoting Recovery* (Chapter 3 of *The Road to Recovery*) sets out the evidence framework which underpins a multi-agency system of treatment and care in Scotland including drug services, mental health services and training and employment services. The key sources of evidence are discussed here with a more detailed analysis of each set out in Appendix 1.

6.27 *Mental Health in Scotland: Closing the Gaps – Making a Difference: Commitment 13* was produced in 2007 by the Mental Health and Substance Misuse Advisory Group, Scottish Government. Evidence was collected through a literature review and contributions from an expert advisory group. It provided recommendations for care and support for people with co-occurring substance misuse and mental health problems. Data on the extent of the need appears to be UK-wide or English-focused, with small-scale studies in Glasgow.

6.28 The data from the service user survey implies that current drug treatment services are not responsive to the needs of people with mental health problems since this group tend to abuse alcohol, cannabis and cocaine rather than opiates.

6.29 There remains a lack of clear evidence for Scotland (outside Glasgow) as to the extent of co-morbidity of mental health problems and substance misuse. There is also a gap in knowledge around the usage patterns of people with mental health problems.

6.30 *Drug Misuse and Dependence: UK Guidelines on Clinical Management* was produced by a UK expert working group in 2007. It is intended for all clinicians in the

UK, especially those providing pharmacological interventions for drug misusers as a component of drug misuse treatment.

6.31 The document highlights a number of gaps in the evidence base for drug treatment research and so this is obviously important in terms of 'recovery'. However, the publication mainly deals with pharmacological interventions.

6.32 The guidelines state: *'Although the evidence base for drug misuse treatment has improved, the working group found that, in many areas of drug treatment, evidence was either lacking or was based on research from countries other than the UK'* (p10).

6.33 The evidence suggested that methadone is more likely to retain patients in treatment, but the evidence for the relative effectiveness of methadone and buprenorphine at preventing illicit opioid misuse is mixed – further research is required.

6.34 Since the advent of supervised consumption, the number of drug-related deaths involving methadone has reduced, during a period when more methadone is being prescribed, providing indirect evidence that supervising the consumption of medication may reduce diversion although further research is required.

6.35 Evidence for the effectiveness of take-home naloxone in preventing overdose-related deaths in opiate misusers is largely anecdotal at present.

6.36 *National Quality Standards for Substance Misuse Services* were produced by Scottish Executive in 2005 to set out a framework of standards to ensure consistency in the provision of all substance misuse services.

6.37 The standards have been developed from the standpoint of the people who use these services. They describe what each person can expect from the service provider. They focus on the progress that the person using the service can make during a period of treatment.

6.38 There is no evidentiary base cited within this document. There was a limited level of consultation with service providers and users consisting of local workshops.

6.39 The *National Investigation into Drug-Related Deaths in Scotland, 2003* was conducted in 2005 to investigate and report on causes and circumstances of drug-related deaths in Scotland. Data on the 317 drug-related deaths in Scotland in 2003 were collected from the General Register Office for Scotland (GROS), police, prisons, Crown Office, primary care, mental health services, criminal justice services and drug services. In addition, primary research was conducted with overdose survivors sampled from Glasgow and fatal overdoses were compared with data from London coronial courts.

6.40 The study found that nearly half of all deaths occurred when other people were present and demonstrated a clear reluctance in those present to call for help. Most deaths involved more than one drug and over half involved alcohol. *The Road to Recovery* notes that this position remains largely unchanged.

6.41 In addition to the evidence sources cited in *The Road to Recovery* a further three relevant official documents were identified by the authors and are considered in Table 6.3 with fuller detail in Appendix 1.

Table 6.3: Additional evidence sources relevant to ‘Treatment and Interventions’

Year	Evidence source	Evidence type	Information gaps
2006	Workforce Plus – An Employability Framework for Scotland	Strategy document. No up-to-date data provided.	<i>‘There is some evidence that support for disadvantaged clients are too short term and expertise often lost between the end of funding for one project to the start of another’.</i> <i>‘There is a perception that the needs of some groups are met in a way that separates them unnecessarily from other groups’.</i> <i>‘Existing services tend to focus on the job ready and there are gaps in current provision, particularly in terms of early engagement and in-work support’ (all p47).</i>
2007	Towards a Mentally Flourishing Scotland: The Future of Mental Health Improvement in Scotland 2008 - 2011	Strategy document. No up-to-date data provided.	Action 4 requires <i>‘Improvement of attitudes and behaviours within staff groups’</i> (p12). Action 5 includes a requirement to make effective linkages to other key public health agendas including alcohol and drugs.
2008	Hepatitis Action Plan for Scotland, Phase II: May 2008 – March 2011	Action Plan. No up-to-date data provided.	Over 85% of the individuals infected with Hepatitis C are infected through the use of needles. The action plan proposes to reduce the re-use and sharing of needles among these individuals by promoting safer injecting. However, this may encourage these individuals to continue injecting and thus make the process of recovery more difficult.

Making it work

6.42 The final chapter in *The Road to Recovery* sets out how the Scottish Government intends to work with all relevant partners and experts in the field. There is no new evidence cited here but it draws on a number of the documents cited in Chapter 1, *Making a fresh start*. These are considered here with regard to their potential impact on supporting recovery.

6.43 *Reducing Harm and Promoting Recovery: A Report on Methadone Treatment for Substance Misuse in Scotland (SACDM, 2007)* consisted of mainly expert opinion with a small amount of evidence from a survey issued to all Scottish drug treatment services. The report stated that methadone maintenance treatment was more cost

effective in terms of harm reduction than any other treatment for opiate dependency, but should be delivered as part of a package of treatment to encourage both harm reduction and enhance recovery. It concluded that methadone treatment in Scotland could be optimised through improving accountability, performance management, information quality, effectiveness, integration and commissioning processes. Research gaps included:

- Current monitoring and evaluation data is sparse.
- Services find it hard to extract data to undertake reviews.
- Outcomes are rarely measured at operational or strategic level.
- More structured performance management systems need to be in place to measure outcomes.

6.44 *The Report of the Stocktake of Alcohol and Drug Action Teams (2007)* reviewed the effectiveness of ADATs in terms of their current performance and future capability to deliver Ministerial policy and priorities. It consisted of working group examinations of the role of ADATs based on semi-structured interviews undertaken with staff members of 22 ADATs.

6.45 The report sets out the key elements of an effective ADAT and concludes with a range of recommendations relating to the future structure and remit of ADATs.

6.46 *Essential Care: A Report on the Approach Required to Maximise Opportunity for Recovery from Problem Substance Use in Scotland (2008)* sought to address the additional non-medical aspects of services required to ensure that people with substance use problems are given every opportunity to recover from their problems.

6.47 The report adopted a recovery ethos as its basis and affirmed the need for service users to access a range of services in order for recovery to take place.

6.48 The report acknowledged a lack of "*objective evidence to support this approach in the field of substance misuse*", but argued that comparisons with the field of mental health (*CSIP common purpose, 2007*) suggest recovery would be meaningful in a substance misuse context. It referenced the Scottish Recovery Network as evidence that recovery is possible and specifically the idea that narratives of recovery can provide hope.

6.49 There is a lack of evidence regarding the extent to which programmes are successful in assisting people with drug misuse problems in achieving a reduction in drug-related harm and promoting recovery. Also, there is a lack of detailed information on staff's expectations of service users – mental health studies argue that where clinicians are more hopeful for recovery for their patients, outcomes are improved.

6.50 The report does not set out what the new outcomes for measuring success should be, nor how services should seek to record these and to whom they are accountable. There is also a lack of evidence around whether some wraparound services have a greater impact than others.

6.51 In addition to these reports, the research team considered a further three sources of evidence regarding the way in which drug services are to be commissioned, delivered and evaluated. These are summarised in brief here with fuller detail in Appendix 1.

Table 6.4 Additional evidence sources relevant to ‘Making it Work’

Year	Evidence source	Evidence type	Information gaps
2007	Concordat between the Scottish Government and CoSLA (Scotland)	No up-to-date data. Draft guidance to ADPs on operating in an outcomes environment and to help them identify local priority outcomes related to alcohol and drugs.	High level outcomes related to alcohol and drugs make limited reference to recovery (point 57) and are linked primarily to ‘safer and happier families and communities’, with the primary focus on reductions in consumption and harms, and increased access to supports.
2008	Report of the Alcohol and Drug Delivery Reform Group (Scotland)	None – based on some workshops but no data presented.	The key question will be how delivery reform will contribute to recovery-oriented systems of care.
2009	A New Framework for Local Partnerships on Alcohol and Drugs (Scotland)	The strategy ‘ <i>Aims to ensure that all bodies involved in tackling drug and alcohol problems are clear about their responsibilities and their relationships with each other; and to focus on the activity on the identification, pursuit and achievement of agreed, shared outcomes</i> ’.	Not applicable

Findings of the Literature Review

6.52 The findings of the literature review on the categories of *Criminal Justice and Prisons, Families, Prevention and Education* and *Treatment and Intervention* are further divided into sub-categories as shown below.

Table 6.5: Findings from the literature review

Subject	Sub-category
Criminal Justice and Prisons	Therapeutic communities
	Co-occurring mental health and substance misuse in prison populations
	Women offenders
	Other forms of coerced treatment
	Recidivism/relapse/re-incarceration
Families	Family involvement in the care of substance misusers
	Parenting skills in treatment
	Predictors of family separation/reunification
	Pregnancy and substance misuse
	Adolescence and substance misuse
Prevention and Education	Deprivation and other societal factors associated with substance misuse
	Characteristics of young people who misuse substances
	Substance misuse and prevention/education strategies within schools and institutions of higher education
	Substance misuse and prevention/education strategies: family interventions and community-based work
Treatment and Intervention	Recovery amongst substance misusers with dual diagnosis
	Substance misusing women
	Treatment and service characteristics
	Black and Minority Ethnic Groups
	Relapse prevention
	Deprivation, housing and employment
	Non-treatment aftercare
	Treatment follow-up and aftercare

6.53 The remainder of this chapter reviews each of these subjects in turn. The purpose of this process is not to provide a critical appraisal of each of the articles reviewed but to:

- identify and explore the extent to which research has been conducted in these areas;
- establish what the key findings are;
- identify any research implications or gaps raised by the authors;

- comment on the relevance of this work to recovery; and
- comment on the relevance of this work to Scotland.

Criminal Justice and Prisons

Therapeutic Communities (TCs)

6.54 Studies have shown therapeutic communities to be effective in reducing drug use and criminality, although there is some evidence to suggest that this intervention is less successful among women. The effect of therapeutic communities has been shown to reduce over time. However, research has shown that where therapeutic communities are bolstered by an aftercare programme, criminal justice outcomes are improved. In a study by Wexler et al (1999), only 27% of therapeutic community and aftercare programme completers returned to custody (Sacks et al, 2004), compared with around 75% of control group members.

6.55 Research undertaken on TCs in the USA (Hiller, Knight, Saum and Simpson, 2006) has shown that, during treatment, risk taking reduces somewhat and social conformity increases modestly. Hostility also increases over the course of treatment, which may be explained partly through the socialisation process and partly by the fact that a core component of TC programmes is confrontation between peers to challenge anti-social or unacceptable behaviour. There was no relationship between risk taking, social functioning or hostility and 1 and 2 year recidivism rates.

6.56 In terms of treatment outcomes and effectiveness, TCs have been shown to produce good outcomes for recidivism and substance misuse. When combined with aftercare, recidivism is significantly less likely. Where TCs and aftercare programmes are specifically tailored to people with co-occurring mental health and substance misuse problems evidence is more mixed.

6.57 *Relevance to Recovery:* The success of TCs appears to be in preventing recidivism and a return to substance misuse, both of which have implications for the recovery agenda in terms of improved sobriety and citizenship. The evidence that inclusion in an aftercare group on completion of a TC intervention can further support good outcomes chimes with the long term outlook of recovery. This links to the discussion of ROIS (Recovery-Oriented Integrated Systems) in Chapter 3 where the value systems developed in structured therapeutic communities are translated to a community setting.

Co-occurring Mental Health and Substance Misuse in Prison Populations

6.58 A study in the United States showed that integrated dual treatment aftercare for offenders suffering from substance misuse and mental health problems (the majority of inmates) had little effect upon arrests, conviction or jail days when compared with standard aftercare services (Chandler & Spicer, 2006). However, offenders who received integrated dual treatment aftercare were much more likely to attend outpatient appointments than those who did not and were far less likely to require acute hospitalisation or crisis services. Research undertaken on a small sample of people suffering from co-morbidity showed that a community oriented group intervention with citizenship training combined with standard clinical treatment

was effective at reducing alcohol misuse in the experimental group (Rowe et al, 2007).

6.59 In relation to treatment outcomes and effectiveness, the evidence in this area is mixed. Different studies have shown sometimes contradictory results.

6.60 *Relevance to Recovery:* Treatment programmes which include aftercare and thus maintain long-term contact with former offenders who also experience mental health problems may have a positive effect. However, it is clear that more research in this area needs to be done.

Women Offenders

6.61 Between 70% and 80% of female offenders in the USA have a substance misuse problem. Female offenders typically have multiple and complex needs, especially around co-occurring mental health problems and substance misuse, a history of physical and sexual abuse, higher unemployment and lower work skills. Despite this, they have been shown to achieve better outcomes than their male counterparts, both in terms of relapse and recidivism (Pellissier et al, 2003).

6.62 With regards to treatment outcomes and effectiveness, the relatively small body of USA evidence which exists, has shown that gender specific interventions can reap rewards in terms of treatment effectiveness and recovery, specifically case management interventions with follow-up on re-entry into the community, cognitive behavioural therapy (CBT) approaches for women suffering from co-occurring post-traumatic stress disorder (PTSD) and substance misuse problems, using therapeutic rather than punitive sanctions (i.e. treatment rather than imprisonment, building self esteem and utilising the recovery capital associated with motherhood).

6.63 Providing specialist interventions on top of standard treatment is as effective as specialist treatment alone. Specialised post-release services upon re-entry can help to reduce recidivism, as can sustained programmes of aftercare (Sacks, 2004). Remaining clean during the first week after leaving drug treatment was associated with having received longer treatment, a transition plan, avoiding associating with drug users and accessing support for abstinence in the community (Strauss & Falkin, 2001).

6.64 *Relevance to Recovery:* Gender specific interventions which recognise the multiple and complex needs of female offenders are likely to improve treatment effectiveness and outcomes. A recovery framework which recognises a broader, more holistic and longer-term range of outcomes beyond retention, relapse and recidivism may allow for better evaluation of interventions, but there is currently insufficient evidence to support this. Despite the fact that the main body of the research was completed in North America, these findings may be applicable to Scotland. The only women's prison in Scotland, Cornton Vale holds:

'Very many prisoners with a high incidence of drug addiction (estimated 98%), mental health problems (estimated 80%) a history of abuse (estimated 75%) and very poor physical health.' (HMP Inspectorate of Prisons, Inspection Report 2005)

6.65 With this in mind, gender specific interventions which take account of mental health problems, specifically post traumatic stress disorder, may be appropriate for a Scottish setting.

Other Forms of Coerced Treatment

6.66 The evidence around the success of coerced treatment is mixed. Research has primarily been undertaken in North America, where evidence suggests that coercion has an improved effect upon retention in treatment, especially for those offenders who have yet to be sentenced. However, despite longer periods in treatment, abstinence among this group does not necessarily improve (Brochu et al, 2006). Research undertaken by De Leon and Melnick has shown that:

'overt compliance with a program based solely on external pressures without high internal motivation is not associated with better outcomes once the client is no longer subject to those external pressures.'
(Melnick et al, 2001)

6.67 However, other studies have shown that legally coerced male prisoners were more likely to be abstinent in the month before follow-up interviews than non-coerced service users. In addition, they were shown to have a lower addiction severity than non-coerced service users (Chandler & Spicer, 2006). A review of the evidence by the National Institute of Drug Abuse (2006) concluded that, *'recovery from drug addiction requires effective treatment, followed by management of the problem over time'* (NIDA, 2006, p1), *'treatment should target factors that are associated with criminal offending'* (p3), and that *'continuity of care is essential for offenders re-entering the community'* (p4).

6.68 Further research compared a group of offenders who were subject to legal sanction for non-compliance with their treatment programme and a group who were on probation but could not be legally sanctioned (Hepburn & Harvey, 2007). The results showed no difference in rates of participation or completion, leading researchers to conclude that the threat of legal sanction did not have any effect. However, the two groups were mainly composed of non-violent offenders with only one or two convictions. It is not clear whether the effect of probation itself would have been sufficient to incentivise participation without legal sanction for a group of relatively low risk offenders. Thus the transferability of these findings to the remainder of the criminal population is questionable.

6.69 Qualitative research undertaken in Scotland (Eley et al, 2005) has offered an insight into the perceptions of offenders with regard to the effect of coercion as well as reasons for attrition and relapse. The study reports on group interviews conducted with 27 men and women who were undertaking either a supervised attendance order (SAO) or a community service order (CSO). The CSO had no drug treatment provision while a short drug and alcohol misuse programme was optional for those on a SAO. Some offenders felt that legally mandated treatment provided a strong incentive for attending treatment and an effective deterrent against breaching conditions, supporting other international evidence around improved rates of retention. Offenders also expressed their views on attrition, explaining that non-attendance was often related to other problems resulting from social exclusion and

chaotic lifestyles, such as debt, ill health and the threat of violence or the fact that medical services often appeared unresponsive to offenders' personal views on methadone maintenance, tending to operate a 'one size fits all' approach. In a broader UK context, Skodbo et al (2007) reported that around half of all offenders who come into contact with the Drug Interventions Programme (DIP) in England shows reductions in offending, by a mean of 79% in the six months following treatment contact.

6.70 Nonetheless, published evidence on the effectiveness of criminal justice diversion schemes remains limited, in spite of the widespread implementation of the DIP in England and Wales. Skodbo and colleagues make the point that further research is required to develop a greater understanding of how individuals move through the criminal justice programme and why DIP appears to work better for some clients than for others.

6.71 In terms of treatment effectiveness, while coercion may improve retention and there is some data to suggest that this has a knock on effect on improvements in sobriety and addiction severity, in general evidence in this area is insufficient, especially in the Scottish context. Review papers note that the methodologies around the research into coerced treatment can be far from robust, with programme retention, lack of proper control groups and self-selecting samples all presenting problems (Fischer, 2003).

6.72 *Relevance to recovery:* It is clear that coercion can provide a strong incentive to participate in treatment, as research in both the USA and Scotland has shown. However, the effect of retention on sobriety among this group is not clear and wider outcomes relating to global health and citizenship are not known. As is shown by Chapter 2 of the present report, there is almost no evidence on criminal justice and recovery. There is a relatively limited literature outside the therapeutic communities prison literature that has focused on recovery among offender populations.

6.73 Additionally, coerced treatment creates ethical dilemmas for many health and social work professionals. The lack of patient autonomy is of concern in and of itself. Furthermore, experience of working with substance misuse service users highlights that recovery can best be achieved when motivation and readiness to change are high (Best et al, 2009). Fischer notes that the drug court model of coerced treatment is problematic in creating a mixed discourse in which the offender exists both as 'criminal' to be punished through discipline and moral correction and as a 'patient' to be cured through therapeutic intervention, creating a dual identity which some academics and practitioners believe to be antithetical and irreconcilable.

Recidivism/Relapse/Re-incarceration

6.74 A significant body of research has been undertaken into client characteristics which predict future recidivism, relapse and re-incarceration among substance misusing offenders. This suggests that older offenders are less likely to be re-incarcerated, as are those who have stable employment. Previous arrests and periods of re-incarceration are positive indicators for further imprisonment (see De Leon et al 2006). However, recovery research has begun to focus on dynamic characteristics, such as motivation and readiness in predicting future patterns of

offending among substance misusing offenders. Individual growth and increased socialisation were found to be higher among non-incarcerated offenders at follow-up (De Leon et al 2006). This is encouraging for recovery in that it implies that an emphasis on improving social skills and boosting self esteem can have a real impact on improved citizenship. Higher motivation and participation in therapeutic community programmes during imprisonment made entry into aftercare more likely, which itself was shown to impact upon lower rates of recidivism and relapse (Melnick et al 2001).

6.75 Litt & Mallon (2003) showed that where offenders have clean sober/support networks around them, they are less likely to relapse. Social support networks, such as AA and NA, are effective in reducing substance use and their effectiveness is in part due to the availability of social networks which discourage drug use. Incorporating social networks into the treatment of offenders has successfully resulted in drops in recidivism and drug use (e.g. Lemieux, 2002).

6.76 In relation to treatment outcomes and effectiveness, while there are some fixed characteristics such as age and previous re-incarceration, which predict recidivism and reincarceration among substance misusing offenders, there are others which can be changed through treatment. Improved prosocial skills and the establishment of social networks can reduce the likelihood of reoffending.

6.77 *Relevance to Recovery:* Encouraging social skills and channelling substance misusing former offenders towards networks of social support can reduce reoffending and thus promote better citizenship.

Families

Family Involvement in the Care of Substance Misusers

6.78 Involvement of the family in treatment programmes for substance misusers in the USA has been shown to have positive effects. Landau et al (2004) found that where a family member or friend called outpatient drug treatment clinics to ask for help in getting loved ones into treatment, substance misusers could be engaged in the process relatively quickly; the more severe the family member perceived their loved one's problem to be, the more motivated they were to make contact.

