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National Advisory Committee on Drugs

Mental Health and Addiction Services and the Management of Dual Diagnosis in Ireland

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Foreword

I am happy to welcome this report *Mental Health and Addiction Services and the Management of Dual Diagnosis in Ireland*. The report is concerned with the issue of dual diagnosis, which is defined as the co-existence of both mental health and substance misuse problems for an individual. It is clear that many drug dependent patients also have symptoms of mental health disorders and vice versa. This can pose singular challenges for those charged with treating them. In recognition of this, the NACD undertook this research as part of their overall work programme approved by Government.

The aims of the research centred on the needs of people with dual diagnosis, how they are assessed and the treatment appropriate to their condition. It also looked at the organisational structures of Irish Services and assessed their effectiveness in providing care for people with dual diagnosis.

As the report points out there is much improvement to be made in this area, in particular the need for better co-ordination of care between both disciplines. Accordingly, I believe we need to develop guidelines for managing dual diagnosis in Ireland and training and education should be provided across all disciplines in both sectors. The research in this area also contributes significantly to the implementation of the National Drugs Strategy, particularly in relation to access to treatment and the range and quality of treatment available to people with dual diagnosis.

As I have said on many occasions, I am always grateful for the research and analysis provided by the NACD and for all the on-going work of all of the members of the National Advisory Committee on Drugs. Finally, I would like to congratulate the authors on this comprehensive report.

Noel Ahern T.D.
Minister of State with responsibility for the National Drug Strategy

Preface

In June 2000, the Irish Catholic Bishops' Conference in association with the Irish Times organised a drug treatment seminar entitled " Beyond Maintenance" the proceedings of which were subsequently published by Veritas. The keynote address by Dr. Jane Wilson from the Scottish Drugs Training Project dealt with the challenges presented by individuals with dual diagnosis, to the treatment services. In a response to Dr. Wilson's thought provoking contribution, I made the following observation, based on the lack of information on dual diagnosis/co-morbidity in Ireland; "It is clear therefore that we do need some research into the extent of psychiatric co-morbidity/dual diagnosis in Ireland. It is to be hoped that the National Advisory Committee, through its research remit, might examine this." I also made the point that the seminar showed that this phenomenon needed a greater priority attached to it at European level.

I am delighted that both these suggestions have now come to pass. At EU level, the 2004 report by the EMCDDA on the State of the Drugs Problem in Europe will contain a special chapter on co-morbidity/dual diagnosis. At National level we now have this highly valuable and groundbreaking report so ably compiled by Liam MacGabhann, Alexandra Scheele and their colleagues at DCU. Their painstaking work will provide strong support to the ongoing improvements in service delivery to drug users with complex issues such as dual diagnosis.

In addition to paying tribute to the excellent efforts of the DCU team, I must also thank the Research Advisory Group comprising Dr Eamon Keenan, Dr Dermot Walsh (Inspector of Mental Hospitals), Liam O'Brien and Mairéad Lyons who have been so diligent in developing the recommendations to government from the NACD, which have emerged from the report. The input from the clinical psychiatrists on the NACD was central to initial setting up of the study and the worth of multi-disciplinary collaboration throughout the process is emphasised by the value of involving the Mental Health Division of the Department of Health and Children, through Dr. Dermot Walsh, not least during the discussions surrounding the key recommendations to Government.

It is the belief of the NACD that guidelines for managing dual diagnosis in Ireland should be developed by a specialist Committee representative of key stakeholders including the NACD, substance abuse psychiatry, general psychiatry, the Mental Health Commission, the Irish Psychiatric Association and the Irish College of Psychiatrists and others.

The NACD has also recommended, arising from its consideration of this report, that any patient in receipt of methadone prior to admission to a psychiatric facility, should be continued on that prescription while under psychiatric care. We have further recommended that training and education should be improved at all levels; and that the introduction of a clinical nurse speciality in addiction for psychiatric nurses is desirable. We recognise that this report and our recommendations need to be reviewed in the context of the reform of the Health Services now under way.

While we do not yet have a clear picture of the prevalence of dual diagnosis in this country, the NACD is convinced that this report and the associated recommendations will, through the presence of an infrastructure arising from the implementation of the recommendations, facilitate research on prevalence but more importantly advance patient care in this difficult but important area.