6.79 Chassin et al (2009) found that where families were involved in the treatment of serious male juvenile offenders, outcomes around smoking cessation and non-drug offending were improved. A study of schizophrenia patients found that the presence of substance misuse predicted an irregular pattern of attendance; the support of family members predicted a more regular attendance. However, where patients experienced co-morbid schizophrenia and substance misuse, and had the involvement of family members in treatment, such involvement was able to mitigate somewhat for the negative effects of substance misuse on service attendance. (Fischer et al, 2008). A further study of individuals with co-morbid mental health problems and substance misuse found that family involvement, both in terms of economic assistance and informal caregiving was associated with a reduction in substance misuse (Clark, 2001).

6.80 Network therapy, where the families of substance misusers participate with the individual in group therapy has been shown to be effective in helping the addict break down denial and rationalisation of their problem. Furthermore, family involvement can assist the addict in identifying addictive cues and support them in their avoidance of these (Galanter & Brook, 2001). This work has been continued in the UK with the development of Social Behaviour Network Therapy (Copello et al, 2005) which evaluated positively in the UK Alcohol Treatment Trial. A small study in the USA found that a skills training programme for parents of adolescent substance misusers improved parental coping skills, communication within the family and had some effect on reducing the drug use of the adolescent child (McGillicuddy et al, 2001).

6.81 With regards to treatment outcomes and effectiveness, the inclusion of family in treatment, has been shown to improve treatment attendance among individuals with co-occurring schizophrenia and substance misuse.

6.82 *Relevance to Recovery:* It is not clear what the mediators are between family involvement in treatment and improved outcomes. They may lie in the increased social and emotional support or, as Fischer suggests, in the provision of practical support, such as transport to treatment for substance misusers living in rural areas, thereby enabling greater exposure to treatment. Such contributions to recovery cannot be underestimated; however, there is currently insufficient evidence, especially in the Scottish context, to make strong assertions about the role of the family in recovery.

Parenting Skills in Treatment

6.83 There are several studies from the USA that comment on the inclusion of a focus on families in treatment for parents with substance abuse problems. Research in Massachusetts found that retention in treatment for substance abusing mothers was improved where parenting skills were included in the treatment programme when compared to both non-gender specific treatment and gender specific treatment (McCornish et al, 2003). Grella et al (2009) found that where treatment programmes included a parenting element, reunification between substance abusing mothers and children who had been removed to foster care was more likely. Additionally, research in the North-Western USA has shown that including parenting skills in treatment can reduce the risk of male children of substance misusers from themselves developing addiction problems (Haggerty et al, 2008). There is also evidence that substance abusing parents who have custody of their children have somewhat more severe addictions than parents without custody of their children. It may be the case that in a group which uses substances as a coping mechanism, the stresses of parenting act as a push factor into greater substance misuse (Lewis & Petry, 2005).

6.84 In terms of treatment outcomes and effectiveness, family oriented treatment programmes can improve retention and sobriety outcomes for substance abusing mothers; further research conducted on a larger scale will be necessary.

6.85 *Relevance to Recovery:* Improving parenting skills may help substance misusing parents to stay in treatment for longer, thus providing the best possible

chance at achieving recovery. Furthermore, such interventions have been shown to improve parenting attitudes and beliefs, potentially reducing the stresses associated with childcare and the related triggers back to relapse. It is clear that there is further work to be done in this area, especially with regard to larger sized trials with adequate control groups.

Predictors of Family Separation/Reunification

6.86 A recent study compared women who had been separated from their children and women whose children were still living with them using data from a large, federally funded, longitudinal study of women with co-morbid mental health and substance misuse disorders and histories of violence. Women who had had at least one child removed from their care were more likely to have a greater number of children, to have been homeless, to have been in juvenile detention or jail, to have experienced greater lifetime or current exposure to stressful and interpersonally abusive events, to have prostituted themselves for money or goods, to have been physically attacked by a stranger and to have experienced unwanted sexual contact than those women who had not had a child removed (Nicholson et al, 2006).

6.87 Evidence around family reunification has been gathered by Grella et al (2009) in California on children taken into care as a result of maternal substance misuse. The research found that mothers with poorer psychiatric and employment status were less likely to be reunited with their children; children under two were also less likely to be reunited with their parents. Reunification was more likely where mothers remained in treatment for 90 days or more and where treatment programmes provided a high-level of family related or education/employment related services. Brook and McDonald (2007) assessed provision of services to families where the child has been removed due to parental alcohol and drug disorders. It was found that multidisciplinary, intensive services that address a range of needs from a single point of contact for families had less successful outcomes than standard services; reunification took longer among the experimental group and re-entry of the children into care services was more common.

6.88 *Relevance to Recovery:* The multiple and complex needs of women with substance misuse problems impacts on their ability to care for their children and may result in their children being removed from their care. Recognition that this group is exceptionally vulnerable and may need a range of supports including housing, mental health treatment and parenting classes could prevent this outcome.

Pregnancy and Substance Misuse

6.89 Evidence from the USA indicates that pregnant women utilise substance misuse treatment services in a different way to non-pregnant women. Daley et al (1998) found that pregnant women used treatment services more regularly, were more likely to be admitted to methadone maintenance programmes and residential programmes and were also more likely to be re-admitted to detoxification. Further research has shown that there was no difference in retention in residential or outpatient treatment among a small sample of cocaine-dependent pregnant women (Comfort and Kaltenbach, 1999). However, this same study showed that a significantly higher proportion of the pregnant women in the residential programme

maintained abstinence throughout the course of treatment than those in the outpatient programme.

6.90 With regards to treatment outcomes and effectiveness, while greater treatment service utilisation may not necessarily produce better outcomes, there is a correlation between increased use of services and improved abstinence, especially if women participate in residential programmes.

6.91 *Relevance to Recovery:* The increased use of treatment services and the use of more intensive treatments among pregnant women may suggest that pregnancy can be a turning point (Finkelstein & Piedade, 1993) due to the desire to protect the best interests and health of the unborn child.

Adolescence and Substance Misuse

6.92 Adolescents follow broadly the same recovery path as adults, but experience things at a different level of intensity and over different timescales. The fact that teens are also undergoing the individuation/separation tasks associated with maturing complicates recovery processes; they are more likely to behave in a hostile manner towards people who they view as authority figures (i.e. therapists) and reject the idea that they are dependent. The desire to become independent and autonomous will probably also lead them to believe that they can resolve the addiction without assistance, which means that accepting their addiction takes much longer. Despite this, adolescents can and do make progress (Blumberg, 2005).

6.93 Supportive parents are key to adolescents becoming abstinent and developing as autonomous individuals. Further research with male serious juvenile offenders (Chassin et al, 2009) has shown that family involvement in substance use treatment reduces cigarette smoking and criminal offending behaviours. Furthermore, a study of resilience in individuals (DuMont et al, 2005) who had been abused either physically or sexually as children found that those who had lived in a stable environment (either with two parents or in a long care placement) were more likely to be resilient in adolescence (the definition of resilience included the absence of a diagnosis for alcohol and drug abuse).

6.94 Evidence around the participation of adolescents in 12-Step programmes (Chi et al, 2009) shows that maintaining attendance at 12-Step programmes after one year made alcohol abstinence at three years more likely. 12-Step attendance at 3 years increased the likelihood of *both* alcohol and drug abstinence. Social support was found to be a factor in the success of attendance at 12-Step programmes and abstinence, possibly because such programmes encourage abstinent friendship groups.

6.95 Therapeutic Communities have been shown to be an effective way to improve psychological and substance misuse outcomes among adolescent probationers (Morral et al, 2004).

6.96 In relation to treatment outcomes and effectiveness, therapists can be more effective by understanding that teen hostility stems mainly from the conflict between needing to accept the powerlessness and need for help associated with addiction,

and the development of individual personality and autonomy. Patience and understanding are likely to be required. Framing the recovery process as the individuation/separation process can assist adolescents (Blumberg, 2005); enabling adolescents to experience abstract ideas may also assist their engagement with the recovery process (Gillis & Simpson, 1994).

6.97 *Relevance to Recovery*: Adolescents are able to achieve long-term sobriety and may be more resilient than their adult peers, since their personality is not fully formed and they can adapt more readily to recovery ideas. However, the conflict between accepting addiction and separation/individuation tasks can lead to great hostility within families. Outcomes are much improved for teens if they have the support of their families. Recovery can enable adolescents to develop high levels of empathy for others and perhaps this can assist in the healing of wounds within families as well as improving citizenship.

Prevention and Education

6.98 *The Road to Recovery* states that problem drug use is strongly linked to socio-economic disadvantage. Besides deprivation, there are other routes into drug misuse such as enjoyment, escapism and peer support. These involve a degree of free choice and can therefore be addressed at the individual level through prevention and education strategies. The focus of such strategies is to impact on the attitudes, beliefs and behaviours associated with drug use.

6.99 Therefore this section will provide evidence drawn from UK good practice guidance documents regarding the role of deprivation and other societal factors in drug misuse and examine evidence regarding effective interventions aimed at younger people within school and higher education settings as well as community based approaches. Interventions relating to housing and employment with a focus on recovery are examined later in this chapter.

Deprivation and Other Societal Factors Associated with Substance Misuse

6.100 The relationships between deprivation, poverty, widening inequalities and drug use are well-documented in the literature. The report *Drugs and Poverty: A Literature Review* (2007) published by the Scottish Drugs Forum (SDF), discusses these links in detail, although this was not a systematic review. The report states that such relationships often involve '*psychological discomfort, fragile family bonds, low job opportunities and community resources*'.

6.101 The authors highlighted that the Scottish Parliament Social Inclusion, Housing and Voluntary Sector Committee (SIHVSC) officially recognised that: '*deprived communities with poor housing, poor amenities and high levels of unemployment*' experienced the most serious levels of substance misuse (SDF 2007) and that problem drug use '*...is inextricably linked with other extreme forms of social exclusion, notably homelessness, persistent offending and street prostitution*' (SIHVSC 2000, cited in SDF 2007).

6.102 The authors of the SDF report examined the evidence regarding the causation of problem drug use. They highlighted the conclusion of the Advisory Committee on

the Misuse of Drugs (1998) that there is a strong statistical correlation between problem drug use and deprivation, although the committee did state that such relationships are not straightforward.

6.103 The fact that deprivation does not directly cause addiction is another important point that is discussed. It is emphasised that the causes of deprivation are experienced by people on an individual basis, and so these negative social factors merely tend to raise the likelihood of someone developing a substance misuse problem, by weakening what can often be referred to as protective factors, and by strengthening risk factors (Young 2002, as cited in SDF 2007).

6.104 According to the authors of the SDF report, a number of British studies have found that *'for a significant proportion of clients, social disadvantage and exclusion were major issues prior to the onset of a drug habit'* (Buchanan 2004, as cited in SDF 2007).

6.105 Buchanan (2004) says that deprivation does not mean that people will definitely go on to misuse drugs, but simply that problem drug users are more likely to have had problem childhoods, including negative experiences such as growing up in care and exclusion from school. The authors of the SDF report raised questions regarding whether such relationships are being *'followed through into policy and practice'* and state they *'should be taken into account'* and in turn *'form the development of assessment and intervention strategies'* (SDF 2007).

6.106 Consequently, it is vital to not only understand and address societal factors in terms of the subject of promoting recovery from drug misuse, but also with regards to implementing suitable prevention strategies within Scottish society. Tackling important issues such as poor housing and employment will therefore have a positive impact at both of these levels.

6.107 It is stated in *The Road to Recovery* (Chapter 2, p12) that *'not all people in deprived areas will develop a drug problem...'* and therefore it is important to review other factors, which lead people to misuse drugs, for example: mental health problems (discussed later in this chapter), recreational use and peer networks. Although the research evidence to support the efficacy of drug prevention initiatives (other than those discussed above) is lacking, there are examples of peer support programmes across Scotland, which are independently evaluated by bodies, such as the Lloyds TSB Foundation for Scotland and the Big Lottery Fund.

Characteristics of Young People Who Misuse Substances

6.108 According to the report, *Joining Forces, Drugs: Guidance for Police Working with Schools and Colleges* (2006), the majority of young people of school age do not misuse drugs, drink alcohol or smoke tobacco. It is well-documented that cannabis is the most common illegal drug currently used by those aged 18 years and under; although its use amongst young people is presently in decline. The document highlights the fact that the number of youngsters *'who report being offered illegal drugs has risen, and the age at which young people first use them is falling'*.

6.109 There are a number of risk factors and protective factors that have been identified for young people with regards to problematic drug use (Table 6.6). It should be noted that the more risk factors a young person experiences, the greater the likelihood of them developing a drug problem. However, it is important to state that these risk factors are not predictors of drug use amongst young people, as not everyone who experiences such risk factors, will end up misusing substances.

Table 6.6: Risk and Protective Factors

Risk Factors	Protective Factors
Chaotic home environment	Strong family bonds
Parents who misuse drugs or suffer from mental illness	Experiences of strong parental monitoring with clear family rules
Behavioural disorders	Family involvement in the lives of children
Lack of parental nurturing	Successful school experiences
Inappropriate and/or aggressive classroom behaviour	Strong bonds with local community
School failure	A caring relationship with at least one adult
Poor coping skills	
Low commitment to school	
Friendship with deviant peers	
Low socio-economic status	
Early age of first drug use	
Being labelled as a drug misuser	

Table adapted from *Joining Forces, Drugs: Guidance for Police Working with Schools and Colleges* (2006, p16)

6.110 The publication, *Drugs: Guidance for Further Education Institutions* (2004), states that young people who may be vulnerable to drug use are those who:

‘are looked after or who have recently left care; who truant or have been excluded from schools; have special educational needs; mental health problems; are in contact with the criminal justice system; live with drug misusing parents/carers; and are homeless or involved in prostitution.’

6.111 The authors stress the importance of identifying vulnerable young people in order to ensure they receive appropriate support. In turn, the implementation of such a strategy may be an effective method of reducing substance misuse in this sub-population. However, this may be a further evidence gap and a potential area for research within Scotland.

Substance Misuse and Prevention/Education Strategies within Schools and Institutions of Higher Education

6.112 This section addresses drug use prevention among young people, and the effectiveness of different strategies. Research highlighted in the report, *Joining Forces, Drugs: Guidance for Police Working with Schools and Colleges* (2006), only demonstrates that specific drug education models can obtain 'modest reductions' in cannabis, alcohol and tobacco consumption, as well as delay the onset of their use.

6.113 Additionally, *'there are indications that drug education has a role in reducing the risks associated with drug use'*, as well as the amount of drugs used, and can assist people to stop misusing substances (*Joining Forces*, 2006). However, these statements are not necessarily supported by other reports.

6.114 McGrath et al (2006) completed a systemic review for NICE (National Institute for Clinical Excellence), examining the effective components of drug prevention programmes in schools. The authors state that:

'since past research on drug prevention programmes has shown mixed results in terms of efficacy, no quality criteria or guidelines have been developed for schools, policy makers and prevention workers, to help choose which programmes should be delivered to young people.'

6.115 Therefore, the purpose of this study was to systematically review three types of drug prevention studies: meta-analyses; primary studies examining mediating variables of drug use; and studies examining effective characteristics of programmes.

6.116 The research found there was:

'a lack of UK evaluation studies, which means it is difficult to deliver evidence-based prevention programmes in this country, since diversity in environmental factors among countries (e.g. cultural, societal and developmental factors) can affect effectiveness and/or implementation.'

6.117 This comment was pertinent, because the majority of the publications reviewed were based on primary research conducted in the USA, and so it is vital to carry out research within Scotland. The conclusions drawn by the authors, were that findings were generally consistent with those of Canning et al (2004), stating that there *'is a lack of methodologically sound evidence'* making it difficult to determine which drug prevention strategies work effectively among young people. In addition, it is suggested that there is *'inappropriateness in terms of a 'one size fits all' approach to drug prevention'*, and so research is required to determine *'what types of interventions are effective in particular populations'*.

6.118 The publication, *Pathways to Problems* (2006), provides a further detailed review of the current evidence base, and the authors summarise the findings by stating that:

'The extensive published research on school-based preventative initiatives makes disappointing reading. While many of the evaluations were poorly designed, those that were conducted to an acceptable standard found that even carefully designed, resourced and implemented programmes resulted in, at best, small short-lived delays in the use of tobacco, alcohol or other drugs by pupils. Indeed, many studies showed no effect at all and some programmes were found to be counter-productive.'

6.119 The researchers further conclude by saying:

'the evaluations of current practice in England and Scotland indicate wide variations in standards, with many schools using traditional, information-based methods that are least likely to be effective. Despite this, drugs education policy in the UK continues to be based on the assumption that drugs education is effective, investing large amounts of staff and pupil time and resources in such activity.'

6.120 The Blueprint Drug Education Programme was a major research project conducted between 2004 and to 2005 in England (Institute of Social Marketing, University of Stirling, 2007). It was developed as a partnership between three Government departments: the Home Office, the Department for Education and Skills (DfES) and the Department of Health (DH). The study aim was *'to examine the effectiveness of a multi-component approach to drug education'* and *'it was the first attempt to design, deliver and evaluate a multi-component programme on such a large scale in England'*, with the view to informing *'the development of future drug education'*. The project involved classroom-based lessons within schools, alongside *'working with parents, the media, Local Education Authorities (LEAs) and the community'*, as well as policy work.

6.121 The findings of the Blueprint Drug Education Programme cannot be summarised concisely here. The multi-component approach has led to various studies examining specific aspects of the project, but none have attempted to assess the overall impact of the programme and its effectiveness, especially in relation to prevention of substance misuse.

6.122 The document, *Drugs: Guidance for Further Education Institutions* (2004), states that *'research indicates that young people enjoy and learn from drug education delivered by their peers'* and that *'many young people request an input from an ex-user who has had experience of drug misuse'*. In terms of the latter, it is very important to ensure *'the input is suitable'*, as well as *'relevant and presented well'*. Additionally, the authors highlight the necessity of ensuring that monitoring and evaluation processes are being built into drug education programmes, so quality and effectiveness can be readily assessed. The methods utilised would have to be carefully devised in order to make sure programmes are being reviewed consistently. However, this may be a useful process to implement within Scotland, regardless of whether substance misuse education is being delivered in schools, colleges or universities.

6.123 The authors of the document, *Alcohol and Drug Prevention in Colleges and Universities: A Review of the Literature* (Polymerou, 2007), state that '*little is known about the harm that alcohol and/or drugs cause, among further education college and university students in the UK*', as there are no recent studies that examine this subject. The findings of this literature review are consistent with those highlighted in other reports, as previously discussed in this chapter.

Substance Misuse and Prevention/Education Strategies: Family Interventions and Community-Based Work

6.124 The *Pathways to Problems* (2006) publication briefly discusses drug prevention in settings other than schools. The authors evaluated a systemic review published in 2006, which assessed 17 Randomised Controlled Trials (RCTs) that had been conducted over the ten-year period prior to the start of the study. The researchers who conducted the review categorised the interventions into four types: multi-component community studies; family intervention studies; education and skills training; and brief interventions. They conclude that '*no definite evidence for their effectiveness was obtained*' and state that '*further high-quality trials were needed to explore interventions that appear to have a 'potential benefit'*'. In addition, they state that:

'there was insufficient evidence that the five multi-component community studies which were considered, had any advantage over the school-based programmes with which they were compared. Neither of the education and skills training interventions had any effect, nor did the majority of the eight family interventions.'

Treatment and Intervention

Recovery Amongst Substance Misusers with Dual Diagnosis

6.125 A significant percentage of substance misusers suffer from co-morbid psychiatric disorders. These diagnoses not only have serious consequences for the individual, but also for their family and community. Murray and Lopez (1996) reported that in 1990 '*mental health disorders accounted for 5 of the 10 most burdensome diseases in the world*' (Tiet and Mausbach, 2007).

6.126 The prevalence rates for substance-related disorders among patients with mental health problems are between 33% and 66% for those diagnosed with lifetime schizophrenia disorder (Alterman et al, 1982; Barbee et al, 1989; Mueser et al, 1992; Tiet & Mausbach, 2007). Additionally, Reiger et al (1990) reported that over 56% of persons with any lifetime bipolar disorder have been diagnosed with a substance abuse problem, as identified through the large Epidemiologic Catchment Area (ECA) study in the USA. Grant et al (2004) found that around 60% of clients seeking treatment for drug misuse suffer from a co-morbid mood disorder, with 42% diagnosed with an anxiety disorder. It is estimated that between 55% and 99% of women with dual diagnosis have experienced some form of trauma (Jennings, 1997; Miller, 1994; Najavits, Weiss and Liese, 1996).

6.127 The joint report of the Scottish Advisory Committee on Drug Misuse and the Scottish Advisory Committee on Alcohol Misuse (2003), *Mind the Gaps*, cited data from the Scottish Drug Misuse Database (SDMD) showing that between April 2001 and March 2002, over 40% of people who sought treatment for drug problems (3,236 from a recorded population of 10,798) reported mental health as one of the issues which led them to treatment. This figure is especially concerning given the fact that these data *'may not necessarily be complete or consistent across Scotland'* (Scottish Advisory Committee on Drug Misuse and Scottish Advisory Committee on Alcohol Misuse, 2003, p23) and other British studies possibly suggest an even greater prevalence (see Chapter 3). In the light of such statistics, it is clear that the diagnosis and the efficacious treatment of psychiatric conditions, within substance misusing populations, needs to be a focus within a Scottish recovery agenda.

6.128 The evidence around the success of treatment for those with dual diagnosis is rather poor, as discussed in the review by Tiet & Mausbach (2007). The authors evaluated 59 studies of which 36 were randomised trials and reported that only a limited number had investigated specific options for different categories of co-morbidity. In addition, it was noted that:

'treatments had not been replicated and consistently showed clear advantages over comparison conditions for both substance-related and other psychiatric outcomes.'

6.129 In summary, the authors concluded that it was not possible to identify *'specific treatment options that were simultaneously efficacious for psychiatric disorders and forms of substance misuse.'*

6.130 However, Tiet & Mausbach (2007) did find that:

- *'Tricyclic antidepressants reduced depressive symptoms among depressive substance-abusing individuals.'*
- *'Seeking safety and relapse prevention may reduce Post Traumatic Stress Disorder (PTSD) and substance-related problems among women.'*
- *'Cognitive-behavioural therapy + motivational interviewing may benefit individuals with substance-related disorder and schizophrenia.'*

6.131 A further study, this time conducted by Sacks et al (2008), reviewed the effectiveness of utilising a modified Therapeutic Community (TC) approach for people with co-occurring disorders in an enhanced outpatient programme. It was reported that these clients had significantly better outcomes compared with the control group who received a traditional substance abuse day treatment programme that included standard elements of individual and group therapy and counselling focussed on relapse prevention. The positive outcomes were on measures of psychiatric severity and on housing stability (substance misuse, crime and employment outcomes all remained unaffected). However, as the authors state, this study only provides *'modest support'* in terms of this intervention, as the findings must be treated with caution. Seventy-nine percent of the participants involved were of African-American origin, and improvements may not translate to a Scottish population.

6.132 Another study investigated the characteristics of 50 clients suffering from 'severe and enduring mental illness' in high support community residences in the Dublin North East Mental Health Service (as discussed by Kavanagh & Lavelle, 2008). The study concluded that positive outcomes were achieved following:

'active rehabilitation interventions, but there remained a cohort of patients whose needs could not be met in a supported community rehabilitation residential programme'.

6.133 The authors highlighted the importance of ensuring that 'a range of rehabilitation services, from inpatient to supported community placements', are provided to meet the needs of such patients.

6.134 Min et al (2007) reviewed the effectiveness of *The Friends Connection* peer support programme as a potentially useful intervention for clients with three year re-hospitalisation patterns and showed that participants experienced longer community tenure. This provides some evidence that such peer support programmes may facilitate recovery for people with dual diagnosis. In addition, Timko et al (2003) found that Mutual Aid groups may be beneficial for helping dual diagnosis clients to successfully overcome their 'daily living and social skills deficits', as this treatment option can provide 'long-term continuity of care for psychosocial and cognitive difficulties as well as an addiction'.

6.135 Timko et al (2005) found that to facilitate the integration of psychiatric and substance abuse treatment, it is vital to emphasise cross-system and interdisciplinary teamwork, as well as long-term staff commitment to improve the quality of care. They recommend the Comprehensive Continuous Integrated System of Care (CCISC) to enhance treatment capacity for dually disordered individuals based on eight principles (e.g. dual diagnosis is an expectation, not an exception). The authors mention that a toolkit is currently being produced to help systems and agencies implement evidence-based practices for adults with severe mental illness and co-occurring substance use disorders and they indicate that these tools if used by treatment planners and managers should be helpful in creating truly integrated treatment.

6.136 Elliott and Masters (2009), examining mental health inequalities in Scotland, reported that a major cause is poverty. The authors also indicated that current policy needs to be set out more clearly, especially around the role of mental health nursing as this group of health professionals should have:

'a key role to play in helping to shape existing physical and mental health services so that these services are more accessible and helpful for those who use them.'

6.137 The authors concluded that gathering further evidence on the subject would provide a better understanding of the health needs of different populations, as very little is known about what types of approaches might be best suited to different social groups.

6.138 *Relevance to Recovery*: To promote recovery in patients with dual diagnosis, further research is urgently required. As highlighted by Tiet & Mausbach (2007), it is also important that more methodologically rigorous trials are carried out, including better controlled and randomised studies that make the distinction between primary and secondary psychiatric disorders or symptoms. Other recommendations to researchers, from these authors, to improve the evidence include:

'to investigate the interaction between medication and substance use needs; ensure sufficient sample sizes and maintain high study completion rates; include multiple and long-term outcome measures and measures of mediating mechanisms; report effect sizes; include results for trial drop-outs within analyses; differentiate between treatment effects and the effects of the total amount of services patients receive; examine cultural influences on treatment processes and outcomes; investigate clinician and programme factors that are related to patient outcomes; and lastly evaluate treatment guidelines.'

Substance Misusing Women

6.139 Metsch et al (2002) assessed treatment outcomes in a cohort of 4,236 women in Florida and found that treatment completers were less likely to be receiving welfare benefits at follow-up, and that residential rehabilitation was also associated with lower welfare benefit payments. Predictors of reduced welfare benefit payments were being younger, better educated, being married and having less criminal justice involvement. In assessing outcomes among pregnant women and drug using mothers, Connors et al (2006) found significant improvements in substance use, employment, offending, mental health, parenting and risk, with longer treatment stays associated with better outcomes. Toussiant et al (2007) also showed positive treatment outcomes for women who had been the victims of trauma in a study of 170 women engaged in a structured treatment programme.

6.140 In a study of women with comorbid substance use and mental health problems, Morrissey et al (2005) reported positive outcomes with better outcomes associated with the provision of greater levels of 'integrated' counselling. Greenfield et al (2007) conducted a review of 280 published articles since 1990 and reported that women were less likely to access drug treatment than men, but that, once in treatment, retention and outcomes were no different, although there were gender specific outcome predictors.

6.141 With regards to research implications and gaps, there is a need to develop and test effective treatments for specific subgroups such as older women with substance use disorders, as well as those with co-occurring substance use and psychiatric disorders such as eating disorders. Additional research on effectiveness and cost-effectiveness of gender-specific versus standard treatments, as well as identification of the characteristics of women and men who can benefit from mixed-gender versus single-gender treatments, would advance the field. Further research is also required to identify the longer-term effects of integrated counselling for women with co-occurring disorders and trauma histories.

Treatment and Service Characteristics

6.142 Scott et al (2005b) studied recovery stages in 1,326 adult substance users showing movement, over the three years of the study, between (i) community or incarcerated use, (ii) treatment and (iii) being in the community not using. This provided evidence for a staged model of change and recovery. In a second developmental study, Claus et al (1999) reported on the recovery processes of 7,092 clients accessing treatment in St Louis and found that recovery change could be evidenced and that the change process takes place via multiple mechanisms. Based on the Californian outcome data referred to in Chapter 3, Hser et al (2007) found that, compared with individuals still addicted after 30 years, individuals in recovery were less likely to have spouses who used drugs and more likely to have more non-drug using social support, greater self-efficacy and lower psychological distress.

6.143 In a 5-year treatment outcome study in the USA, Satre et al (2004) found that older adults were more likely to achieve total abstinence from substances at follow-up, and that abstinence was also made more likely by having no close friends who were substance users and longer retention in treatment. In focusing more on the details of the treatment process, Simpson et al (2000) looked at one year outcomes and found that treatment process measures – treatment engagement and satisfaction, and motivation for treatment – were predictors of reduced substance use and offending, and improved family relationships at one year after treatment initiation.

6.144 In a meta-analysis of psychosocial interventions across a range of substances, based on a total treatment sample of 2,340, Dutra et al (2008) described an overall moderate positive effect across all participant groups. The authors commented that while psychosocial interventions had least effect for polydrug users, contingency contracting (the use of incentives as a form of behaviour modification, also known as ‘shaping’) was found to be the intervention with the strongest resulting effects.

6.145 However, there is a strong meta-therapeutic effect. De Leon et al (2000) found that more experienced professional staff increased client retention and improved client functioning in a residential TC setting. Similarly, in a study of cultural congruence in therapeutic relationships, Longshore et al (1999) reported greater treatment engagement and higher motivation with culturally congruent therapists and clients.

6.146 In terms of research implications and gaps, although there is evidence around the impact of specific interventions, an increased focus on the structure and context of treatment is gaining greater prominence (see Chapter 3). This is particularly the case with regards to therapeutic engagement and working relationships, as well as the cultural milieu of treatment services.

6.147 *Relevance to Recovery:* There is empirical support, albeit from the USA, for a staged approach to recovery, including a recovery process for those engaged in the criminal justice system. There is also evidence that long-term recovery may well be

linked to social networks and the development of recovery capital identified as positive recovery self-efficacy.

6.148 In terms of relevance to Scotland, the research has been conducted in the USA, and so caution is needed about applicability to a Scottish context. Consequently, piloting of such interventions, alongside appropriate evaluation, may be beneficial.

Black and Minority Ethnic (BME) Groups

6.149 Surveillance and surveys suggest that drug use in the UK is more prevalent amongst those from white ethnic groups. While this may be the case, there are likely to be substantial numbers of minority ethnic drug users, with geographical variations and differences in the types of drugs being used.

6.150 *Drug Misuse Statistics Scotland 2009* (Information Services Division, 2010) reports that in 2008/09 there were 99 non-white people presenting to drug services, as new clients. This represents 0.9% of all presentations in that year where ethnic group was recorded¹⁹. Scottish population figures provided by the General Register Office for Scotland (GROS, 2008) confirm that there are 101,677 non-white people living in Scotland, accounting for 2% of the population.

6.151 In order to ascertain whether there is an under-representation of non-white problem drug users, at drug services in Scotland, there are three issues to consider:

- 1) Are the prevalence and trends of drug use similar between white and non-white groups?
- 2) What might be the barriers to non-white problem drug users accessing drug services?
- 3) What are the mechanisms for monitoring and reporting on ethnicity across drug services in Scotland?

Prevalence and Trends

6.152 Glasgow has the highest proportion of residents from non-white groups in Scotland (GROS, 2001). In a study into drug issues affecting Chinese, Indian and Pakistani people living in Glasgow, Ross et al (2004) concluded that drug use was present and increasing across the three ethnic groups, but that prevalence rates were still reported at lower levels than for the general population. This finding was echoed in a review of drug use in Black and Minority Ethnic groups in England (Fountain et al, 2003), which found drug use to be increasing, and in some communities as prevalent as it is within the white population. In a synopsis of five studies carried out on issues surrounding drug use and drug services amongst different ethnic populations in England, Fountain (2009) concluded that the drugs used and the relative popularity of each among the various black and minority ethnic samples, are not substantially different to those of the whole population.

¹⁹ 11342 cases. There were an additional 613 cases where ethnic group was not recorded.

Barriers to Accessing Services

6.153 The document, *Integrated Care for Drug Users: Principles and Practice* (Rome et al, 2002), states that minority ethnic drug users have traditionally been reluctant to access existing services and that service providers must be more sensitive to the needs of minority ethnic groups. This involves providing materials and support in languages other than English, providing services to address the drug of use (e.g. not just opiates), and working with families with different cultural backgrounds and values. Fountain points out that:

'it does not follow that black and minority ethnic drug users can simply slot into existing drug services because they face a series of barriers to accessing these services';

and that the responsiveness of drug services is a long-term process at a strategic level, rather than an 'add on' to existing services.

6.154 In a Scottish study reviewing vulnerability and access to care for South Asian Sikh and Muslim patients with life limiting illnesses, the authors (Worth et al, 2009) identified a number of themes more evident in the South Asian population than the general population. Although the study focussed on palliative care and dying, there are some factors which should be considered by drug service providers. These include:

- Illness and suffering are viewed as God's will and a test of faith.
- Despair and anger are seen as spiritual deficits and therefore emotional problems are difficult to acknowledge openly.
- Institutional or overt personal racism sometimes apparent in patients' and carers' interactions with services.
- Some patients and families were reluctant to seek help from services they perceive as racist, or because they had poor experiences of services or were concerned about criticism from their own community.
- Inadequate professional training in diversity and concern about causing offence through lack of cultural understanding.
- Some staff awareness of the needs of Sikh and Muslim patients but uncertainties about how to adapt usual care to a different cultural context.
- Professionals uncertain about accurate, complete and effective communication when patients or family members act as interpreters.

6.155 A national scoping study of drug prevention and drug service delivery to minority ethnic communities, conducted in 6 DAT areas in England in 2000/2001 (Sheikh et al, 2001), showed that '*symbols of accessibility*' were important. This means explicitly demonstrating that minority ethnic groups are welcome to utilise services, for example by providing posters, leaflets, cultural-specific newspapers and magazines (Sangster, 2002).

6.156 However, it was emphasised this was only one aspect of what is required to help services become more culturally sensitive, and thereby enhance accessibility for ethnic minority groups. Other recommendations include a shift away from delivering services for opiate injectors to the development of services with a more

holistic, therapeutic and social focus and also an emphasis on the importance of 'cultural competence' to mainstream services.

Mechanisms for Monitoring and Reporting

6.157 The data currently collected by ISD Scotland through the Scottish Morbidity Reporting system (SMR25 notification forms), allows for monitoring of the number of new individuals from black and minority ethnic groups accessing drug services in Scotland each year. It also allows for measuring the proportion of people in any one health board or local authority area accessing services. It is anticipated that the introduction of follow-up reporting to the Scottish Drug Misuse Database will build a picture of the total number of people from black and minority ethnic groups currently engaged with drug services (as opposed to only recording new presentations).

Implications for Research and Practice

6.158 In 2003, Fountain and colleagues produced the guidance document '*Black and Minority Ethnic Communities in England: A Review of the Literature on Drug Use and Related Service Provision*', which was published by the National Treatment Agency for substance misuse (NTA, 2003). Although primarily focussed on England, it provides evidence and guidance which is applicable to services planning and provision more generally.

6.159 The *Tackling Drugs, Changing Lives: Diversity Manual* (Home Office, 2006) provides further guidance on the operational aspects of service design and delivery for minority groups, including black and minority ethnic groups.

6.160 More recently the UK Drug Policy Commission has commissioned a number of evidence reviews aimed at understanding the needs and challenges of drug problems for different minority groups. These are as follows:

- Prevalence and patterns of (illicit) drug use within different ethnic groups.
- Drug prevention and information provision for different ethnic communities.
- The interaction and impact of drug markets and drug-related enforcement activity on different ethnic groups.
- The prevalence of drug use, access to and need for services, and the impact of enforcement on the LGBT community.
- The prevalence of drug use, access to and need for services, and any impact of enforcement on disabled people.

6.161 These reviews have a UK-wide remit and are due to be completed in early 2010.

Relapse Prevention

6.162 It is important to ensure that individuals maintain the changes they have achieved after leaving treatment. Dennis et al (2002), in Chicago, showed that the average time for the participants to reach a year of abstinence following discharge is eight years (with three to four episodes of treatment in between). According to Brown et al (2002), the six month period following discharge is the crucial period that

determines whether or not relapse will occur. Sixty to 80% of relapse occurs during this period (Marlatt & Gordon, 1985). Recovery is a longitudinal process which involves building a different lifestyle by learning to cope with issues such as pressure of relapse, acquiring new attitudes, skills and relationships (Hser et al, 2007).

6.163 A substantial body of research has been carried out to determine the interventions effective in preventing relapse. Relapse prevention is a cognitive behavioural intervention involving assessing the possible factors linked to increased risk of relapse and improving the self-efficacy of the individuals (Brown et al, 2002). Brown et al (2002), when studying substance misusers in Canada, showed that relapse prevention and 12-step both achieved positive outcomes by significantly reducing the percentage of substance use, but that for the relapse prevention arm of the study, this self-efficacy effect lasted only for the duration of the aftercare programme (10 weeks).

6.164 A few studies conducted in the USA comparing day drug abuse treatment versus residential treatment report similar outcomes for both groups (Greenwood et al, 2001). Greenwood et al (2001) compared the relapse outcomes of day programmes and residential treatment at six, twelve, and eighteen month follow-ups, providing evidence for the effectiveness of day drug abuse treatment at the six month follow-up. However, there was no significant difference between the two types at the twelve and eighteen month follow-ups.

6.165 Greenwood et al (2001) also re-examined Guydish et al's (1998; 1999) data to identify baseline predictors of relapse at twelve and eighteen months for both day and residential treatment. The predictors positively correlated with relapse included: being employed part-time or full-time in the three year period prior to relapse; having a history of injecting drugs; and number of sexual partners. The correlation between employment and relapse was thought to be 'related to work related difficulties and having to compromise their recovery needs to meet survival needs' (Greenwood et al, 2001). The risk of relapse remains alive even for those who have been in remission for years (Drake et al, 2005). According to current research, key strategies to prevent relapse include learning self-control, avoiding situations that have relapse potential, reducing exposure to substances and coping with cravings (Brownell et al, 1986; Witkiewitz et al, 2004; cited in Drake et al, 2005).

6.166 Relapse factors among substance misusers with mental illnesses are similar to the general substance misusing population: negative emotions; social stress; interpersonal problems; lack of involvement in satisfying habits; and attempts to escape from personal experiences. However, unique relapse factors to this group include the fluctuating nature of long-term mental disorders, lack of normal developmental experiences, social victimisation, lack of necessary treatment resources and biological factors (Drake et al, 2005). Thus, when providing relapse prevention for substance misusers with mental illnesses, it is important to consider cognitive and social dysfunctions and the need for long-term mental health treatment as well as assistance with housing and employment.

6.167 Further evidence regarding relapse among substance users with psychiatric disorders comes from a 6-year Norwegian follow-up study carried out in 2006 by Landheim et al. The results showed that those who relapsed were younger, less

often married at the start and follow-up, and had higher rates of major depression and agoraphobia at baseline. Within the relapsers, those with major depression at baseline had higher mental distress compared with those without the disorder at the follow-up.

6.168 In terms of treatment outcomes and effectiveness, in relation to relapse prevention aftercare programmes, both CBT-based and 12-step strategies appeared to offer beneficial outcomes. However, the changes did not persist past the treatment phase. Similarly, in addition to drug abuse day-treatment being more cost effective, it has been shown to be more effective in relapse prevention during the initial 6 months of aftercare. Thus this method can be used to assist high-risk clients to prevent relapse in the initial months of aftercare.

6.169 *Relevance to Recovery*: A significant and independent contribution to severity of drug use has been shown to be confidence and self-efficacy in high-risk situations. Therefore, using aftercare interventions, such as relapse prevention and 12-steps, which aim to build self-efficacy and confidence in clients are likely to be an important step towards recovery. Further, major depression and agoraphobia have been shown to be predictors of long-term relapse, suggesting that assessing and treating these disorders early on may reduce long-term relapse.

6.170 Although none of this research is Scottish based, relapse prevention research shows the importance of bridging the gap to post-treatment, as well as the need for ongoing support to be available to those exiting treatment.

Deprivation, Housing and Employment

6.171 *The Road to Recovery* (p12) describes a 'clear link' between deprivation and drug misuse. It identifies housing, employment, training and education to be part of a joined-up approach to promoting recovery.

6.172 There is some evidence to indicate that post-treatment housing can have a significant effect on potential for lapse and relapse. Progress towards a drug free life can be impaired if substance misusers exit treatment and return to '*an environment that promotes crime and drug use*' (Jason et al, 2008, citing evidence from Polcin et al, 2004). A study of group homes found that the type of accommodation provided could impact on criminal justice and substance abuse outcomes. Specifically, residents living in larger group homes have greater opportunities for social contact with recovering addicts and were found to have improved criminal justice and substance abuse outcomes compared with their counterparts living in smaller homes (Jason et al, 2008). This has been well understood within some treatment programmes in Scotland which facilitate new tenancies and a break from the old life for many substance users exiting treatment.

6.173 Research into relapse among homeless populations found that there was not a significant difference between the length of time which it took for homeless and non-homeless people to resume their drug use following treatment. However, where homeless people were offered a booster to normal treatment their rate of return to substance misuse was lower. These boosters consisted of stabilisation programmes which were:

'voluntary, short-term, transitional facilities offering temporary treatment support and residence for 2 to 6 weeks while longer term residential placement options are considered.' (Kertesz et al, 2003)

6.174 Employment has been recognised as of great importance in helping to reinforce and sustain the recovery process (McIntosh et al cite Westermeyer 1989; Platt, 1995; Klee et al, 2002; Biernacki, 1986; Luchansky et al, 2000; McIntosh and McKeganey, 2001; Cebulla et al, 2004). The inclusion, esteem and opportunities for social contact which are associated with employment help to prevent lapse and relapse (McIntosh et al, 2008). The impact of employment within the DORIS cohort is discussed in Chapter 4.

6.175 This has significant implications for future treatment provision, which should look to provide employment related assistance as standard if substance misusers are to maintain recovery and realise the opportunity to make an economic contribution.

Non-Treatment Aftercare

6.176 One of the few comparisons of mutual aid groups was conducted by Brooks and Penn (2003) in which 224 dually diagnosed substance users were randomly assigned to 12-step or to SMART Recovery. Benefits from 12-step included reduced drinking and greater social interactions, while SMART (Self Management And Recovery Training) participation led to improved health and employment, with the authors recommending a wider range of outcome indicators and longer follow-ups in future research.