Finally, on behalf of the NACD, I would like to extend our sincere appreciation to all those who gave of their time and experience in participating in this study.

Dr Des Corrigan
Chairperson NACD

List of Abbreviations

AA	Alcoholics Anonymous
ACO	Assertive Community Outreach
ADHD	Attention Deficit Hyperactivity Disorder
ASI	Addiction Severity Index
AUS	Alcohol Use Scale
BPRS	Brief Psychiatric Rating Scale
CAMI	Chemical Abuse and Mental Illness
DALI	Dartmouth Assessment of Lifestyle Instrument
DAST	Drug Abuse Screening Test
DHHS	Department of Health and Human Services
DoH	Department of Health
DSM-IV	Diagnostic and Statistical Manual of Mental Disorders – Fourth Edition
DUS	Drug Use Scale
ECAS	Epidemiological Catchment Area Study
ERHA	Eastern Regional Health Authority
HIV	Human Immunodeficiency Virus
MICA	Mentally Ill Chemical Abuser
MIDAS	Mental Illness and Drug and Alcohol Services
NA	Narcotics Anonymous
NACD	National Advisory Committee on Drugs
NCS	National Co-morbidity Survey
NIHM	National Institute for Mental Health
NSF	National Service Framework
NSW	New South Wales
OPCS	Office of Population Census and Surveys
PTSD	Post Traumatic Stress Disorder
RDU	Reason for Drug Use Screening Test
SADS	Schedule for Affective Disorders
SCID	Structured Clinical Interview for Diagnosis

Executive Summary

In 2002 the National Advisory Committee on Drugs (NACD) commissioned a national research study on the management of dual diagnosis in mental health and addiction services. A research team at Dublin City University was awarded the research contract following open tender.

There is no consensus on a definition of dual diagnosis. This causes difficulties in standardising research methodologies and identifying clinical cohorts of people with dual diagnosis. Complex definitions pose challenges for the management of dual diagnosis, particularly when separate services provide care. However, several health and social care systems have met the challenges in different ways over time. There is evidence of high prevalence of dual diagnosis, clinically effective treatment and service approaches and guidelines for best practice.

However, there is little study of dual diagnosis carried out in Ireland. As a concept, dual diagnosis is not explicitly referred to in health and social policy and there are no guidelines for the management of dual diagnosis in services. Before this study there was no published evidence as to how dual diagnosis was managed by addiction and mental health services in Ireland.

Working definition of dual diagnosis

The working definition of dual diagnosis emerged out of the first phase of the study, the literature review. Dual diagnosis is defined as:

"the co-existence of both mental health and substance misuse problems for an individual"

The aims of this study were threefold:

- To identify the health and social care needs of people with dual diagnosis and the models of assessment and treatment appropriate to clinically effective healthcare provision.
- To identify the services provided and the manner of care delivery to people with dual diagnosis across both the addiction and mental health services in Ireland.
- To analyse the organisational structures of Irish services that provide care for people with dual diagnosis in terms of the effectiveness of their existing and/or potential service provision for this client group.

Study methodology

A three-phased mixed-method approach was taken over a timeframe of one year, with each phase informing the next. First, a critical literature review identified the needs of people with dual diagnosis, explored the relevant Irish and international policy and examined best practice in treatment and service management. Second, an open forum was convened in one geographical area, comprising people and agencies involved in the care of people with dual diagnosis. The forum considered the findings of the literature review and contextualised these into their experience of dual diagnosis. Third, a national survey was then developed to review how, together or separately, mental health and addiction services manage dual diagnosis. A targeted sample of clinicians, middle and senior managers at the forefront of service provision, was recruited to complete the survey. Of these respondents, 10% participated in follow-up interviews where they were asked to expand on survey responses and provide documentary evidence supporting the management of dual diagnosis in their services.

Summary of findings

There is no systematic co-ordination of care evident in any health board area, with 76% of services failing to offer a specific service for people with dual diagnosis. Seventy-five percent of survey respondents support a fully integrated service as the most effective. There are at least three models of service provision in operation: a parallel model (52%), an integrated model (29%) and a serial model (16%).

Although 21% of services report policies that address dual diagnosis, there was no consensus on what policies were in place. Further formal and informal structures were reported, with significantly more in addiction services (56%). Although 78% of respondents did not think refusal of treatment for people with dual diagnosis was justified, both addiction (58%) and mental health (43%) services reported exclusion criteria applied to people with a dual diagnosis.

In relation to assessment, 93% of respondents thought routine screening should be in place and 66% reported that they always assess for dual diagnosis, with 71% believing they could effectively identify a client with dual diagnosis. However, dual diagnosis is reportedly recorded in only 37% of cases. Sixty-two percent of respondents felt that clinical staff were adequately trained to assess for dual diagnosis.

There is some ambiguity in relation to the recognition and treatment of dual diagnosis, evidenced by the lack of service structures and the extent of exclusion criteria. For example, 93% of respondents from mental health services reported that they treat people with substance misuse problems, yet 71% of these do not follow specific treatment models and 61% report that clinical staff are not adequately trained to treat dual diagnosis.

Although respondents were generally content with the level of communication between addiction and mental health services, more so among those who had responsibilities across both service areas. Formal and informal communications with other services were reportedly low, 24% and 54% respectively. However, when addressing dual diagnosis specifically, a substantial number of respondents from addiction services reported inadequate communication to enable effective treatment. There was consensus throughout the study that GPs should be more involved in the management of people with dual diagnosis.

Key themes emerging from the study

A number of key themes were identified from the results that, together, have a major impact on how dual diagnosis is managed in services. If the issues associated with these were addressed, dual diagnosis could be more effectively managed. The identified themes were: the concept of dual diagnosis; organisational strategies and structures; management of services and co-ordination of care; culture, ideology, education and professional relations; assessment, diagnosis, prevalence and treatment; intra- and inter-organisational communication; and prospective management of people with dual diagnosis.

Gaps in knowledge and implications for practice

This study looked at addiction and mental health services, though the study also identifies the role of primary health care through GPs in the management of dual diagnosis.

Dual diagnosis is not clearly understood or formally recognised in policy, nor often, in mainstream addiction and mental health services themselves. Whereas many aspects of dual diagnosis were formerly overlooked, there is now an initial picture of how these are being addressed in addiction and mental health services. They are fragmented, with a mixture of service models applied, seemingly to align with an overall service model rather than with the complex needs of people with dual diagnosis.

National policy and service reviews need to address dual diagnosis and develop clinically effective service and treatment models applicable to the Irish context. Clarity and practice guidelines to provide frameworks for managing dual diagnosis are essential. Without such developments there may be little drive or support for practitioners trying to improve the care for people with dual diagnosis

Cultural, ideological and practice differences require further exploration. This can be facilitated through initiatives such as educational programmes for multidisciplinary teams and service agencies and joint agreements on service provision.

Further research is required in areas such as: prevalence rates; needs assessment; service users' views and perceptions of service; and the role of GPs and primary care in the management of dual diagnosis.

Chapter 1
Introduction

Dual diagnosis is a familiar term within the health and social care arena. However, it is applied to vastly different circumstances and is understood differently within each frame of reference. For example, the term can be used in relation to a person with an intellectual disability. It can also refer to a person with both a physical and a mental illness. Even within the same healthcare arena, e.g. mental health, the term can denote the presence of two co-existing diagnoses; a person may have a dual diagnosis if they are suffering from depression and are also diagnosed as having a personality disorder.

This poses one of the difficulties associated with understanding and defining dual diagnosis, that is, it is used synonymously and often without clarification of what it means. This difficulty arises when the term is applied between similar healthcare arenas, for example, in relation to a person who suffers from a mental illness and also has a substance addiction. What first appears simple in terms of definition, the impact on people diagnosed and quantifiable in terms of prevalence and treatment, becomes quite the opposite, as will be further demonstrated by this study.

Dual diagnosis as it applies to people with mental health and substance misuse difficulties has been researched internationally and treatment models have developed over two decades. However, there is still no consensus on the precise meaning of the term, the implications of such a diagnosis for the health and well-being of an individual, or the most effective treatment models. Several countries, including the United States of America, have developed treatment models appropriate to their health and social care needs and the concept of dual diagnosis is enshrined in legislation and health policy. Recently, Australia and England have begun to develop specific policies and treatment models that recognise, define and address dual diagnosis in their populations.