6.177 In a study of 12-step focusing on injecting drug users, Crape et al (2002) found no differences at one-year outcomes between those with and without a 12-step sponsor, but that ongoing engagement with community organisations was strongly linked to sustained abstinence. However, being a sponsor did confer significant benefits in terms of long-term abstinence. In a study linking residential treatment to ongoing support in Oxford Houses, Jason et al (2007) found that those who stayed longer in the ongoing provision had better substance use outcomes than the comparison aftercare group. Crits-Cristoph et al (2003), in a study of 12-step engagement in cocaine users found that involvement in Cocaine Anonymous (CA) was a partial predictor of reductions in cocaine use, but recommended a need for greater investigation of the mechanisms of change.

6.178 In terms of continuity of care, Kelly et al (2006) assessed mutual aid participation 1, 2 and 3 years after alcohol treatment and found that mutual aid participation was associated with greater abstinence and less drinking, irrespective of religious belief, gender or previous mutual aid experience. There are nonetheless obstacles to 12-step engagement and Laudet (2003) reported that motivation and perceived need for help were barriers to attendance and suggested that there is a strong need for clinicians to provide information and education about 12-step groups. As mentioned in Chapter 3, there is also evidence that intensive referral by professionals to 12-step groups (Timko & deBenedetti, 2007) led to both greater AA attendance and better substance use outcomes 6 months and one year later.

6.179 However, there is also evidence for peer support not linked to 12-step. Boisvert et al (2008) reviewed a peer support community focused on self-determination and found significant reductions in relapse risk. In a review of self-help organisations, Humphreys et al (2004) concluded that involvement in self-help groups was associated with reduced substance use, improved psychological functioning and reduced economic burden on the healthcare system.

6.180 *Relevance to Recovery:* While there is evidence of added value of engagement in mutual aid after formal treatment, there remain barriers for both clients and professionals that need to be addressed. There is a very strong evidence base in favour of mutual aid, although much of this evidence has been developed around Alcoholics Anonymous.

6.181 In terms of relevance to Scotland, according to the NA website²⁰ there are 97 NA meetings held in Scotland each week, and based on the CA website²¹ there are 28 CA meetings held in Scotland each week. Based on the SMART Recovery website²² there are 12 SMART Recovery meetings held in Scotland, although these are primarily held in the North of Scotland and this does not include many of the groups run through specialist treatment services. Additionally, there are 242 listed meetings of AA in Glasgow alone. Thus, there is considerable availability of structured mutual aid and this does not include unaffiliated community groups or professionally run aftercare supports.

Treatment Follow-up and Aftercare

6.182 Jason et al (2007) assessed community aftercare for 150 individuals leaving residential treatment by randomly assigning participants to recovery housing or standard aftercare and found that the recovery home group had better outcomes in terms of substance use, employment and offending, with a greater effect for those retained for longer in the recovery homes.

6.183 One particular aspect of aftercare, Recovery Management Check-ups (RMC, see Chapter 2), was assessed by Dennis et al (2003) based on quarterly check-ups. Those provided with recovery check-ups returned to treatment faster if they relapsed but had lower rates of relapse. In a further study of the RMC approach, Scott et al (2004) conducted two-year follow-ups and provided further support for effective re-engagement and positive outcomes using the recovery check-up model. More recently, Scott and colleagues (2009) completed a quarterly study of functioning over two years using the recovery check-up model in which participants were contacted quarterly. Benefits were seen in lower levels of substance dependence, more days of abstinence and higher levels of functioning. Rush et al (2008) have also demonstrated the effectiveness of the RMC model in a study of clients with a dual diagnosis in Canada.

6.184 Hubbard et al (2007) assessed the effects of phone calls after discharge from residential treatment and showed improved compliance and outcomes, but the

²⁰ Narcotics Anonymous website, <http://www.ukna.org/meetings/> [accessed 7 January 2010]

²¹ Cocaine Anonymous website, <http://www.cascotland.org.uk/meetings.htm> [accessed 7 January 2010]

²² SMART Recovery website, <http://www.smartrecovery.co.uk/> [accessed 7 January 2010]

results did not reach statistical significance. A similar approach, of assertive continuing care (ACC) was assessed by Godley and colleagues (2007) for adolescents, with assertive aftercare associated with better treatment engagement and higher abstinence rates than the standard aftercare package.

6.185 *Relevance to Recovery*: There is strong support for effective continuity of care to aftercare services, with a growing evidence base for the recovery-management check-up model, effective in both reducing relapse risk and in treatment re-engagement of those who do lapse. It is essential that links to aftercare involve an assertive linkage model and the RMC approach also provides a potential role for individuals in recovery as the cohort who do the recovery check-ups.

6.186 Aftercare has a particularly limited evidence base in the UK, yet it is imperative in order to sustain the gains made in treatment, that effective linkage to community and professional supports are provided and that the aftercare provision is evaluated and monitored locally and nationally.

Overview

6.187 The international literature suggests considerable support for the underlying principles of recovery – in particular the importance of continuity of care beyond acute treatment, the importance of providing community-based supports, and the important lifestyle changes associated with safe housing and meaningful opportunities for training and employment. The evidence base around recovery also links to the GIRFEC and CAPSM work by emphasising the reciprocal benefits of a family focus on improved recovery outcomes and for improving the wellbeing for the children and partners of substance using parents. There is also a growing evidence base around what works in criminal justice settings, including prisons, that emphasises the potential role of peer influence (in therapeutic communities) and the importance of ongoing support and care beyond the influence of the treatment setting. The principles of recovery – continuity of personalised care, focus on families and communities and the preservation and support for hope (even in the most complex cases of co-morbid mental health problems and recidivistic offending) are evident across the wide array of studies reviewed.

CHAPTER 7 – CONSULTATION WITH KEY EXPERTS

Summary: Perceptions of the Expert Group Consulted in this Research

1. Amongst the evidence experts consulted in this research, there was an overall consensus that a clear strategy is needed for developing an evidence base that will both support and test key aspects of the national drugs strategy.
2. Although there was optimism about the evolution of standard data collecting in Scotland, there was a recognition that it would take considerable time for this to yield the type of research information needed.
3. Almost all of the experts agreed that the state of drugs research in Scotland was poor and particularly limited in areas such as clinical research and treatment effectiveness work.
4. Nonetheless, there were seen to be examples of innovation and good practice, but that these frequently lacked the rigorous evaluation and dissemination to justify replication elsewhere.
5. Key areas identified as needing further research were around long-term outcomes, in terms of individual recovery, the effectiveness of alternative medications to methadone (buprenorphine and suboxone), the effectiveness of community and residential rehabilitation, and technology transfer work on effective implementation of research.
6. A number of potential funding bodies were considered and a range of strategies for re-invigorating drug research in Scotland including a research consortium and the 'importation' of dedicated research expertise.

7.1 The aim of the project was to conduct the documentary analysis and literature review components of the work as the first phase of the review process and then to 'test' this with a range of key experts in the drugs field who we would task with identifying additional sources of research and information, key evidence gaps and with providing feedback on the first phase of the analysis. The group of key experts consisted of three main groups:

1. Members of the research advisory group for this review;
2. Members of the National Drugs Evidence Group (NDEG) in Scotland, and
3. Other key subject experts.

7.2 There was a generic list of questions for all of the interviewees with specific questions addressing each person's area of expert knowledge added as appropriate. The broad questions asked of all interviewees are included in Table 7.1.

Table 7.1: Questions for Key Experts

Background
What is your role?
What was your role in the development of <i>The Road to Recovery</i> ?
What do you see as the 'evidence chain' that it is based on?
The Evidence Base in Scotland
What do you think are the key assumptions about recovery that need to be tested?
What do you think we need to know about the application of the evidence base to Scotland in terms of: treatment effectiveness; long-term outcomes; recovery literature?
What are the completed studies that we need to know about that have taken place in Scotland that are relevant to the review?
What are the other sources of data (monitoring, evaluation, audit, 'grey literature') that we should be accessing?
Are there examples of good practice of recovery in Scotland that have been evaluated in some way?
Purpose of the Review
What would you like to see coming out of the review?
Have the Scottish Government already identified key evidence gaps?
In terms of developing this agenda, who are likely to be the key collaborators [e.g. National Treatment Agency (NTA), National Institute of Health Clinical Excellence (NIHCE), etc]
Have you any other comments?

7.3 Having completed the documentary analysis, a draft of the report was circulated to the members of the research advisory group, the National Drugs Evidence Group and to the other key experts where possible. Members of these groups were contacted to request their participation in a structured interview which was conducted either face-to-face or by telephone if that was not possible. Prior to commencing the interviews, the interviewee was informed of the procedure for confidentiality and accuracy. This involved:

- Assurance that none of the individuals would be quoted by name.
- If direct quotations were used, the interviewee would be given the opportunity to review these for accuracy, although the quotations would not be attributed.

7.4 At the start of each interview, the interviewees were asked if they were clear about the process and were happy with the method of recording. None objected to this.

7.5 The information presented below is an overview of the responses obtained in the interviews. A total of 16 interviews were conducted between 23 November and 22 December 2009. Two of those approached did not feel that they had enough specialist knowledge to contribute and so declined to participate.

The Evidence Base in Scotland

7.6 A number of the respondents expressed their dismay at the scarcity of the existing research evidence base in Scotland.

7.7 Several of the respondents felt that there was a strong pool of addiction researchers and academics who would generally be willing to work together, but the limited nature of research funding and the lack of programme research or clear strategic research aims have hindered the development of potential research collaborations across Scotland.

7.8 Another respondent felt that, while there was considerable innovative practice in Scotland, this was not reflected in a commensurate evidence base, particularly since the demise of the Scottish Executive's Effective Interventions Unit (EIU). This respondent also contrasted the situation with the alcohol evidence base which was perceived to be more established and where there was a greater academic consensus.

7.9 Existing research work that was identified included:

- Follow-up study of survival and long-term injecting cessation (Edinburgh included as part of a multi-site study)
- Pharmacy supplementary prescribing study (Aberdeen)
- Training in psychosocial interventions for pharmacists (6 centres)
- Study of supervision arrangements for methadone (Aberdeen)
- Scottish Government funded evaluations of the pilot community rehabilitation projects initially funded by the outgoing Liberal/Labour administration, including LEAP (Edinburgh).
- Additional recently completed research includes assessments of arrest referral and drug courts, the evaluation of mandatory drug testing of arrestees, and evaluations of homeless interventions and a psycho-stimulant clinic (all funded by the Scottish Government)
- Initiation of the drug-related deaths database and the development of Scottish Morbidity Record 25 (SMR 25a&b) to enable better data linkage

7.10 There were also suggestions that there was a lot that could be learned from the English model of developing the national database for treatment (National Drug Treatment Monitoring System, NDTMS) and using this as the basis of treatment outcome research, as reported in the Lancet article (Marsden et al, 2009) in which positive treatment outcomes were reported – in the first six months of treatment, more than one-third of heroin users and more than half of crack cocaine users reported that they were abstinent from illicit drugs²³.

²³ The follow-up options available on the Scottish Drug Misuse Database (SDMD) Follow-up Reporting System will provide information on clients throughout their care episode with data collected

7.11 There was considerable discussion about the DORIS project and whether it had satisfied all of our knowledge needs around treatment effectiveness in Scotland (see Chapter 4 for an overview). Concerns raised included the length of follow-ups within a recovery focus, and whether it provided a sufficient platform for testing recovery-oriented approaches such as the community rehabilitation model implemented by Glasgow Addiction Services and in the Lothians and Edinburgh Abstinence Programme (LEAP). This led some respondents to suggest that there still remained the need for cohort studies with longer-term follow-up windows.

7.12 Another cohort that could yield further follow-up research would be work done around a cohort of methadone service users in Glasgow although it was acknowledged that not as much of that had been published as would have been desirable to date. It was also suggested that the NDTMS data (including the Treatment Outcome Profile) provided a huge research resource that could be made available for a wide-range of policy and research projects, and that similar potential existed for outcomes research on a treatment seeking population identified through SMR25, the treatment forms used in the Scottish Drug Misuse Database (SDMD). Thus, one of the ongoing NTA projects in England, identified by a key informant is the generation of a 'data warehouse' for offending and treatment data that can start to answer questions about long-term changes in behaviour in treatment seeking populations.

7.13 There was also the perception that there have been important pieces of work in policy in Scotland including the *Essential Care* report reviewed in Chapter 6, which was seen as having set the scene for *The Road to Recovery*. There was also the positive perception that the introduction of follow-up reporting in the Scottish Drug Misuse Database and the development of a drug death database would significantly improve the monitoring function, although it was acknowledged that it will take some time before these are ready for analysis that can inform policy. However, the aim is that this will begin to yield data on outcomes and recovery, and will also provide additional information about the numbers of children living with drug users entering treatment.

What are the Research Gaps Pertinent to *The Road to Recovery*?

7.14 The key domains of *The Road to Recovery* that needed to be examined include clearer definitions of what is meant by recovery, and some methods for reconciling population level indicators with the assumption that recovery is an individual process. It was also suggested that we have little evidence around what configuration of services are needed to enable the diversity of individual expressions in recovery journeys. Another consideration that needed to be examined was that of 'citizenship' and how this links to broader political goals of social inclusion, and what the need for treatment is if natural recovery is to be considered seriously. Another respondent summarised the key research challenges that are salient for the implementation of *The Road to Recovery* as:

at initial assessment, 12 week follow-up and then annually for retained clients or at discharge for those exiting treatment. This will include measures of substance use, social functioning and child care and a process assessment of the interventions received.

- The challenge of translating the existing recovery evidence base to drug users and to the Scottish context.
- Within the Scottish drug using population, applying these principles equivalently across specific groups such as stimulant and opiate users, younger users and minority groups.
- Testing the assumption that there are lots of problem drug users who have the potential for recovery, who are not currently achieving it, and who can be assisted by a new approach, and whether treatment services can have a positive impact on the recovery trajectory of individuals.
- Addressing co-morbid drinking and switching from problematic heroin to alcohol use.
- Assessing the effectiveness of medication assisted recovery as a parallel path to abstinence-oriented recovery.
- Assessing staffing and cultural issues at play in developing a recovery model, and being clear about what the outcomes framework is for services.
- Identifying the mechanisms by which recovery research questions could be tested in pilot formats and approaches.

7.15 As a footnote, one of the respondents observed that the Scottish Government (and Executive) had produced a huge amount of literature but it was questionable how much of this had shaped or even influenced policy or practice. Another respondent felt that there was a problem about sharing the existing information and that much of the good work that had been done around evaluation of services and projects had not been widely disseminated, to either policy makers or practitioners, in Scotland.

7.16 There was also a key question around whether the introduction of a recovery culture in Scottish treatment services would fulfil the broader social change issues around social and welfare issues of effective reintegration and active participation in society and the economy.

7.17 Another respondent felt that there needed to be considerable focus on the shift required in the professional culture and the resulting implications for workforce training and development within a recovery model. There is the presumption that evaluating such change will require not only implementation issues but also should incorporate the time window required to embed a recovery culture effectively.

Areas for Further Research and Investigation

7.18 Key areas for research in Scotland that were identified included:

- Research into heroin injecting and the learning from the Randomised Injectable Opioid Treatment Trial (RIOTT) of injectable heroin in England
- Assessing the options available as substitute medications including studies comparing methadone with buprenorphine and suboxone
- More longitudinal studies
- More research on older drug users, including late onset drug problems to assess whether we really have an 'ageing' drug using population
- Work to improve the adequacy of the current prevalence estimations
- More research examining the effectiveness of residential rehabilitation treatment,

including rapid detoxification

- Primary care as a research setting was seen as important, both in terms of the optimal models for the delivery of shared care treatment and of an evidence base that included GP settings as part of a treatment outcome model

7.19. However, one respondent felt that Scotland was still struggling with the basic data questions about what is being delivered and to whom, and there was a perception that services were still struggling to cope with the data demands placed on them. It was also recognised that there are issues around the timeliness of data and that the Scottish Drug Misuse Database (SDMD) does not necessarily capture all that is needed.

7.20 However, the data go back to 1998 (although the recording system has changed since then) and there is the possibility of follow-up work and data linkage. A follow-up recording system has been introduced to track clients' progress through treatment. This will permit an assessment of the relationship between interventions received in treatment and changes in substance use, housing and employment, legal situation and family circumstances. Baseline data is collected at the time of treatment engagement with follow-up data collected at 3 months and then on an annual basis for those remaining in treatment. Information will also be collected at the point of transfer to another service or discharge for those who exit the treatment system.

7.21 Further data linkage is planned to take place between information in the SDMD and all the other alcohol / drug related data sources available within ISD. ISD is currently working with key stakeholders including Alcohol and Drug Partnerships, drug and alcohol services and the Scottish Government to inform the analytical strategy which will underpin this linkage and analytical work.

7.22 These developments should allow some of the basic treatment monitoring that is collected in England using NDTMS to be assessed in Scotland, and also to enable wider research questions to evolve from the basic data management processes. It will also enable basic mapping of 'treatment journeys' as people move through different treatment providers and episodes of care in their overall recovery journey. Mapping this information will be essential to our understanding of recovery pathways.

7.23 Nonetheless, these improvements did not mean that there were not fairly basic research questions to address about why Scotland has such a high drug use prevalence rate when compared with the rest of the UK and how this relates to both culture and deprivation factors. While there was a perception that Scotland did not need to replicate all the evidence-development work done elsewhere, there was a recognition that much greater attention needed to be devoted to questions of knowledge transfer and the application of principles of research from other settings.

7.24 There are also key questions to be answered about what organisational factors promote recovery and also to consider national survey work that might start to address research questions around 'natural recovery' in populations who do not utilise formal treatment services. Another interviewee observed that the local issues of good workers and services are often ignored where those very personal and local

issues may be at the heart of what will promote recovery. There is a major concern that recovery is such a localised issue, contingent on peer effects and the contextual and historical impact of communities, that an evidence base will look much looser and be based on broad principles of recovery rather than specific interventions to be delivered in a particular order.

Potential Areas for Funding and Coordinating Research

7.25 Participants were also asked about potential funding sources for research, and representatives from independent funding bodies in Scotland were included in those participating in the research. Among the potential funding sources suggested were:

- Medical Research Council (MRC)
- National Institute of Health Research (NIHR)
- Chief Scientist's Office (CSO) in the Scottish Government
- Health Service Research Committee (HSRC)
- European Union (EU)
- Wellcome Trust
- Robertson Trust
- Joseph Rowntree Foundation
- Lloyds TSB Foundation
- Cross-Governmental Research Programme on Drugs (CRGPD).

7.26 Outline summaries of the priorities and funding mechanisms of each of these organisations are set out in Appendix 2.

7.27 In England, the Cross-Government Research Programme on Drugs (CGRPD) has been set up to improve the development and use of the evidence base by better coordinating drugs research across Government. The core research priorities for CGRPD are to:

- Strengthen understanding of aetiology, prevalence, incidence and patterns of drug use
- To improve the understanding of drug use in core populations, including young people, offenders, BME groups and families
- To review measures of drug-related harm
- To develop understanding of treatment, prevention and other demand-based indicators
- To improve the understanding of drugs markets and how to tackle them
- To strengthen understanding of public perceptions and confidence.

7.28 The CGRPD will not commission research and the funding of research will remain the responsibility of individual departments but it will oversee progress to meeting the overall targets of the English drug strategy. However, it is essential that Scottish Government and NDEG develop a relationship with this group in terms of shared opportunities for research and joint mechanisms for assessing the effectiveness of study outcomes and implementation. As one of the objectives of CGRPD is to develop and communicate a shared vision for future drug research, there are potential benefits to communicating with this group around the

development of the evidence framework emerging from this review.

7.29 Around funding issues, one respondent felt that the key was to get proper funding for strong research designs with suitable follow-ups as we have been too reliant on outcome studies that are increasingly out of date and are based on insufficient numbers and inadequate follow-up periods. One concern expressed was that people are in such a rush to adopt recovery principles that they are doing so without the proper evaluation mechanisms being in place.

7.30 Finally, participants were asked to identify examples of good practice in recovery in Scotland with the most commonly cited example being LEAP (Lothians and Edinburgh Abstinence Programme), but even there some respondents suggested that the evaluation did not go far enough and that it was not a service that would meet all needs. One respondent answered in terms of the examples of good practice from the mental health field, including the social model from New Zealand, and examples from the Scottish Recovery Network.

Aspirations for the Review

7.31 At the most basic level, it was hoped that the review would produce:

'recommendations that are evidence-based, do-able, practical, pragmatic, manageable, useful for broad populations and acceptable to patients.'

7.32 More specific suggestions were for a graded summary of the evidence base, better awareness of the research going on in Scotland, and commitment to research influencing policy.

7.33 It was suggested that setting a clear research agenda which could be agreed with other funding bodies was important and that the review suggested some broad themes of developmental research along with some specific study areas. Another respondent suggested that the identification of significant research gaps should be based in part on an assessment of what is already working in Scotland that was beyond the scope of the current review, and the existing building blocks that could reasonably be built upon.

7.34 One respondent suggested both specific actions – such as improved assessment, better integration between treatment services, more partnership working – as well as broader aspirations such as recovery focussed movement, the development of recovery champions, greater involvement for carers and families and changes in the philosophy and delivery of specialist treatment.

Identifying the Way Forward

7.35 One of the respondents suggested that a Scottish Drugs Research Forum would be a useful mechanism for pinpointing and prioritising areas for investigation and to highlight the areas of strength and weakness in the evidence base. This could be linked to the National Drugs Evidence Group (NDEG) or be a sub-group of NDEG whose key aims would be:

- Developing an ongoing dialogue with practitioners and recovery groups about knowledge and evidence gaps.
- Linking that to international research evidence where appropriate and making links with research collaborators and funding bodies in the UK and internationally.
- Working with policy makers and service providers around generating an implementation framework for practice and for disseminating key evidence messages.

7.36 The same respondent also suggested developing a network of key organisations from inside the drugs field (NHS and Health Scotland, SDF, NTA, the Alcohol and Drug Partnerships [ADPs]) and organisations with a broader remit (NICE, SIGN, MRC, Royal Colleges, Education for Scotland, ACPOS, children and young people's services and social work) to commit to joint work. A second respondent made a similar suggestion around a research consortium to generate an infra-structure that would be similar to equivalent work in the mental health field.

7.37 However, one of the participants felt that this did not go far enough and that what was required was a structural change:

'what is needed is research leadership and infra-structure. Pay for a big name professor to come to Scotland for five years and do for drug research what people like Sir Philip Cohen has done for cancer research. Set up a research facility which can provide a lead nationally and internationally. We have the worst drug death rate in the world as well as one of the highest prevalence rates. We need to be getting serious about research and that means spending a lot of money.'

CHAPTER 8: REVIEW AND CONCLUSIONS

Summary: Overview of Recommended Developments

The review confirms the need for a more strategic, programmatic approach to developing the drugs recovery evidence base in Scotland. To ensure that the implementation of *The Road to Recovery* is informed by the best possible evidence, the authors suggest the following actions:

1. Develop a drug research forum linked to the National Drug Evidence Group to focus on three key areas of research activity - recovery-specific; treatment and interventions; and prevention and public policy.
2. Develop a key focus on the transitions to abstinence and the continuity of care in the course of recovery journeys, with a significant focus on community and mutual aid groups.
3. Improve the understanding of treatment delivery and the 'technology transfer' of evidence within a framework of generating an improved evidence-based culture.
4. Improve our understanding of the benefits and costs of long-term prescribing and how to generate recovery communities within maintenance treatment services.
5. Prioritise research and subsequently negotiate with key bodies around programmatic research funding support both within Scotland and as a participant in international recovery and addiction work.
6. Develop appropriate collaborations and funding opportunities outside the addictions silo looking to the key areas of recovery gain to evaluate and fund recovery-oriented activities.

Where Are We Now?

8.1 This review has found that while there is a growing body of research evidence in the USA around recovery from addiction, there are limitations in translating the learning from this evidence into a Scottish context. Scotland has a core group of experienced and skilled researchers who have used a wide-range of research techniques and methodologies to produce some innovative work around epidemiology, treatment effectiveness and treatment innovation. However, the lack of research programme support has meant that this work appears patchy in the evidence base, whilst it is also apparent that it has been the result of the endeavours of a small group of individuals, rather than a growing body of experts, particularly those tied to the recovery agenda or to treatment and prevention providers. Research and evaluation of recovery in Scottish contexts has also fallen behind the innovations that have taken place in recovery practice in Scotland (eg the innovations observed in recovery communities). Therefore, in relation to the evidence reviewed and in particular the USA literature, the limitations observed were:

- much of the research is dated;
- much of it is qualitative and based on samples of unknown representativeness, with only limited outcome and epidemiological evidence to substantiate some of these preliminary recommendations;
- a significant proportion of the available evidence has focused on alcohol using populations;

- there is a limited evidence base about the role of long-term treatments on recovery outcomes;
- the USA client groups and treatment response systems are significantly different to those in the UK, which should be taken into account when making comparisons or interpreting findings.

8.2 As a result, the limitations described above are confounded by a modest local evidence base in Scotland of ‘what works’ in recovery, which has resulted in a reliance on evidence from England and the USA on the effectiveness of particular types of treatment, for instance substitution treatment, detoxification and rehabilitation. This is particularly relevant in a country where expert consensus would suggest that there is an evidence gap around local research and evaluation.

8.3 Nonetheless, there is a strong and flourishing recovery movement in mental health in Scotland coordinated through the Scottish Recovery Network²⁴ (and a linked research group in the UK called the Recovery Research Network), that has provided evidence for policy and practice in this area. However, there is a limited evidence base using cohort and outcome research methods that use standardised instruments as identified in the Joint Position paper (Care Services Improvement Partnership et al, 2008) so the drug recovery movement, in Scotland and elsewhere, must develop its own empirical support and infrastructure to enable not only recovery research, but a range of approaches to evaluate, audit and review recovery processes. There are sufficient examples of both academic research (in the form of outcomes studies such as DORIS and the Glasgow methadone cohort research programme) and pilots of innovative practice (such as the work on naloxone done in Glasgow and Lanarkshire and the pharmacy work in Aberdeen) to suggest that there are the foundations for developing a drugs research framework for Scotland. There has been some strong work done around epidemiology and mortality (e.g. Copland et al, 2004), but this has not resulted in sufficiently programmatic research. The major benefit that could result from a forum involved in collaborating with NDEG to implement a Drugs Research Framework is that good quality work could be produced on a planned and systematic basis with appropriate follow-ups and the capacity to develop clear themes of evidence and knowledge gathering focused on recovery that are built around a solid core of standard monitoring data. This could enable research teams to develop the skills and expertise and build research units that can represent Scotland internationally and participate in major international research collaborations on recovery and the drugs evidence base more generally. One of the key legacies from *The Road to Recovery* should be a commitment to ensuring that this omission is addressed.

Measuring Recovery and Treatment Effectiveness

8.4 There are also clear limitations in terms of what we know about the Scottish context. Both of the more recent UK outcomes studies – DTORS in England and DORIS in Scotland – have had short outcome windows, which means they can say relatively little about the long-term recovery transitions that individuals experience. They also only offer insights into the outcomes of those individuals who have sought formal treatment. As raised in the consultation phase of this research, key experts in

²⁴ Scottish Recovery Network website, <http://www.scottishrecovery.net> [accessed 5th March 2010]

the drugs evidence field also highlighted questions around the types of information that are being measured – the focus is frequently on health, offending and risk, while a transition to studies of long-term recovery would involve much greater assessment of lived experiences and quality of life, active participation in families and communities and active engagement in meaningful activities. Any recovery-focused outcome studies would need to examine a much longer time window – to account for the putative 5 to 7 years that is typically associated with recovery from opiate use. They would also need to look much more at the effects of recovery oriented services (such as community and residential rehabilitation, and engagement in mutual aid and other community groups), which would require a move away from the current focus on acute care (methadone treatment, detoxification, etc) as the ‘index treatment’ that is assessed in most of the UK and international outcome studies conducted to date. Thus, cohort or outcome studies would potentially cover longer time windows, use different measures of outcomes and would begin with different trigger points for inclusion as the starting point of a recovery journey.

8.5 Thus, any research agenda and evidence framework emanating from this review needs to account for two tracks – those that focus specifically on recovery as a long-term and community-based activity and those that relate to the effectiveness of acute treatment, where there is a much greater international evidence base but the same questions persist about translating research findings to the Scottish context. This reflects the findings in Chapter 7, where key experts in the drugs evidence field identified major gaps in knowledge around types of substitution treatment and their relative effectiveness (methadone versus buprenorphine), as well as studies of the effectiveness of detox regimes, of rehabilitation and more generic questions around patterns and prevalence of drug use in particular groups, such as older adults, and around particular substances for example psycho-stimulants. However, there is a broader research agenda that links to both recovery and to treatment effectiveness that is around the comparability of different fields.

8.6 There is also a much smaller evidence base around criminal justice populations and long-term recovery and about the recovery pathways of adolescents. There is also a limited research evidence base about the differences in recovery pathways by gender, ethnicity or substance use profile and a lack of sufficient treatment effectiveness knowledge mediated by these demographic variables. Finally, there is an extremely limited addictions clinical research capability in Scotland particularly around the ‘what works’ agenda, with no adequate evidence base around technology transfer and implementation questions. This is key in terms of both being able to translate international rules and principles (such as those produced by NICE and SIGN), but also about developing in clinicians and other practitioners the basics of audit and evaluation as the core building blocks of an evidence-based culture for helping services.

8.7 However, *The Road to Recovery* does not only deal with adult problem drug users and their issues of addiction and dependence. The development of a balanced evidence base requires the production of an overall knowledge map that allows comparisons to be made between measures of recovery and relevant outcome measures in the other key strands of public policy – drug education, wider prevention, supply reduction, criminal justice and disease prevention/harm reduction. An increased focus on developing a common evaluation language for interventions –

perhaps measured in terms of effect sizes, outcomes and health/cost effectiveness – would enable policy makers to decide on the relative merits and impact of different interventions in different domains covered by *The Road to Recovery*.

Using Monitoring Data as a Core Building Block in Research

8.8 As mentioned in Chapter 7, the initiation of follow-up data obtained through the enhanced Scottish Drugs Misuse Database (SDMD) Follow-up Reporting System has the potential to significantly improve the breadth and quality of monitoring information on the medium and long-term outcomes for clients accessing drug treatment services in Scotland. Data will be collected at the following points throughout a clients' care episode – initial assessment; 12 week follow-up; annual follow-up; discharge from service; and transfer from service. These multiple data points for long-term treatment clients will provide data that will constitute the basic building blocks in mapping both treatment populations and of change processes at a population level.

8.9 This will provide not only a basic performance management framework, but will also enable the comparative effectiveness of different modalities of treatment to be assessed alongside overall treatment impact on substance use and on wider outcomes around social functioning, including the links to family involvement. This will enable basic mapping of the overall treatment population as well as the tracking of:

- variability by age and gender
- applicability to diverse populations (including BME groups)
- relevance for young people and primary offenders
- links to the mental health recovery movement and the issues that arise in dually diagnosed populations
- geographic variations, including rural groups.

8.10 ISD Scotland are undertaking a programme of quality and development work over the next 3 to 4 years to improve this process and to enable consultation about what people would like to see from the data collected. It is hoped that, by end of 2011, this will start to result in more meaningful outputs. This will also enable nested studies to be produced in which monitoring data are used – such as links to prescription data, GP monitoring and death data.

8.11 The “National Drug-Related Deaths Data Collection Form” came into use in Scotland on the 1st of April 2009. This collects 80 items of data on each drug-related death grouped into:

1. personal details
2. drug using history
3. contact with drug treatment services and GPs
4. medical history
5. current substitute prescription / other prescriptions relating to drug problem
6. criminal justice information
7. scene of death
8. toxicology and cause of death.

8.12 While this will provide an essential wealth of information about the pattern and profile of drug-related deaths in Scotland, it will also provide a foundation for analysing data from both the Drug Related Deaths (DRD) and SDMD databases, which has the potential to enable the mapping of treatment engagement in relation to drug-related mortality as a core part of the process of linking datasets and improving the sophistication of the overall data monitoring system.

8.13 Furthermore, this is a building block that can be used for academic collaborations with ISD Scotland as well as linkage to other relevant data systems such as housing, criminal justice, employment and training, and child welfare and education. Thus, the possibility of having linked data on mortality, treatment uptake and possibly also treatment waiting times and prescriptions will provide a crucial foundation for the development of monitoring and mapping data that can be accessed by academics and research teams and that can provide the core set of information on which specific treatment and recovery questions can be based.

Setting a Research Agenda for Recovery from Addiction

8.14 So what are the primary knowledge gaps around recovery? At the most basic level, there is almost no descriptive information on the recovery groups and activities that take place across the ADP areas in Scotland. Similarly, there is almost no information on the impact that recovery activities taking place in Scotland have had on drug using populations and on the wider community. Reading from the recovery literature, a recovery focused research agenda would have five 'layers' of impact to be measured and assessed:

1. The number of people engaged in recovery journeys and the impact of treatment and support on their lives – measured in terms of quality of life, active engagement in communities and meaningful activities and sustained abstinence from their problem substances.
2. Measurable impact on the quality of life and functioning of family members such as the reduction in psychological health symptoms reported in the cohort of children of fathers attending AA by Andreas and O'Farrell (2009).
3. Active engagement and growth in the number of recovery communities and recovery organisations – this would include mutual aid groups like SMART Recovery and NA, but also local support groups and non-affiliated recovery support services and systems that provide visible recovery support and inspiration in local communities. This should be evaluated and tested as part of a commitment to developing an evidence base around long-term support systems that underpin developmental recovery journeys.
4. Impact on local communities in terms of the positive contribution that individuals in recovery and recovery groups can make to the lives of communities through active participation in community growth and development and economic regeneration of areas.
5. The emergence of community 'tipping points' – the most ambitious goal for recovery activities, and so for recovery research, is to show whether the impact of recovery groups and individuals fundamentally shifts the attitudes and behaviours of a community towards substance use, and so acts as a form of prevention and early intervention in high risk communities.

8.15 These five zones of potential impact and benefit should all be incorporated within a recovery research and evaluation agenda. Thus a core research requirement is to address key questions about the recovery debate by translating the definition of recovery given in the strategy into a research model that operationalises and defines key indicators and that attempts to account for each of the five types of positive recovery outcome indicated above. It is not sufficient to measure recovery by focusing only on the individual outcomes that have been the focus of addiction outcome studies to date. The basic building blocks of recovery research would include:

1. To conduct 5 to 7 year follow-ups from new help-seeking populations – this would mirror the estimated period for a ‘typical’ recovery journey from the point of last illicit use to a risk of use not significantly greater than for the general population as a whole. Alternatively, to attempt to access existing research populations such as that recruited for the DORIS study, the Glasgow methadone cohort or the LEAP cohort, or to collaborate in conducting longer term follow-ups for the NTORS or DORIS research cohorts in England and Scotland. By using recovery focused research instruments, the extent of recovery achievement could be assessed and the developmental pathways associated with recovery could be mapped, albeit with retrospective reconstruction. While commissioning prospective studies is expensive and means data are a long time in coming, the use of exclusively retrospective methods are limited by post hoc rationalisation and problems with sampling. Accessing existing research cohorts may provide a partial solution to this problem.
2. To identify a cohort originally recruited and accessed through SMR forms and followed up at 5 to 7 years, supplemented by additional groups for under-researched populations such as graduates from community and residential rehabilitation in Scotland, and from mutual aid groups. This would have the disadvantage of lacking satisfactory baseline information (although some basic information would be available from the SMRa form), but would enable pathways to recovery to be mapped, and there may be ethical issues arising from not obtaining client permission to contact them at the baseline data point.
3. To use general population survey methods to look at natural recovery processes in Scotland as part of the development of a recovery epidemiology. Alternatively data from the Psychiatric Co-Morbidity study in England could be used to attempt to recreate some of these data retrospectively.
4. To study planned change at the level of either treatment service providers or treatment systems (ADPs) where evaluation methods are used to test the implementation of training and culture change in services on higher level recovery outcomes and worker satisfaction measures. It is clear from the mental health recovery agenda that recovery systems need to be culturally embedded in treatment systems and attempting to map how this works, possibly on a pilot basis, will be essential in developing recovery oriented systems of care in Scottish treatment services.

8.16 Part of the proposal outlined here – as will be discussed below under funding issues – is to separate out the research agendas and their subsequent financing for acute addiction treatment and for recovery models. This is not to imply that there are not overlaps, nor indeed important continuities, but the acute model builds on an infrastructure of research that already exists to some extent in Scotland and is strong

in England, while the recovery models will use a much wider array of research techniques and are likely to involve different expert collaborators (such as those identified in chapter 5) with a view to building a new cohort of researchers focused on the long-term, developmental and community-based aspects of the recovery journey. The next section switches focus to examine a research agenda around acute treatment of substance dependence.

Developing an Evidence Base for ‘What Works’ in Scottish Addiction Treatment and Other Areas of Intervention

8.17 The core questions persist around the role of treatment and related interventions in promoting recovery and reducing the harms associated with illicit substance use – those related to physical and psychological health, public health, crime and the fear of crime, and protection of the children of drug using parents. This would require the development of a coherent programme of treatment research that is linked to the primary recovery agenda.

8.18 Given the concerns that have arisen in the USA literature (e.g. McLellan et al, 2006) and in the UK (Best et al, 2009) about implementation of evidence-based practice, this would also divide into two programmes – those concerned with efficacy (such as trials of new interventions and medications) and those dealing with effectiveness (such as evaluations of packages of treatment and ‘technology transfer’ studies). This will inevitably involve issues around workforce and the integration of recovery working practices and principles, as well as the evidence base, to a range of professional groups and those training to become:

- Addiction psychiatrists and GPs with a special interest
- Mental health nurses
- Social work staff and students
- Occupational therapists
- Psychologists
- Linked professionals such as those engaged in criminal justice, youth work, housing and vocational support and education.

8.19 While there are grounds for importing the principles of trials – using the methods of NICE, SIGN and the Cochrane and Campbell review systems, the technology transfer questions are critical in determining what actually works in applied contexts, as well as the impact of real packages of care on those seeking help for substance misuse in Scotland. This would include, but not be restricted to, some understanding of treatment pathways and technology transfer questions that would assess the ‘key ingredients’ including measures of therapeutic alliance (the relationship between the carer/professional and client), building of recovery capital and delivery of evidence-based psychological interventions in predicting long-term recovery journeys. It would also include questions of organisational functioning (Simpson, 2009) and the relationships between service structure and workforce development that will determine the quality of what is actually delivered to clients as packages of care in treatment. Linked to this should be a research programme that would address some of the key omissions in the addictions field generally about recovery that are particularly evident in Scotland. These would include:

- Research into engagement, retention and short and long term outcomes for abstinence oriented services, in particular detoxification and rehabilitation, and the effectiveness of linkage to ‘aftercare’ supports in the form of day programmes, vocational programmes, stable housing and family support programmes. While there are omissions in the knowledge base in Scotland around acute treatment, they pale into insignificance in comparison to the gaps around the transitions to long-term abstinence and ongoing engagement in recovery.
- Better understanding of the long-term impact of maintenance prescribing on functioning – including cognitive performance, motivation, self-esteem, in addition to assessments of the provision of recovery support within maintenance treatment programmes. Scotland has a large number of clients on long-term prescribing and it is essential that the recovery potential of this group is assessed and that pilot projects are evaluated in order to initiate recovery activities within maintenance treatment services.
- The delivery of real choices to clients in treatment around medication (particularly methadone or buprenorphine, but also including dihydrocodeine) and about the intensity and type of psychosocial packages that are offered alongside medications. Crucial to this area of investigation would be assessments of the options for detoxification and the development of support systems (including linkage to mutual aid and other community groups) to assess the impact on the risk of relapse.
- A wider programme looking at the support and delivery of brief and intensive psychosocial programmes to stimulant users, non-dependent opiate users in the criminal justice system and problem users of other drugs. The treatment system has been developed primarily around injecting heroin users and this has led to a reliance on substitute prescribing that excludes users of other substances and may provide sub-optimal service delivery to polydrug users, including those who switch from opiates to alcohol.

The Development of an Oversight System

8.20 In addition to the recovery-specific agenda and the addictions interventions agenda outlined in Chapter 7, there is also the broader array of prevalence, prevention, education and public health questions some of which are specified in Chapter 7 following the consultation with key experts in the drugs evidence field. The suggestion made for a Drug Research Forum in Chapter 7 would seem to fall naturally within the remit of the National Drug Evidence Group with potentially three research subgroups dealing with the three broad areas that have been synthesised from the review chapters and the interviews conducted with key experts. These areas are about building on the existing research work, that focus more directly on recovery and that then link into wider policy and public wellbeing agendas:

1. recovery-specific research
2. addictions treatment and intervention research
3. wider questions of public health, prevention, education and prevalence and patterns of drug use.

8.21 This forum would have four main objectives:

1. To develop a research agenda using the outline above as the starting point. This would link to the Drugs Evidence Framework that, at the time of writing, is being drafted on behalf of the National Drug Evidence Group. The Research Evidence Framework provides the initial outline of key areas that will require prioritisation through NDEG, and then construction of a research programme to be consulted upon with a range of key stakeholders.
2. To bring together academics, policy-makers, practitioners and those involved in standard data monitoring to establish a consensus and to agree on collaborations and targets for research.
3. To liaise with equivalent figures in England and internationally to link into ongoing work in other places (such as the recovery research work being conducted in the USA, and the monitoring research done by the NTA in England), to participate in multi-site research collaborations and to seek international funding sources.
4. To generate a research culture both by attempting to generate funding from governmental and external bodies and by promoting an evidence-based culture in the planning, commissioning and delivery of services in which – in addition to formal monitoring returns – simple levels of audit and evaluation can also contribute to the knowledge base. Part of this latter function would also be to generate a local knowledge repository for Scotland and to ensure the dissemination of key knowledge to relevant practitioners and planners and to national and local government.

Funding the Work of the Forum

8.22 The key experts participating in the consultation stage of this research provided information on a wide-range of potential funding sources – listed in Chapter 7 - and one of the first tasks of the suggested Scottish Drug Research Forum could be to engage with these groups to discuss their willingness to participate in a dialogue with the group about the opportunities for any potential funding consortiums – and to approach government about the possibility of matching any funding that was drawn from these sources. As part of the interview process, one of the main charitable bodies, Lloyds TSB Foundation, has already expressed a willingness to participate in such discussions.