Although the concept, if not the terminology, is recognised in the Irish healthcare context, there is little research or development in relation to dual diagnosis specifically. Although examination of the concept and recognition of its potential impact on people and services have become more explicit over recent years in Ireland (Report of the Inspector of Mental Hospitals (Government of Ireland, 2001)), health and social policy do not identify dual diagnosis [e.g. National Health Promotion Strategy 2000–2005 (Department of Health and Children); National Drugs Strategy 2001–2008 (Department of Tourism, Sport and Recreation); Quality and Fairness: A Health System for You (Department of Health and Children, 2001)]. Consequently, there is neither formal recognition of the prevalence of dual diagnosis nor any impetus for service provision.

Assessing for dual diagnosis is fraught with difficulties. Lack of definition and use of non-standardised assessment tools, or tools that have been validated for distinct clinical groups, rather than for people with dual diagnosis, make accurate assessment difficult. Because of the complexities associated with people who have a dual diagnosis, existing diagnostic measurement tools are not necessarily applicable. However, a small number of tools have been developed specifically to assess dual diagnosis. Lack of standardisation and agreed diagnosis make it difficult to develop shared care between addictions and mental health services. The unique inter-relationship between mental health and substance misuse problems and its impact on the profile of dually diagnosed people is not always considered in service and treatment options.

From the range of service and treatment models that have emerged over the last few decades, one model appears to be the most successful in effectively treating people with dual diagnosis. This is the integrated model where a seamless service is provided to an individual, which addresses both the substance misuse and the mental health problems. However, as most of the research into the

effectiveness of this model's inherent treatment approaches has been done in the United States of America, it cannot be taken for granted that this model is the most appropriate for other countries. Many of the emerging guidelines for the management of dual diagnosis advocate locally agreed definitions or place clients in various defined categories with particular service and treatment approaches taken, dependent on definition. Whichever direction services take, liaison and effective communication, with focused education, are key to developing effective services for dual diagnosis.

It is not clear how or when people are being dually diagnosed and how or if appropriate care is managed. From a statistical perspective, people with a dual diagnosis are invisible in Ireland. However, if we were to surmise that Ireland might have similar clinical cohorts as other countries with similar population characteristics where dual diagnosis has been researched, prevalence estimated and services developed, then there is a potential major impact on the resources of health and social services in this country. Furthermore, the health and social needs of a significant number of people are not necessarily being met.

The NACD, as part of its research and evaluation role in problem drug use, identified dual diagnosis as an issue. In particular, the apparent absence of formal health service mechanisms to manage dual diagnosis was highlighted. Consequently, the present study was commissioned a) to examine international best practice in relation to the assessment, treatment and management of people with dual diagnosis, and b) to describe the organisation of care and management of people with dual diagnosis in Irish mental health and addiction services.

Aims and Objectives

The aims of this study were threefold:

- To identify the health and social care needs of people with dual diagnosis and models of assessment and treatment appropriate to clinically effective healthcare provision.
- To identify the services provided and the manner of care delivery for people with dual diagnosis across both the addiction and mental health services in Ireland.
- To analyse the organisational structures of Irish services that provide care for people with dual diagnosis in terms of the effectiveness of their existing and/or potential service provision for this client group.

Study objectives were to:

- Identify the particular assessment and treatment needs of this complex group, from a national and international perspective.
- Identify existing service and treatment models of best practice.
- Identify what services are available in Ireland for people who experience co-morbidity.
- Review how adequately people are assessed for dual diagnosis when presenting to mental health and addiction services.

- Explore service users' and practitioners' perceptions of the services and suggestions for improvements.
- Explore the accessibility of services and the appropriateness or relevance of their location.
- Describe a typical mental health and addiction service in terms of its structures, goals, roles, policies and procedures and how these are conducive to effective dual diagnosis service provision.
- Explore how organisational structures in mental health and addiction services impact on actual or potential delivery of effective dual diagnosis services.
- Collate any service reviews and evaluations that highlight this issue.
- Identify whether services have any mechanisms in place to respond to the different needs of a range of groups, such as women, people who have been in prison or the homeless.
- Identify to what extent services have interfaced or have been integrated with primary care services.