8.23 However, one of the key lessons from a recovery agenda is that we need to move away from a 'silo' model of addictions to something much more ambitious and broad-ranging. The key successes of recovery, as outlined throughout this report, go way beyond individual recovery pathways to look at families, communities, regeneration and prevention. For this reason, research investigations around recovery – and indeed the funding of services – should not be confined by the label of addiction. As a consequence, the key agenda that recovery research should be tapping into is a much broader question around social inclusion and community development (which should complement but not compete for funds with traditional clinical research) where recovery already plays a key role but one that is poorly charted by academics and where there is a limited academic heritage from an addictions perspective. Thus, one potential area for funding of research and of service delivery is around local government and communities work and this is also a potential source for collaboration with academics from a different disciplinary

backgrounds. Likewise, the core aim of recovery in disrupting inter-generational transmission means that a similar set of funding opportunities and collaborations arise with family services and research funders into family work. There are potentially similar opportunities around housing, social care, employment, education and training, and in extending the aims of prevention to wider community issues.

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APPENDICES

Appendix 1: Review of documents cited in *The Road to Recovery* and analysis of their relevance to recovery and the evidence base

Appendix 2: Independent Funding Sources

Appendix 1: Review of documents cited in *The Road to Recovery* and analysis of their relevance to recovery and the evidence base

Source 1	Reducing Re-offending: National Strategy for the Management of Offenders
Author(s)	Scottish Executive
Year	2006
Format/Availability	PDF
Type of Paper	First national offender management strategy
Purpose of Paper	To set a target of 2% reduction in reconviction rates in all types of sentences by March 2008.
Original Data	No
Evidence Quality	Not applicable
Intervention	To elicit 'sustained or improved physical and mental wellbeing; the ability to access and sustain accommodation; reduced or stabilised substance misuse; improved literacy skills; employability prospects increased; maintained or improved relationships with families, peers and community; the ability to access and sustain community support; the ability to live independently' (p5).
Effect	Focus on interagency working for sharing of resources expertise and information, 'to support transitions, particularly from prison to the community' (p16).
Sample size	Not applicable
Relevance to Scotland/ Technology transfer issues	Specific to Scotland
Relevance to Recovery (Individual)	One of the aims is challenging barriers and stigma to reintegration through communication and information management.
Relevance to Recovery (Service)	One of the key aims is to focus on integrated case management and to 'promote the enhanced through-care strategy, including the Through-care Addiction Service' (p17).
Relevance to Recovery (System)	The aim is to use existing partnership forums such as community planning, community safety partnerships and community health partnerships to engage with community partners like employability, learning and housing.
GAPS/IMPLICATIONS/QUESTIONS	Paragraph 5.4 asserts that 'we would understand more about the effectiveness of work with offenders if more of the data available came from studies which tracked individuals through the system, rather than from statistical 'snapshots''(p28). The strategy also suggests that data should examine the rates of re-offending and the seriousness of offences.

Source 2	Prisoner Survey
Author(s)	Scottish Prison Service
Year	2008
Format/Availability	PDF
Type of Paper	Annual survey of prisoners
Purpose of Paper	'The survey is not simply about asking prisoners their views. The survey is about helping inform and shape change in the SPS and is directed at improving the quality of service delivery in every prison.'
Original Data	Original survey data
Evidence Quality	Cross-sectional survey that achieved an overall response rate of 62% of all adult prisoners in Scotland – response rate down from 74% in 2007.
Intervention	52% of prisoners reported that they had been assessed for drug use on admission to prison; 47% reported that they had been offered help with their drug problem in prison; 28% reported that their drug taking would be a problem for them on their release.
Effect	No data provided on the type, duration or effectiveness of interventions delivered in prison.
Sample size	Not stated
Relevance to Scotland/ Technology transfer issues	Survey conducted in Scotland with good coverage and high response rate.
Relevance to Recovery (Individual)	21% had been receiving treatment for their drug use prior to their imprisonment, and 22% had committed their offence to get money for drugs suggesting a strong linkage and the need for effective continuity of care.
Relevance to Recovery (Service)	High rates of drug use were reported in the 12 months before coming into prison – heroin (49%), cocaine (63%), benzodiazepines (60%) and cannabis (81%).
Relevance to Recovery (System)	28% reported that their drug use would be a problem for them on release, although 45% reported that they would be willing to seek help on their release.
GAPS/IMPLICATIONS/QUESTIONS	The report does not provide information on the quality or continuity of treatment in prison (nor on prisoners satisfaction with treatment delivered) nor about ongoing needs for recovery in and after prison.

Source 3	It's Everyone's Job to Make Sure I'm Alright: Report of the Child Protection Audit and Review
Author(s)	Scottish Executive
Year	2002
Format/Availability	PDF
Type of Paper	Report to improve the safeguarding of vulnerable children
Purpose of Paper	'To promote the reduction of the abuse or neglect of children; to improve the services for children who experience abuse or neglect; to review how well agencies work together and public and professional confidence in these agencies; to identify best practice; to learn lessons from international developments' (p19).
Original Data	Case audit of 188 child protection files; this yielded 11 interviews with children; analysis of Childline and Parentline calls; MORI Scotland survey of public knowledge and understanding of child protection system; questionnaire survey of academics, statutory and voluntary agencies and MSPs.
Evidence Quality	Low response rates to questionnaires and child interview processes
Intervention	'Drug Action Teams and Child Protection Committees are working on reducing the problems arising from parental drug and alcohol misuse' (p143).
Effect	76/188 cases assessed involved children living with substance abusing parents. Concluded that many children live in circumstances that are not acceptable and many children and their parents do not have confidence in the system. 'Agencies are not able to always respond effectively to some problems – parental drug or alcohol misuse, domestic abuse and neglect' (p140).
Sample size	As above
Relevance to Scotland/ Technology transfer issues	Specific to Scotland
Relevance to Recovery (Individual)	Not applicable
Relevance to Recovery (Service)	Not applicable
Relevance to Recovery (System)	Integrated working with child protection committees to improve information sharing, training and awareness of staff and effective inter-agency working.
GAPS/IMPLICATIONS/QUESTIONS	Insufficient needs assessment of newborn children to substance using parents and parents with a history of neglect.

Source 4	Hidden Harm. Responding to the Needs of Children of Problem Drug Users
Author(s)	Advisory Council on the Misuse of Drugs (ACMD)
Year	2003
Format/Availability	PDF
Type of Paper	Summary of evidence – review
Purpose of Paper	To summarise the findings of the inquiry in relation to a series of questions – to estimate the number of children affected by parental substance use; to examine the effects of parental drug use on children; to consider the levels of involvement of key provider agencies; to identify best practice.
Original Data	Witness testimony; secondary data analysis on prevalence; survey analysis of treatment, maternity and social services.
Evidence Quality	Good quality evidence from expert testimony; medium quality level for survey data and lower level for epidemiological assessment.
Intervention	Not applicable
Effect	Evidence of marked inconsistencies in the delivery of interventions in each of the surveyed settings with variation in specialist services, integrated working and provision of help for parents. Limited research information base around risks to drug users and families particularly in the UK context.
Sample size	Survey had overall response rate of 55%.
Relevance to Scotland/ Technology transfer issues	Scotland included as part of overall UK analysis.
Relevance to Recovery (Individual)	Not explicitly targeted but focus on improving family functioning consistent with a recovery approach.
Relevance to Recovery (Service)	Recommended that there was much greater focus on adequate recording of dependent children by specialist services and that these services should 'contribute actively to meeting their needs'. The report also called for better training for staff and for specialist services to provide more effective supports for drug users and their children.
Relevance to Recovery (System)	Expressed the need to listen to the voices of children – need for delivery of a coordinated range of resources to provide support to families.
GAPS/IMPLICATIONS/QUESTIONS	'A programme of research should be developed in the UK to examine the impact of parental problem drug use on children at all life stages from conception to adolescence'.

Source 5	Getting Our Priorities Right: Good Practice Guidance for Working with Children and Families Affected by Substance Misuse
Author(s)	Scottish Executive
Year	2003
Format/Availability	PDF
Type of Paper	Guidance to improve the lives of children affected by parental substance misuse.
Purpose of Paper	To outline what agencies need to ask of families presenting with drug and alcohol problems; to advise on the help available and on inter-agency working and the issues to be addressed to strengthen services and help workforce development in this area.
Original Data	No
Evidence Quality	Not applicable
Intervention	'All agencies in contact with children and their families have a responsibility to act if they become worried about a child's welfare or a parent's ability to care for the child safely and adequately. The welfare of the child is the paramount consideration'. Also required all agencies working with substance misusing parents to have child protection procedures in place.
Effect	Appendix 2 contains a basic checklist for professionals on collecting information about substance use and its impact on parenting.
Sample size	Not applicable
Relevance to Scotland/ Technology transfer issues	Specific to Scotland
Relevance to Recovery (Individual)	Primarily through the commitment to family working and the emphasis on support services for the whole family.
Relevance to Recovery (Service)	Need for shared information and common protocols for specialist substance misuse agencies to work with partner agencies.
Relevance to Recovery (System)	The report made a major commitment to strengthening services for families; and to building strong inter-agency partnerships – and that Drug and Alcohol Action Teams should work to ensure that common policies and protocols are in place for working with families.
GAPS/IMPLICATIONS/QUESTIONS	No clear presentation of evidence and no research about implications on recovery for individuals or families.

Source 6	Hidden Harm – Scottish Executive Response to the Report of the Inquiry by the Advisory Council on the Misuse of Drugs
Author(s)	Scottish Executive
Year	2004
Format/Availability	PDF
Type of Paper	Response to Hidden Harm report
Purpose of Paper	To set out the Scottish context and the framework for the response to the challenges set out in Hidden Harm, and to set the agenda for Hidden Harm New Agenda Steering Group.
Original Data	No
Evidence Quality	Not applicable
Intervention	Aims to set out appropriate performance indicators and include a wide range of agencies including primary care providers and schools within this performance framework. Full response given to each of the 48 recommendations of the Hidden Harm report.
Effect	Scottish Executive had already commissioned research on babies of substance misusing mothers and an evaluation of young people's projects, and indicates the need to extend this work to alcohol.
Sample size	Not applicable
Relevance to Scotland/ Technology transfer issues	Specific to Scotland.
Relevance to Recovery (Individual)	Proposed link to review of treatment and rehabilitation services.
Relevance to Recovery (Service)	The report requires improvements in data collection, training for workers and integration between drug services, children's services and child protection services. Particular emphasis in the report is placed on criminal justice and the potential role of Drug Treatment Testing Orders (DTTOs) in targeting women offenders.
Relevance to Recovery (System)	Although the focus is not on recovery, the response emphasises the need for systemic working and information sharing and joint case management that are relevant to the recovery agenda.
GAPS/IMPLICATIONS/QUESTIONS	No explicit focus on recovery, nor on the potential gains for families of parental recovery.

Source 7	Protecting Children and Young People: Framework for Standards
Author(s)	Scottish Executive
Year	2004
Format/Availability	PDF
Type of Paper	Pledge to children and young people at risk of abuse or neglect.
Purpose of Paper	A charter which 'sets out what children and young people need and expect to help protect them when they are in danger of being, or already have been, harmed, by another person' (p3).
Original Data	No
Evidence Quality	Not applicable.
Intervention	A programme of reform of child protection services and programme for working with agencies and professionals to deliver the pledge.
Effect	The aim is to encourage agencies and professionals to 'reflect on practice and deliver the commitments made in the Charter; avoid duplication of effort; identify ways in which outcomes for children can be improved; and help to plan, as single agencies and jointly, for these improvements' (p9).
Sample size	Not applicable
Relevance to Scotland/ Technology transfer issues	Specific to Scotland
Relevance to Recovery (Individual)	Not applicable
Relevance to Recovery (Service)	Focus on multi-agency working and requiring the role of single lead professionals to coordinate assessments, plans and reviews (p11).
Relevance to Recovery (System)	'Taking account of the needs of the child and their parents, professionals, working together' (p17) to focus on needs and risks, personal and family strengths, support networks and resources available, and the gaps that need to be filled and the resources and options to fill them. There is also a focus on the role of communities in protecting children and developing appropriate strategies.
GAPS/IMPLICATIONS/QUESTIONS	None relevant to recovery.

Source 8	Hidden Harm - Next Steps: Supporting Children - Working with Parents
Author(s)	Scottish Executive
Year	2006
Format/Availability	PDF
Type of Paper	Policy update document
Purpose of Paper	To set out what the Scottish Executive was doing with partners to bring about the improvements required in the Hidden Harm document – ‘to improve the way in which agencies identify, protect and support children and young people living with parental substance misuse’.
Original Data	No
Evidence Quality	Not applicable
Intervention	Legislating to require the sharing of information; placing a duty on all agencies to identify the needs of children; and early and better identification of vulnerable children.
Effect	Not applicable
Sample size	Not applicable
Relevance to Scotland/ Technology transfer issues	Specific to Scotland
Relevance to Recovery (Individual)	Parenting support for fathers in the criminal justice system; relationship counselling as part of the Routes Out of Prison project; improved support for young people caring for parents with substance misuse problems.
Relevance to Recovery (Service)	Requirement for information sharing and inspection of specialist services to assess the impact of specialist working on children. Improve training for specialist staff.
Relevance to Recovery (System)	Requirement for suitable housing for vulnerable families. Each ADP responsible for safeguarding and promoting the interests of children of drug using parents.
GAPS/IMPLICATIONS/QUESTIONS	Although recommendations are laid out, little indication of effective practice and examples of success.

Source 9	Looked After Children and Young People: We Can and Must Do Better
Author(s)	Scottish Executive
Year	2007
Format/Availability	PDF
Type of Paper	Report to initiate improved outcomes for looked after children.
Purpose of Paper	To promote five key outcomes for looked after children – ‘working together; becoming effective lifelong learners; developing into successful and responsible adults; being emotionally, mentally and physically healthy; feeling safe and nurtured in a home setting’ (p1).
Original Data	No
Evidence Quality	Not applicable
Intervention	Improved training for parents, foster carers, residential workers and teachers. Funding 18 local authorities to take forward pilot work to improve educational outcomes for looked after children.
Effect	Not applicable
Sample size	Not applicable
Relevance to Scotland/ Technology transfer issues	Specific to Scotland
Relevance to Recovery (Individual)	Emphasis on safe, secure and appropriate accommodation for looked after young people.
Relevance to Recovery (Service)	Care Commission tasked to review the health of looked after children and young people.
Relevance to Recovery (System)	Focus on partnership approaches “with local authorities to deliver a more robust and comprehensive data collection and reporting framework” (p16). Also emphasises the importance of continuity of care and sensitivity around transition points.
GAPS/IMPLICATIONS/QUESTIONS	None relevant to recovery.

Source 10	Getting It Right for Every Child in Kinship and Foster Care
Author(s)	Scottish Government
Year	2007
Format/Availability	PDF
Type of Paper	Strategy document
Purpose of Paper	'The purpose of this kinship and foster care strategy is to demonstrate the commitment of the Scottish Government and local government, firstly to the children and young people concerned and secondly, to those who care for them.... And to ensure that children and families receive personalised care, which meets their complex needs over time'.
Original Data	No
Evidence Quality	Not applicable
Intervention	Aim is to ensure that all children are safe, nurtured, healthy, achieving, active, respected, responsible and included.
Effect	Not applicable
Sample size	Not applicable
Relevance to Scotland/ Technology transfer issues	Specific to Scotland
Relevance to Recovery (Individual)	One of the key aims of the strategy is to strengthen the capacity of the family to look after a child.
Relevance to Recovery (Service)	Emphasises the need for an increased focus on the family and putting the needs and wishes of the child at the centre of the treatment and recovery process.
Relevance to Recovery (System)	The systemic implications are around working with whole families and effective information sharing and joint working approaches that support and enable recovery to occur within the family context.
GAPS/IMPLICATIONS/QUESTIONS	There is little focus on recovery or its impact on the family within the document and no presentation of original evidence.

Source 11	Evaluation of the Effectiveness of Drug Education in Scottish Schools
Author(s)	M. Stead, A.M. MacKintosh, L. McDemott, D. Eadie, M. Macneil, R. Stradling and S. Minty
Year	2005
Format/Availability	PDF
Type of Paper	Report of multi-method evaluation
Purpose of Paper	'Multi-phase study conducted to examine the nature and effectiveness of current drug education practice in Scotland' (p7).
Original Data	In addition to a literature review, there was a postal survey of schools, sample observations in schools and qualitative research with young people. A total of 100 classroom observations were carried out.
Evidence Quality	Postal survey yielding data from a sample of 528 primary school pupils and 357 secondary school pupils. From the observations, just over half of the lessons were considered to have helped the understanding of students.
Intervention	The authors concluded that information provision was the main form of delivery and that lessons were not as interactive as they could have been, with limited evidence of progression across the years in the content of delivery.
Effect	From the survey, 65% of P1 groups surveyed provided some drug education rising to 94% for P7 groups. In contrast in secondary schools, drug education was more likely to be delivered in the earlier years ranging from 94% of S1 and S2 classes to 84% of S4 classes reported to having received drug education. In secondary schools, the two main barriers to the delivery of drug education were staff training and timetabling issues.
Sample size	As above
Relevance to Scotland/ Technology transfer issues	Specific to Scotland
Relevance to Recovery (Individual)	Not applicable
Relevance to Recovery (Service)	Not applicable
Relevance to Recovery (System)	Not applicable
GAPS/IMPLICATIONS/QUESTIONS	'Overall, it is clear that there is much good practice in Scotland in drug education, but more can be done to enhance its effectiveness, particularly through clearer guidance on evidence-based methods and approaches, and on continuity and progression; further training and support to boost teachers' knowledge, skills and confidence; and more attention to resources' (p204).

Source 12	Early Years and Early Intervention: A Joint Scottish Government and COSLA Policy Statement
Author(s)	Scottish Government and COSLA
Year	2008
Format/Availability	PDF
Type of Paper	Joint Scottish Government and COSLA policy statement on 'early years and early intervention'.
Purpose of Paper	A framework for a strategic approach to the early years prioritizing resources across local government, the health service and the public sector.
Original Data	No
Evidence Quality	Not applicable
Intervention	The aims of the document are to reduce inequalities, identify those at risk of not achieving, to make sustained and effective interventions and to switch to a model that focuses on capacity building in families and communities.
Effect	Not applicable
Sample size	Not applicable
Relevance to Scotland/ Technology transfer issues	Specific to Scotland
Relevance to Recovery (Individual)	Focus on personalisation of services, with an emphasis on risk, need and resilience; help parents and carers provide a 'nurturing and stimulating home environment'.
Relevance to Recovery (Service)	Developing more people-centred services working alongside people and not constrained by service boundaries; focus on workforce development to increase 'people-centred' approaches.
Relevance to Recovery (System)	The focus on capacity building in individuals, families and communities and to maximise life chances is consistent with a recovery model; emphasis on 'what works and on evidence-based approaches'.
GAPS/IMPLICATIONS/QUESTIONS	While recognizing the need for 'identifying effective interventions' it is not made clear how this will be done and what the link to adult or community recovery will be – the document does not have vulnerable parents as a target.

Source 13	Evaluation of the 'Know the Score' Drugs Campaign
Author(s)	D. MacLean, J. Gilliatt & J. Brogden, Scottish Executive
Year	2002
Format/Availability	PDF
Type of Paper	Evaluation
Purpose of Paper	Review of multi-agency drugs campaign designed to increase activity against drugs dealers; increase drug awareness; encourage healthy lifestyles; provide diversionary activities for young people; publicise supports available and reduce drug-related harms.
Original Data	80 interviews with representatives of organisations involved; 8 workshops involving 140 participants; survey of Drug Action Teams and secondary analysis of data on enforcement, publicity, and campaign activities.
Evidence Quality	Mid-level data quality – data all cross-sectional and no standardised evaluation criteria using pre- / post-design.
Intervention	Press and radio coverage reached an estimated 22% of the Scottish population; a total of 1200 events took place – mission statement was to 'take effective law enforcement action against those involved in the supply and trafficking of illegal drugs, and to promote drugs awareness and harm reduction, in partnership with the public and other agencies'.
Effect	Increase in the number of recorded drug offences by 12%; and increase by £10 million in the value of drugs seized (from £5m to £15m) 'drug seizures rose by 177% during the campaign period'; positive feedback from the workshops; evaluated as improving existing partnerships. However, recognition of variable impact across police force areas.
Sample size	'Between the interviews with steering group members, interviews at force level, and the workshops, approximately 200 people' contributed to the results.
Relevance to Scotland/ Technology transfer issues	Specific to Scotland
Relevance to Recovery (Individual)	Not applicable
Relevance to Recovery (Service)	Identified key problems around partnership working and coordination across Scotland.
Relevance to Recovery (System)	'Overall the campaign did not achieve the degree of commitment or partnership hoped for' – attributed to lack of time, lack of awareness and the central role of the police in coordination (p22).
GAPS/IMPLICATIONS/QUESTIONS	Evaluation limited by 'lack of specificity, or measurability of the objectives of the campaign', the absence of a baseline and locally set objectives (p30).

Source 14	Review of Choices for Life
Author(s)	J. Menzies and K. Myant, Ipsos MORI; Scottish Executive Social Research
Year	2006
Format/Availability	PDF
Type of Paper	Review of Choices for Life – series of events designed to promote healthy lifestyles and increase drug awareness to primary school pupils about to make the transition to secondary school.
Purpose of Paper	Presents the results of two surveys of Primary 7 pupils.
Original Data	Survey data supplemented by discussion groups and in-depth interviews with teachers.
Evidence Quality	Pre and post intervention assessments using qualitative and quantitative methods with large sample size (around 1,700 at each time point) – but no follow-up assessment of impact on behaviour.
Intervention	The events last around two hours and included live music, a school choir singing the Choices for Life song, a quiz about drugs, alcohol and smoking, video clips and a play.
Effect	Because of strong anti-drug baseline opinions, the surveys recorded very little change in opinions – main effect was to reinforce negative views. High level of recall about the event was reported among pupils who had attended in the previous year. ‘However, the events provide more affective or emotional messages: the pupils now feel they have more awareness of what could happen if they use drugs and feel they have more confidence to handle situations where they are offered them’ (p30).
Sample size	Quantitative – 1,714 pre-assessments and 1,691 post-assessments; 8 interviews with teachers; 16 discussion groups with Primary 7 pupils; 16 discussion groups with S1 pupils to look at longer term effects.
Relevance to Scotland/ Technology transfer issues	Specific to Scotland
Relevance to Recovery (Individual)	Not applicable
Relevance to Recovery (Service)	Not applicable
Relevance to Recovery (System)	Not applicable
GAPS/IMPLICATIONS/QUESTIONS	No outcome analysis to assess impact on drug uptake in secondary school; authors concluded that ‘there was limited follow-up education to capitalise on (this) interest’ (p7). Authors recommend that the views of participants are taken at intervals as they progress through school. ‘Over the long term, this would allow actual behaviour to related to attend (sic) at Choices events rather than relying on current perceptions of future behaviour’ (p31)

Source 15	Pathways to Problems; Hazardous Use of Tobacco, Alcohol and Other Drugs by Young People in the UK and Its Implications for Policy
Author(s)	Prevention Working Group, Advisory Council on the Misuse of Drugs
Year	2006
Format/Availability	PDF
Type of Paper	Prevention Working Group Review for older age group following on from Hidden Harm.
Purpose of Paper	'To take a fresh look at the patterns, trends and determinants of early use of psychoactive drugs by young people in the UK'.
Original Data	No – review of existing information.
Evidence Quality	Not a systematic review; expert testimony to ACMD group consisting of a range of eminent practitioners, policy makers and academics.
Intervention	Scottish data presented showed that 'increasing area deprivation was associated with increased prevalence of regular drinking, smoking and recent cannabis use among girls but not boys' (P57). Similar Scottish data were presented showing the link between deprivation and hospital admissions (p63).
Effect	'A number of systematic reviews have found that some skills-based drugs education programmes in schools had limited effectiveness in preventing substance use in the shorter term, but there was evidence of long-term impact. It has not yet been possible to identify the components of skills-based programmes that are necessary for effectiveness' (p74).
Sample size	Not applicable
Relevance to Scotland/ Technology transfer issues	UK wide but several of the key data sources are Scottish, including the Edinburgh Youth Transitions Study.
Relevance to Recovery (Individual)	Comment on patterns of change – 'Many young people use drugs intermittently at different stages of their lives. In the mid-twenties, reducing use or stopping becomes more common than starting. This is usually without professional help and is often associated with marriage and stable employment' (p52).
Relevance to Recovery (Service)	Not applicable
Relevance to Recovery (System)	Identification of high risk groups as involving use by parents or siblings; family conflict or poor parenting; truancy and other forms of delinquency; pre-existing behavioural problems; low parental supervision; and living with a single or step-parent.
GAPS/IMPLICATIONS/QUESTIONS	Report identified need for large scale periodic surveys of 11-15 year olds; a longitudinal study or a representative group of 15-30 year olds and improved evidence on good parenting and stable family life. 'In the light of the evidence that classroom-based drugs education has very limited effectiveness in reducing rates of drug use, there should be a careful reassessment of the role of schools in drug misuse prevention' (p12).

Source 16	Review of Research on Vulnerable Young People and their Transitions to Independent Living
Author(s)	S. Eelsey, K. Backett-Milburn and L. Jamieson, Centre for Research on Families and Relationships, University of Edinburgh
Year	2007
Format/Availability	PDF
Type of Paper	Review of research on vulnerable young people and their transitions to independent living.
Purpose of Paper	To draw together evidence on successful transitions for young people out of care settings and to look at the evidence around housing transitions.
Original Data	Review article
Evidence Quality	Not a systematic review – described by the authors as ‘a thorough scoping exercise’, including published and ‘grey’ literature.
Intervention	Not applicable
Effect	According to Scottish Exclusion Unit (2005) there are a minority of children who have early exit from education combined with multiple transitions – this group are typically lacking in family support, and multiple moves often signal marginalisation and social exclusion.
Sample size	Not applicable
Relevance to Scotland/ Technology transfer issues	Specific to Scotland but limited Scottish evidence to draw upon.
Relevance to Recovery (Individual)	It is recognised that ‘problems with health, particularly mental health and misuse of alcohol and drugs are more prevalent’.
Relevance to Recovery (Service)	‘Young people themselves have been critical of the timing and inadequate preparation for leaving care’.
Relevance to Recovery (System)	Complex needs, including drug and alcohol problems, can lead to problems in accessing resources, particularly accommodation. Additionally, many young people leave care poorly equipped to cope with the demands of life
GAPS/IMPLICATIONS/QUESTIONS	‘There are not any long-term studies in Scotland on outcomes for young people leaving care. There are, therefore, no studies which attempt to disaggregate the impact of individual factors and interventions on young people’. Review does not mention the impact of recovery on effective transitions.

Source 17	Mental Health in Scotland: Closing the Gaps – Making a Difference: Commitment 13
Author(s)	Mental Health and Substance Misuse Advisory Group, Scottish Government
Year	2007
Format/Availability	PDF
Type of Paper	Guidance on care and support for people with co-occurring substance misuse and mental health problems
Purpose of Paper	To improve the awareness of co-occurring mental health and substance misuse problems; to improve support and service provision for people who have both mental health and substance misuse problems (and their carers); and to reduce stigma and influence positively attitudes towards this care group.
Original Data	No
Evidence Quality	Literature review and contributions of an expert advisory group
Intervention	Not applicable
Effect	Not applicable
Sample size	Not applicable
Relevance to Scotland/ Technology transfer issues	Recommendations for care and support for people with co-occurring substance misuse and mental health problems. Data on the extent of the need appears to be UK wide or English, small scale studies in Glasgow.
Relevance to Recovery (Individual)	Dual recovery process, obtaining employment can be doubly difficult
Relevance to Recovery (Service)	Service user survey implies that current drug treatment services are not responsive to the needs of people with mental health problems since this group tend to abuse alcohol, cannabis and cocaine rather than opiates. Assessment tools to record co-morbidity systematically are required
Relevance to Recovery (System)	Recommendations that people with co-occurring severe mental health problems and substance misuse problems should be treated within mental health services
GAPS/IMPLICATIONS/QUESTIONS	Lack of clear evidence for Scotland (outside Glasgow) as to the extent of co-morbidity of mental health problems and substance abuse. Lack of evidence around the usage patterns of people with mental health problems.

Source 18	Drug Misuse and Dependence: UK Guidelines on Clinical Management
Author(s)	Department of Health (England) and the devolved administrations (the Scottish Government, Welsh Assembly Government and Northern Ireland Executive)
Year	2007
Format/Availability	PDF
Type of Paper	Clinical Guidelines
Purpose of Paper	"Intended for all clinicians in the UK, especially those providing pharmacological interventions for drug misusers as a component of drug misuse treatment".
Original Data	No
Evidence Quality	Working group
Intervention	Not applicable
Effect	Not applicable
Sample size	Not applicable
Relevance to Scotland/ Technology transfer issues	Document based on the decision to issue a single set of guidelines for the whole of the UK - skeleton framework of best practice from which the devolved administrations could develop their own guidance on locally appropriate variations in policy and practice.
Relevance to Recovery (Individual)	The Clinical Guidelines outline the basis for providing clinical treatment to all people resident in the UK requiring substance misuse treatment. This document directly influences the way care is provided to drug misusers.
Relevance to Recovery (Service)	The document highlights a number of gaps in the evidence-base for drug treatment research and so this is obviously important in terms of 'recovery'. However, the publication mainly deals with pharmacological interventions.
Relevance to Recovery (System)	Review of the evidence-base for a range of drug misuse treatment-related issues, including: prison drug treatment; drugs and driving; injectable opioid treatment; methadone and buprenorphine dose induction; drug testing and its use in practice; drug treatment for young people; treatment of substance misuse in pregnancy; cardiac assessment and monitoring for methadone prescribing.
GAPS/IMPLICATIONS/QUESTIONS	2007 Guidelines state: 'Although the evidence base for drug misuse treatment has improved, the working group found that, in many areas of drug treatment, evidence was either lacking or was based on research from countries other than the UK'. Evidence suggests that methadone is more likely to retain patients in treatment but the evidence for the relative effectiveness of methadone and buprenorphine at preventing illicit opioid misuse is mixed – further research is required. Since the advent of supervised consumption, the number of drug-related deaths involving methadone has reduced, during a period when more methadone is being prescribed, providing indirect evidence that supervising the consumption of medication may reduce diversion - research required. Evidence for the effectiveness of take-home naloxone in preventing overdose-related deaths in opiate misusers is largely anecdotal at present.

Source 19	National Quality Standards for Substance Misuse Services
Author(s)	Scottish Executive
Year	2005
Format/Availability	PDF
Type of Paper	Policy document
Purpose of Paper	To set out a framework of standards to ensure consistency in the provision of all substance misuse services.
Original Data	No
Evidence Quality	Not applicable
Intervention	Not applicable
Effect	Not applicable
Sample size	Not applicable
Relevance to Scotland/ Technology transfer issues	Standards developed for specifically for Scotland
Relevance to Recovery (Individual)	The standards have been developed from the standpoint of the people who use these services. 'They describe what each person can expect from the service provider. They focus on the progress that the person using the service can make during a period of treatment'.
Relevance to Recovery (Service)	Describes a 'number of different programmes relevant to the quality improvement and underpinning development of standards in substance misuse services'.
Relevance to Recovery (System)	The standards are intended to guide those involved in tackling substance misuse (such as service commissioners and planners) in terms of policy development and funding.
GAPS/IMPLICATIONS/QUESTIONS	No standards set thereby creating difficulty in benchmarking standards at local or national level No agreed measurement units resulting in lack of uniformity of measurement Lack of any national process or system for applying these standards to practice. This results in a gap in knowledge regarding how to apply these standards, how to measure and how to evaluate them.

Source 20	National Investigation into Drug-Related Deaths in Scotland, 2003
Author(s)	Zador D, Kidd B, Hutchison S, Taylor A, Hickmann M, Faley T, Rome A and Baldacchino A.
Year	2005
Format/Availability	PDF
Type of Paper	Report
Purpose of Paper	To investigate and report on causes and circumstances of drug related deaths in Scotland.
Original Data	Yes
Evidence Quality	Data on the 317 drug related deaths in Scotland in 2003 was collected from the General Register Office for Scotland (GROS), police, prisons, Crown Office, primary care, mental health services, criminal justice services and drug services. In addition, primary research was conducted with overdose survivors sampled from Glasgow and fatal overdoses were compared with data from London coronial courts.
Intervention	Not applicable
Effect	Not applicable
Sample size	317 (all drug related deaths in Scotland 2003)
Relevance to Scotland/ Technology transfer issues	Based on Scottish data regarding drug related deaths. Drug overdose survivors in Glasgow may not be representative of the wider substance misusing population in Scotland. Likewise, quantitative comparisons between Scotland DRDs and London DRDs may not be representative.
Relevance to Recovery (Individual)	89% of drug related deaths had received no counselling in the six months prior to their death.
Relevance to Recovery (Service)	The study found that nearly half of all deaths occurred when other people were present and demonstrated a clear reluctance in those present to call for help. Most deaths involved more than one drug and over half involved alcohol.
Relevance to Recovery (System)	People most at risk are in contact with services. Most often these are non-specialist services such as primary care, criminal justice social work and mental health services. This requires better sharing of information and communication between services.
GAPS/IMPLICATIONS/QUESTIONS	Research gaps relate to lack of research evidence regarding strategies to reduce the risk of overdose, evidence of effective practice in the UK that has been subject to evaluation and the lack of information on the views of drug users and their families in how to improve the management of overdose situations.

Source 21	Workforce Plus – An Employability Framework for Scotland
Author(s)	Scottish Executive
Year	2006
Format/Availability	PDF
Type of Paper	Strategy document
Purpose of Paper	To set out an agenda on how to achieve the target of getting 66,000 individuals, in seven local government areas, to move from benefits to work within Scotland.
Original Data	No
Evidence Quality	Not applicable
Intervention	Not applicable
Effect	Not applicable
Sample size	Not applicable
Relevance to Scotland/ Technology transfer issues	Framework specific to Scotland, though this is part of a UK employability agenda.
Relevance to Recovery (Individual)	Makes mention of the importance of making the necessary link to work for people with substance misuse problems and those with related issues such as mental health problems and homelessness.
Relevance to Recovery (Service)	The framework outlines the roles and responsibilities of different services to make a significant contribution to employability prospects of individuals and attempts to demonstrate how links can be made between organisations to help achieve such a goal.
Relevance to Recovery (System)	Although recovery is not specifically mentioned in this document, employability is considered to be a key goal in the long-term process of recovery from substance misuse, and so it is vital to implement a Scottish strategy that focuses on this aspect.
GAPS/IMPLICATIONS/QUESTIONS	The Workstream identified that 'there is some evidence that support for disadvantaged clients are too short term and expertise often lost between the end of funding for one project to the start of another'. Also that 'there is a perception that the needs of some groups are met in a way that separates them unnecessarily from other groups'. In addition, it was noted that existing services tend to focus on the job ready and there are gaps in current provision, particularly in terms of early engagement and in-work support'.

Source 22	Towards a Mentally Flourishing Scotland: The Future of Mental Health Improvement in Scotland 2008 - 2011
Author(s)	Scottish Government (DG Health and Wellbeing)
Year	2007
Format/Availability	PDF
Type of Paper	Outline of 'proposed future direction for mental health improvement and population mental health for 2008 – 2011'.
Purpose of Paper	To promote a vision of mental health as central to wellbeing based on the idea that 'someone can experience signs and symptoms of mental illness and still have good or flourishing mental wellbeing' (p3).
Original Data	No
Evidence Quality	Not applicable
Intervention	Targets the mental health and wellbeing of the whole population, addressing risk and protective factors; supplemented by the targeting of vulnerable populations. The three main themes are promoting mental health, preventing mental illness and supporting improvements in 'quality of life, social inclusion, health, equality and recovery' (p4).
Effect	Target populations include people with alcohol and drug problems, and other excluded groups.
Sample size	Not applicable
Relevance to Scotland/ Technology transfer issues	Specific to Scotland
Relevance to Recovery (Individual)	Report promotes the notion that 'recovery in the presence or absence of the symptoms of mental illness is possible and will be individual to each person and their circumstances' (p9). A key area for consideration within the report is around co-morbidity.
Relevance to Recovery (Service)	It is recognised that 'Belief in recovery is key to tackling stigma and discrimination and improving people's quality of life, inclusion and opportunities' (p9). Action 4 requires 'improvement of attitudes and behaviours within staff groups' (p12).
Relevance to Recovery (System)	Action 5 includes a requirement to make effective linkages to other key public health agendas including alcohol and drugs.
GAPS/IMPLICATIONS/QUESTIONS	One of the key aims is to develop 'a local understanding of individual and community mental wellbeing, building on work in NHS Health Scotland on mental health indicators, to record baselines and to assist in assessing effectiveness of programmes of work and changes in local population mental wellbeing' (p11).

Source 23	Hepatitis Action Plan for Scotland, Phase II: May 2008 – March 2011
Author(s)	Scottish Executive
Year	2008
Format/Availability	PDF
Type of Paper	Action Plan
Purpose of Paper	To address the issues underlying the spread of Hepatitis C in 1% of the Scottish population and to propose actions that the Scottish Executive can undertake to tackle Hepatitis C in Scotland.
Original Data	No
Evidence Quality	No original data
Intervention	Not applicable
Effect	Not applicable
Sample size	Not stated
Relevance to Scotland/ Technology transfer issues	Action plan for Scotland
Relevance to Recovery (Individual)	Individuals who inject drugs along with those who have developed hepatitis C will be made more aware of the dangers of the re-use and sharing of needles.
Relevance to Recovery (Service)	No relevant information
Relevance to Recovery (System)	No relevant information
GAPS/IMPLICATIONS/QUESTIONS	Over 85% of the individuals infected with Hepatitis C are infected through the use of needles. The action plan proposes to reduce the re-use and sharing of needles among these individuals by promoting safer injecting. However, this may encourage these individuals to continue injecting and thus make the process of recovery more difficult.

Source 24	Reducing Harm and Promoting Recovery: A Report on Methadone Treatment for Substance Misuse in Scotland
Author(s)	Scottish Advisory Committee on Drug Misuse: Methadone Project Group; Scottish Government
Year	2007
Format/Availability	PDF
Type of Paper	Advice for formulation of government policy
Purpose of Paper	'To advise ministers on the place of methadone in the treatment of substance misuse in Scotland'.
Original Data	Partial
Evidence Quality	Mainly expert opinion with a small amount of evidence from a survey issued to all Scottish drug treatment services.
Intervention	Methadone for opiate dependent problem drug users.
Effect	Methadone maintenance treatment is more cost effective in terms of harm reduction than any other treatment for opiate dependency but should be delivered as part of a package of treatment to encourage both harm reduction and enhance recovery. Methadone treatment in Scotland can be optimised through improving accountability, performance management, information quality, effectiveness, integration and commissioning processes.
Sample size	Not applicable
Relevance to Scotland/ Technology transfer issues	Recommendations on providing effective interventions with methadone. Effectiveness of abstinence treatment: different results in England and Scotland (NTORS and DORIS) implying need for further research.
Relevance to Recovery (Individual)	Recommendation that methadone should be prescribed in the context of a care plan; recovery outcomes are improved when methadone is accompanied by wraparound services.
Relevance to Recovery (Service)	Current monitoring and evaluation data is sparse; services find it hard to extract data to undertake reviews, outcomes are rarely measured. More structured performance management systems in place to measure outcomes. Recommends medical interventions: a) replacement prescribing b) detoxification c) psychiatric. Recommends non-medical interventions: a) care planning, practical support, counselling and psychological interventions b) day care and community based rehabilitation c) residential rehab (little evidence).
Relevance to Recovery (System)	Further assistance with regard to outcomes monitoring and assessment, support for service review. Lack of available services in some areas means that methadone may be used as a standalone treatment. Lack of definite evidence around how many people receive methadone and how many achieve abstinence and/or recovery. Concern regarding child welfare and safety (although this may be improved by improved data collection questions). Optimisation of systems of care by delivery through integrated services and good governance, including training and supervision of staff, quality assurance and audit. Further research into treatment effectiveness and methadone effectiveness; better monitoring and evaluation is required - only 5 of 14 geographical health

	boards were able to supply information regarding methadone prescribing. Improved accountability and performance management for ADATs, through SG and national treatment body. Improved service effectiveness through shift in philosophy, review of resource management, clarifying expectations of treatment
GAPS/IMPLICATIONS/QUESTIONS	<ul style="list-style-type: none"> ▪ Substitute prescribing with methadone has been judged on a narrow set of criteria for success. ▪ Some of the data regarding achieving abstinence varies between Scotland and England (NTORS and DORIS studies) implying areas for further research as to the effect of methadone plus other services. ▪ How does methadone support recovery, particularly if the only contact with services is prescribing? ▪ How can this be measured? ▪ Does not address the issue of recovery for people who are addicted to non-opiates

Source 25	Report of the Stocktake of Alcohol and Drug Action Teams
Author(s)	Scottish Government
Year	2007
Format/Availability	PDF
Type of Paper	Evaluation
Purpose of Paper	To guide Ministers when making decisions about the future role and form of ADATs.
Original Data	Interviews with staff and stakeholders of ADATs across Scotland
Evidence Quality	Working Group examination of role of ADATs based on semi-structured interviews undertaken with staff members of 22 ADATs.
Intervention	Effectiveness of ADATs; current performance and future capability to deliver Ministerial policy and priorities.
Effect	Partnership approach is the best one to tackle the problems of substance misuse in Scotland. This can be delivered effectively in the form of an ADAT provided that they fulfil certain criteria covering remit, composition and structure, performance and accountability, integrated and consistent approaches, resources and capacity building.
Sample size	22 ADAT areas.
Relevance to Scotland/ Technology transfer issues	Evaluation of role and structure of ADATs.
Relevance to Recovery (Individual)	Idea of an ADAT chimes with recovery as a holistic model; service users accessing a range of different services, which according to mental health literature, can be beneficial in terms of their recovery trajectory. Little evidence of the inclusion of service users' views in needs assessment/strategy/commissioning process; likewise little evidence of ADATs consulting with families and carers.
Relevance to Recovery (Service)	Better joint working and partnership working may be important in preventing service users falling through the gaps. Strategy based on equal dialogue with all the partners could potentially improve recovery outcomes. Current performance management and monitoring work is poor and more support for ADATs is needed in this arena - what therefore are the implications for designing and promoting outcomes based on recovery criteria?
Relevance to Recovery (System)	No mention of recovery in the document.
GAPS/IMPLICATIONS/QUESTIONS	<ul style="list-style-type: none"> ▪ How can the partnership evolve to reflect the ethos of recovery i.e. Does a particular ADP structure support recovery better than another? ▪ How could ADPs build a focus on recovery into needs assessment, strategy, resource allocation, commissioning, contracting and performance management. ▪ No mention of recovery in the entire document. Suggests at the time of writing that this was not a strategic priority (previous administration).