Mental Health and Addiction Services in Ireland

In Ireland, dual diagnosis is normally managed within two service contexts – mental healthcare and addiction services. In order to understand the service currently provided for clients with dual diagnosis, it is necessary to understand the distinctive patterns of mental health and addiction service provision, as well as the complex relationships between the two. Moreover, to conceptualise and understand the results of this study, it is important to see what the purported mental health and addiction services are, as well as what the experience of mental health and addiction services is in the eyes of those individuals who work in those services.

One will quickly find out that when trying to describe a typical mental health service or a typical addiction service in Ireland one can only go so far. The make-up of local services can be quite distinctive due to factors such as the organisation within the health board, prevalence of substance misuse or mental health problems, population sizes, different staffing arrangements and specialist interests of specific professionals.

Mental healthcare

Historically, Irish mental healthcare was structured around large psychiatric hospitals. However, the policy document, *The Psychiatric Service: Planning for the Future* (Department of Health, 1984) prompted a wholesale revision of Irish mental health services. Psychiatric hospitals were significantly downsized, new inpatient admission units were developed in general hospitals and community mental health services were expanded. Mental healthcare providers were aligned with particular localities and developed responsibility for the provision of a range of services. Typically, these services include hostels and other supported accommodation, day centres, day hospitals, sheltered employment and work re-training, inpatient admission facilities and community mental health teams. In some localities, such as Clondalkin in Dublin and Cavan/Monaghan, innovative approaches to community mental healthcare have been developed that involve the provision of intensive community support for people with severe mental health problems and a reduced tendency to resort to psychiatric hospitalisation.

Professionally, Irish mental healthcare consists of multidisciplinary teams of professionals that always include psychiatrists and nurses and often include social workers, psychologists, occupational therapists and counsellors/therapists. These teams are led by consultant psychiatrists. At the open forum it was suggested that, because they are consultant led, services tend to reflect the particular ideology and preferences of the consultant. It was argued that some consultants have a relatively narrow biomedical perspective and that this can mean that services are primarily oriented to physical treatments, such as medication. This issue was highlighted in the recent healthcare strategy *Quality and Fairness: A Health System for You* (Department of Health and Children, 2001) that outlined the need for mental healthcare provision that is informed by a broader psycho-social orientation. However, contributors to the open forum also suggested that some consultants already have this more inclusive perspective and that this can be reflected in the work of a whole multidisciplinary team.

In terms of voluntary mental health organisations, there are a number of national and local bodies. These organisations tend to have an educational and/or support role. For example, Mental Health Ireland has been active in promoting public awareness of mental health issues, as well as providing support groups and social clubs for people with mental health problems and their relatives. Schizophrenia Ireland provides opportunities for education and support of families as well as some direct help to service users.

Addiction Services

A typical addiction service does not exist in Ireland as each service has developed in a unique manner in response to local need and available resources. Services within the Eastern Regional Health Authority (ERHA) and on the East coast in general appear to be more extensively developed than elsewhere. There are also more similarities in the services provided by the three area boards within the ERHA when compared to the national picture. This could possibly be attributed to the original structure of the former Eastern Health Board (EHB) from which the ERHA developed and the concentration of intravenous drug users seeking treatment in these areas, rather than to any particular healthcare initiative.

In 1968 the Minster for Health set up a Working Party on Drug Abuse to which he gave responsibility for drawing up the broad outlines of a future Irish drug policy (Report of the Working Party on Drug Abuse (Government of Ireland, 1971)). A second group was established in 1972 – The Committee on Drug Education, which was replaced in 1974 by the Health Education Bureau.

In 1969, on the initiative of the Department of Health, a centralised treatment facility was set up at Jervis Street Hospital in Dublin's city centre (Butler, 1997). During 1973 the Coolmine Therapeutic Community, the first voluntary addiction treatment service, was established. Ten years after the establishment of the centre at Jervis Street the drug scene in Dublin changed and intravenous heroin use became prevalent. By 1983/4, HIV transmission through the sharing of drug taking paraphernalia was recognised as an additional problem that the abstinence policy and centralised treatment could not address adequately.