Source 26	Essential Care: A Report on the Approach Required to Maximise Opportunity for Recovery from Problem Substance Use in Scotland
Author(s)	Scottish Advisory Committee on Drug Misuse: Integrated Care Project Group: Essential Care Working Group; Scottish Government
Year	2008
Format/Availability	PDF
Type of Paper	Advice for formulation of government policy
Purpose of Paper	To address the additional non-medical aspects of service required to ensure that people with substance use problems are given every opportunity to recover from their problems.
Original Data	No
Evidence Quality	Working group
Intervention	Essential services/key aspects of service provision which address an individual's physical, psychological and social functioning.
Effect	Not applicable
Sample size	Not applicable
Relevance to Scotland/ Technology transfer issues	Consideration of services required to maximise care, treatment and recovery alongside medical/clinical interventions
Relevance to Recovery (Individual)	In order for recovery to take place, a range of essential treatment services are required. Service users should be involved in service design and should be able to manage their own treatment. Services which will impact upon recovery are: Health improvement related to lifestyle (e.g. nutrition, exercise), life circumstances (unemployment, poverty) and inequality will contribute to recovery. Crisis management - better out of hours provision (most crisis episodes occur in people already known to services) General medical services including primary care providing services and dovetailing with substance misuse services. Integration of wider health service provision including BBV services, dental health and psychological services with substance misuse services.
Relevance to Recovery (Service)	Recovery must be the focus of services. Person-centred approaches are vital. Services must be run in accordance to principles of equality. Services must be accessible and offer a range of treatment options. Commissioners should undertake needs assessments; publish a written service specification; demonstrate service user involvement; collect data; report on outcomes. Substance abuse services should be available locally and regionally with other non-substance abuse specific services available in tandem. Services which could enhance recovery are: Health improvement, crisis management, primary care, BBV services, dental health. Each NHS Board area should develop a psychological therapies framework. Management of pregnant women with substance abuse

	<p>problems must attempt to address addiction, health and social needs.</p> <p>Health and social care services should work jointly and with local authorities and the voluntary sector, employers, educational institutions and advice agencies to provide support in a range of areas.</p> <p>Specialist advice and advocacy services for people experiencing substance misuse problems would be advantageous.</p>
<p>Relevance to Recovery (System)</p>	<p>The report adopts a recovery ethos as its basis and affirms the need for service users to access a range of services in order for recovery to take place.</p>
<p>GAPS/IMPLICATIONS/QUESTIONS</p>	<p>The report acknowledges a lack of 'objective evidence to support this approach in the field of substance misuse' but argues that the comparisons with the field of mental health (CSIP common purpose) are sufficient to suggest that recovery would be meaningful in a substance misuse context. It references the Scottish Recovery Network as evidence that recovery is possible, specifically the idea that narratives of recovery can provide hope. Other evidence which is lacking includes detailed information regarding how successful the programmes in place are at achieving a reduction in drug related harm and promoting recovery. Lack of detailed information on staff expectations of service users - mental health studies argue that where clinicians are more hopeful for recovery for their patients, outcomes are improved.</p> <p>What should the new outcomes for measuring success be? How should services seek to record these and to whom will they be accountable? Lack of evidence around whether some wraparound services have a greater impact than others.</p>

Source 27	Concordat between the Scottish Government and CoSLA
Author(s)	Scottish Government and CoSLA
Year	2007
Format/Availability	PDF
Type of Paper	Draft guidance to ADPs on operating in an outcomes environment.
Purpose of Paper	To enable Alcohol and Drug Partnerships (ADPs) to identify local priority outcomes related to alcohol and drugs.
Original Data	No
Evidence Quality	No original data
Intervention	To identify drug and alcohol outcomes that contribute to the achievement of national outcomes that address economic potential; young people are successful learners; children get the best start in life; longer, healthier lives; tackled inequalities; improved life chances of those at risk; lives safe from crime, danger and disorder; strong, resilient communities; in addition to the two specific National Indicators – reduce alcohol related hospital admissions by 2011 and decrease the number of problem drug users in Scotland by 2011.
Effect	Intermediate outcomes include attempts to link service delivery factors to local communities.
Sample size	Not applicable
Relevance to Scotland/ Technology transfer issues	Specific to Scotland
Relevance to Recovery (Individual)	Switch to a strengths based model included – ‘services should, as far as possible, focus on service users’ strengths, promote recovery and integrate their aspirations into the service users’ own plans for the future. Services should focus on service users’ choice, even when they are subject to ‘coercive’ treatment’.
Relevance to Recovery (Service)	Attempts to link service delivery outcomes to recovery; children affected by parental substance misuse; enforcement and availability and prevention. Services should promote self-management, development of meaningful relationships and participation in positive activities.
Relevance to Recovery (System)	Aim is to ‘identify and show the positive impact on communities, families and individuals that supporting drug and alcohol services delivers and the link this has with high-level and national outcomes’.
GAPS/IMPLICATIONS/QUESTIONS	High level outcomes related to alcohol and drugs make limited reference to recovery (point 57) and are linked primarily to ‘safer and happier families and communities’, with the primary focus on reductions in consumption and harms, and increased access to supports.

Source 28	Report of the Alcohol and Drug Delivery Reform Group
Author(s)	Alcohol and Drug Delivery Reform Group
Year	2008
Format/Availability	PDF
Type of Paper	Report of the Alcohol and Drugs Delivery Reform Group
Purpose of Paper	Recommendations to Government on future local partnership arrangements to tackle drug and alcohol use.
Original Data	No – based on some workshops but no data presented.
Evidence Quality	Not applicable
Intervention	'Our goal is to create an environment for the delivery of client-centred actions that achieve lasting change in the lives of individuals across Scotland, be they substance misusers, their families, or members of the communities in which they live'.
Effect	Not applicable
Sample size	Not applicable
Relevance to Scotland/ Technology transfer issues	Specific to Scotland
Relevance to Recovery (Individual)	As part of the process of implementation of <i>The Road to Recovery</i> and the focus on local measured needs.
Relevance to Recovery (Service)	As part of the process of implementation of <i>The Road to Recovery</i> and the focus on local measured needs.
Relevance to Recovery (System)	Accountability to be based at local level on National Performance Framework, Single Outcome Agreements and community planning, and NHS performance management arrangements including HEAT. Each local authority and NHS Board should develop strategies based on assessment of local need, identify key outcomes based on Single Outcome Agreements, and a broad outline of the services to be provided and commissioned. This is to be based on Alcohol and Drug Partnerships, supported by the Outcomes Toolkit and support coordinators.
GAPS/IMPLICATIONS/QUESTIONS	The key question will be how this approach will contribute to recovery-oriented systems of care.

Appendix 2: Independent Funding Sources

Source name: Medical Research Council
Website: http://www.mrc.ac.uk/index.htm
Organisation's purpose: To improve human health through world-class medical research. Part of the MRC's strategic plan for 2009-2014 is to "aim to develop new approaches to tackle addiction, substance abuse and non-addictive alcohol use". The plan also states that "In addiction research, we will strive for increased coordination and connectivity across existing groups, and innovative, cross-disciplinary studies. Interaction of genetics with lifestyle will be studied in addictions, including smoking and alcohol."
How does it allocate funding: Funding comes from the UK government. <ul style="list-style-type: none">▪ There are 12 grant programmes which relate to different types of research, such as long term programmes, joint research or research to improve methodology – the full list can be found at http://www.mrc.ac.uk/Fundingopportunities/Grants/index.htm▪ There are different deadlines for all the different types of grants. For the main Research Grants scheme, research is divided into 4 areas and each area has 3 deadlines for applications a year, usually in January, April and September.▪ Calls for Proposals – calls for applications for funding to stimulate research in pre-determined areas are made throughout the year.▪ Fellowships – funding for researchers for a fixed term, for example 5 years, and sometimes for a particular area of research, or funding to an organisation to allow them to run a fellowship programme. Most are annual competitions, such as Methodology Research Fellowships.▪ Studentships – funding for postgraduate study. Student applies through their educational institution. Applications for funding are done in rounds, either every year or every few years.
What type of project does it fund: Research grants and career awards to scientists in UK universities and hospitals and research centres in partnership with universities. The MRC also has its own research facilities. In 2008/09, the MRC spent £704.2 million on research.
What projects is it currently funding in the area of substance misuse, addiction and recovery: The Medical Research Council (MRC) is leading a strategy for addiction research in partnership with other organisations which has 3 funding parts: 1. 'Pilot grants' to fund research that makes better use of existing resources. This call is closed and nine awards, worth £1.95 million, were made.

2. Initial seed corn funding to develop interdisciplinary addiction research clusters with the objective of supporting networking, building research capacity, importing new expertise and increasing co-ordination. This call is closed and eleven awards were made in July 2009.

3. A ring-fenced call open only to those addiction research clusters established through the second call. It will be interdisciplinary research leading to new approaches to tackling the harms caused by illicit drugs, alcohol, tobacco and gambling. Launched in 2010, it has a budget of £4.5 million.

Further information on their addiction research strategy can be found at

<http://www.mrc.ac.uk/Fundingopportunities/Initiatives/Addictionresearch/index.htm>

Source name: National Institute of Health Research
Website: http://www.nihr.ac.uk/Pages/default.aspx
Organisation's purpose:
The National Institute for Health Research is now established as a part of the UK Government's strategy, ' Best Research for Best Health '. It works with the UK Government in aiming to establish the NHS as an internationally recognised centre of research excellence through supporting outstanding individuals, working in world-class facilities, conducting leading-edge research focused on the needs of patients and the public.
How does it allocate funding:
<ul style="list-style-type: none"> ▪ There are 8 NIHR run programmes, such as Research for Patient Benefit and Service Delivery and Organisation, which commission and fund research. There are also 5 programmes that it is involved in running jointly with the MRC. ▪ It has created and given money to 'Schools' (joint ventures between academic institutions) for research into Primary Care and Social Care. ▪ It has also created Research Units for particular topics. ▪ It issues calls for research proposals and each area of research has an implementation plan with timetables for accepting applications in that area.
What type of project does it fund:
NIHR commissions and funds NHS and social care research that it considers to be essential for delivering responsibilities in public health and personal social services.
What projects is it currently funding in the area of substance misuse, addiction and recovery:
<ul style="list-style-type: none"> ▪ The Public Health Research Programme has been created to fund both primary research and evidence synthesis, depending on the availability of existing research and the most appropriate way of responding to important knowledge gaps. ▪ The funding available for the Public Health Research Programme was up to £2m in 2008/9, rising to £5m in 2009/10 and £10m in 2010/11 ▪ None of its current projects relate to addiction, substance misuse or recovery ▪ However, it is currently looking for proposals on research into the relationship between reduction in alcohol availability and measures of community alcohol health related harm and/or consumption.

Source name: Chief Scientist's Office
Website: http://www.cso.scot.nhs.uk/
Organisation's purpose:
The CSO supports and promotes high quality research aimed at improving the quality and cost-effectiveness of services offered by NHS Scotland and securing lasting improvements to the health of the people of Scotland
How does it allocate funding:
<ul style="list-style-type: none"> ▪ Project Grants and small grants can be applied for. The CSO funds up to 80% of the cost of a project up to a maximum of £225000 for Project Grants and £50000 for Small Grants ▪ Programme Grants for mental health and cancer research are funded up to £450000 ▪ Applications are submitted to committee for consideration, with 3 rounds of funding per year ▪ The Health Services Research Committee is one of the two committees who assess applications ▪ Postgraduate studentships and doctoral and postdoctoral fellowships are awarded each year
What type of project does it fund:
It funds fund projects in 5 areas: Cancer, Cardiovascular disease and stroke, Mental health, Public Health and NHS needs
What projects is it currently funding in the area substance misuse, addiction and recovery:
<p>In 2008 the Edinburgh Addiction Cohort project was accepted as completed.</p> <p>In 2007-08 awards were made for projects entitled "Feasibility study for a further data collection sweep for the Drug Outcomes Research In Scotland (DORIS) study", "Life course predictors and consequences of injecting drug use: a population-based case-control study", "A cluster randomised controlled trial of enhanced pharmacy services for methadone patients" and "Management of drug misuse in primary care: a seven-year follow-up survey of Scottish general practitioners" – from CSO's Annual Report 2007-08, accessed at http://www.scotland.gov.uk/Resource/Doc/257049/0076314.pdf</p> <p>None of the current fellowships or studentships are in the substance misuse, addiction and recovery field.</p>

Source name: European Union – CORDIS
Website: http://cordis.europa.eu/home_en.html
Organisation's purpose:
Through Framework Programme 7, which runs from 2007-2013, the EU will fund research to strengthen the scientific and technological base of European industry and to encourage international competitiveness while promoting research that supports EU policies
How does it allocate funding:
Mainly through calls for proposals which are published in the EU journal and CORDIS website. Over period 2007-2013 there are 48.71 billion Euros to distribute in all 4 streams.
What type of project does it fund:
Four main themes <ul style="list-style-type: none"> ▪ Co-ordination – encouraging transnational collaboration ▪ Ideas – research in a specific area – implemented by a European Research Council which awards grants ▪ People – fellowship type sponsorship ▪ Capacities – relates to research infrastructure
What projects is it currently funding in the area substance misuse, addiction and recovery:
<p>Calls for proposals on the general Health topic were closed in October and November 2009.</p> <p>Calls for different levels of European Research Council grants have deadlines throughout the year.</p> <p>A basic search of database showed up only one project from last 4 years that is in the field of alcohol or substance misuse (<i>Tobacco, Alcohol and the risk of UADT Cancers</i>, published 2006)</p>

Source name: Wellcome Trust
Website: http://www.wellcome.ac.uk/index.htm
Organisation's purpose:
The Wellcome Trust is dedicated to achieving extraordinary improvements in human and animal health and aims to support the brightest minds in biomedical research and the medical humanities
How does it allocate funding:
<ul style="list-style-type: none"> ▪ Research Fellowships – consider applications usually once or twice a year but some are open for applications all the time ▪ Grants – deadlines staggered throughout the year for different types of grants but some are open all the time ▪ Capital Funding of over £1 million has ad hoc calls for applications, lesser awards have yearly application process
What type of project does it fund:
<ul style="list-style-type: none"> ▪ Biomedical Science ▪ Technology Transfer ▪ Medical Humanities ▪ Public Engagement
What projects is it currently funding in the area substance misuse, addiction and recovery:
<p>In their most recent annual record for awarding of grants from 1st October 2008 – 30th September 2009 the projects relating to this field which received grants were</p> <ul style="list-style-type: none"> ▪ “Scottish Inebriate Reformatories, 1901-1925: The medical role in the response to the last alcohol epidemic”, ▪ “Motivational ambivalence and alcohol abuse” ▪ The 5th International conference on the history of drugs and alcohol: Pathways to prohibition' held at the University of Strathclyde was also given funding.

Source name: Robertson Trust

Website: <http://www.therobertsontrust.org.uk/>

Organisation's purpose:

An independent Scottish trust that makes grants to charities

How does it allocate funding:

The Robertson Trust no longer funds research in this field but will consider supporting community based projects with a research component, where service delivery is the primary focus.

In the year to March 2009 the Trust committed £9.9 million to 497 different charities. These donations will be paid out over the next three years.

- Small and main donations form the bulk of the donations made by the Trust and are assessed on a rolling programme with recommendations made to the Trustees six times a year.
- Major capital donations where the total value is in excess of £1M will be considered three times a year in January, May and September.
- Development Awards are for special category of research areas where the Trust identifies partners with whom they can develop new initiatives. This is always ongoing.

What type of project does it fund:

The Trust has 4 priority areas:

- Care
- Health
- Education and Training
- Community Art and Sport

There are 7 other categories that they will support which are:

- Animal Welfare
- Civil Society
- Communities
- Culture
- Heritage and Science
- Environment
- Saving Lives
- Young People and Families

The Trust is most interested in funding direct service delivery to people in Scotland in need of this support

They do not fund medical research or organisations and projects whose primary object is to provide a counselling, advocacy, advice and/or information service

What projects is it currently funding in the area substance misuse, addiction and recovery:

- Drug and Alcohol Misuse is one of the areas where there have been development awards. One of these was for research and one was in relation to early intervention support to children living in drug using families with two further awards in the pipeline. They are looking to develop further partnerships in this area with charities involved with alcohol misuse, particularly with an innovative approach to prevention issues
- The Annual Review of 2008/09 also mentioned a donation to Mentor UK to enable them to develop their work in Scotland supporting community-based organisations to develop activities to address issues of alcohol misuse with young people.

Source name: Joseph Rowntree Foundation
Website: http://www.jrf.org.uk/
Organisation's purpose:
The Foundation is an endowed charity that funds a large, UK-wide research and development programme. It seeks to understand the root causes of social problems, to identify ways of overcoming them, and to show how social needs can be met in practice.
How does it allocate funding:
Research is funded solely through calls for proposals in specific areas
What type of project does it fund:
The Foundation has an alcohol theme which aims to support research and other work in order to have an impact on negative drinking cultures and patterns among young people in the UK.
What projects is it currently funding in the area substance misuse, addiction and recovery:
<p>During last 2 years the Foundation has published a number of reports in the field of substance misuse;</p> <ul style="list-style-type: none"> ▪ Children, young people and alcohol: how they learn and how to prevent excessive use ▪ Tackling alcohol harm: lessons from other fields ▪ Drinking in the UK: An exploration of trends ▪ Guidance on standards for the establishment and operation of drug consumption rooms in the UK ▪ Street policing of problem drug users ▪ Cannabis supply and young people <p>Alcohol is one of their chosen themes for research; another is entitled 'Social Evils' in which drugs and alcohol were also raised as an issue. The project involved a consultation process and has resulted in a book, <i>Contemporary Social Evils</i>.</p>

Source name: Lloyds TSB Foundation for Scotland

Website: www.ltsbfoundationforscotland.org.uk

Organisation's purpose:

The Foundation distributes its funds to recognised charities in Scotland which are focused on improving the quality of life and creating equality of opportunity for people in Scotland. This applies particularly to those who are disadvantaged and marginalised, with particular emphasis on grassroots charities, and organisations which help those most in need become self-sufficient or improve the quality of their lives.

How does it allocate funding:

- Standard Grant scheme – 6 deadlines per year
- Capacity Building grants – designed to help organisations run as effectively as they can by working with them to identify strengths and set out opportunities for development. Applications can be made at any time of year

Awards are made in February, April, June, August, October and December.

What type of project does it fund:

- Research – for example, grant to Royal Society of Edinburgh in 2008 to research issues relating to the ageing population.
- Salary Costs – the Foundation contributes to salaries for charities' staff from development workers to Chief Executives
- Capacity Building – grant to pay for consultancy on governance or business planning and strategy, for example Tayside Council of Alcohol in December 2009 round of awards
- Staff Training – for example, Monklands Women's Aid were given money for staff to get SVQs in December 2009 round of awards
- Running Costs or equipment – for example, minibus costs or hall hire

What projects is it currently funding in the area substance misuse, addiction and recovery:

Partnership Drugs Initiative - Since 2000 the Foundation has been funding this initiative along with the Scottish Government. It promotes voluntary sector work with vulnerable children and young people affected by substance misuse. To date it has distributed £13 million.

Source name: Cross-Governmental Research Programme on Drugs
Website: http://drugs.homeoffice.gov.uk/ (most information comes from document “The Cross-Government Drugs Research Strategy (2010) found at http://drugs.homeoffice.gov.uk/publication-search/drug-strategy/cross-gov-drugs-resech-strategy2835.pdf?view=Binary)
Organisation’s purpose:
Created in 2008 as part of a review of overall UK Government drug strategy in England. The objective of the programme is to “provide the foundation, direction and guidance for collaboration within government, and between government and other stakeholders, in the development of a robust scientific evidence base for government drug policy in the short and long term”.
How does it allocate funding:
The programme does not itself fund research but aims to co-ordinate and guide the funding of projects by individual UK government departments in the field The CGRPD will assess research annually, including monitoring its delivery, and assess what research is needed to fulfil the aims of the drug strategy. It will continuously review the research priorities and change them if necessary. For the purposes of assessing needs and reviewing priorities it will also consider research done outside of government, such as that funded by the Medical Research Council or Economic and Social Research Council
What type of project does it fund:
The priorities for their research strategy are <ul style="list-style-type: none"> ▪ To strengthen our understanding of drug use: aetiology, incidence, prevalence and patterns of use in the population. ▪ To further strengthen our knowledge of drug use and needs amongst a number of groups, including young people, black and minority ethnic (BME) groups, families, and drug-using offenders. ▪ To review our knowledge and measures of drug-related harms. ▪ To develop our understanding of treatment, prevention, and other interventions. ▪ To review and strengthen understanding of UK drug markets, and interventions to tackle them. ▪ To strengthen our understanding of public confidence, perceptions, and behaviour.
What projects is it currently funding in the area substance misuse, addiction and recovery:
The programme does not directly fund research, but has set out key UK Government research priorities in the drugs misuse field.

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