In Ireland, between 1985 and the end of the century, drug treatment policy and practice shifted its focus towards harm reduction (Butler, 1997). Momentum around the development of the addiction services increased, along with the need for more extensive treatment services; the government responded to this need with the *Government Strategy to Prevent Drug Misuse* (Department of Health,

1991). In 1996 the *First Report of the Ministerial Task Force on Measures to Reduce the Demand for Drugs* (Government of Ireland, 1996), commonly referred to as the Rabbitte Report, was published and can be seen as the precursor of the current National Drugs Strategy 2001–2008 (Department of Tourism, Sport and Recreation). Most significantly, this report made provision for the establishment of Local Drugs Task Forces. This was an acknowledgement of the link between poverty and serious drug problems. The Local Task Forces comprised a combination of statutory and voluntary representatives, and the newly-established National Drugs Strategy Team monitored their work. The gradual shift from a policy centred on abstinence and health education had taken place, and services centred on local communities, with an emphasis on treatment and harm reduction, emerged. This change in policy is reflected in the National Drugs Strategy 2001–2008 (Department of Tourism, Sport and Recreation).

The concentration of opiate users in the ERHA region and recognition by service providers in the region of the issue of dual diagnosis led to one of the area boards providing a dual diagnosis clinic. However this pattern of drug use is not fixed and national changes in the pattern of drug use dictate, to some extent, the spread of services.

Following recommendations of the National Drugs Strategy 2001–2008 (Department of Tourism, Sport and Recreation), each health board now employs an interim Regional Drugs Co-ordinator who is responsible for the provision of treatment and rehabilitation services for drug misusers in that health board area. Growth in drug-related problems throughout the country has resulted in the need for many of the health boards to formulate a specific drug strategy for their region. This is especially the case in the area of development of services, which are local and tailored to the needs of particular communities. The majority of these strategies are being developed at present in accordance with emerging trends which are specific to the individual regions (National Drugs Strategy, 2001-2008: section 3.4.3). The emphasis in a number of boards outside the ERHA is on education and prevention.

As in the mental health services, the addiction services operate a multidisciplinary team approach, comprising a diversity of professionals such as psychiatrists, psychologists, nurses, social workers, outreach workers, counsellors, general practitioners, education officers, pharmacists and general assistants. Variations exist in the composition of teams, dictated by perceptions of local need, availability of suitably trained personnel and the extent to which services have developed. Outside the ERHA, teams often consist of counsellors and outreach workers, with access to psychiatrists and community GPs. Within the ERHA, teams have dedicated psychiatrists, who take on individuals with a dual diagnosis.

A range of services are available to drug misusers, commencing with information, education and communication on the health risks associated with drug use, which will assist them to modify their drug-taking behaviour. Most service providers also offer healthcare in relation to infectious diseases associated with drug misuse which, as well as providing screening and intervention for specific infections, offers support, information and education.

Where intravenous drug use is part of the presenting pattern, harm reduction programmes, which aim to ensure that those who continue to use drugs have access to clean injecting paraphernalia as well as facilities for the safe disposal of used equipment, are provided. Drug substitution treatment is commonly provided; it involves the medically supervised treatment of individuals with opioid dependency based on the prescription of opioid agonists such as methadone. Substitution programmes range from low-threshold maintenance programmes, which have a harm reduction aim, and high-threshold programmes, which are aimed at achieving abstinence.

Most services also offer counselling, which may be provided as part of the overall approach to the drug user or as a separate element of the treatment approach.

Liaison and referral to other health and social care agencies are also considered to be important aspects of work in the addiction field. Services who provide inpatient care include detoxification, respite and rehabilitation in their treatment structure.

A number of services have also developed programmes of care for drug users with special needs, for example services for pregnant women, the homeless, prisoners and young people.

Services are provided by statutory, voluntary and private organisations. There are both advantages and disadvantages to the delivery of services by a variety of groups. From the State's perspective, the provision of services by voluntary and private organisations is helpful as these groups, as well as augmenting statutory services, often provide services which the State has been unable to provide, for a variety of reasons, including: resources; public or political opinion; and service capacity. However, the disadvantage of reliance on voluntary and private organisations include issues of quality assurance and adherence to national policy. Action 50 of the National Drugs Strategy sets out the joint responsibility of the NACD, and the health boards in consultation with the NACD, to develop criteria to ensure that all State-funded treatment and rehabilitation programmes accord with quality standards. This Action applies only to services that are State funded and therefore may remain unaddressed by non-funded organisations. As part of the ongoing work in this area, a national forum on quality in the addiction services was held by the NACD in 2002 (Quality in the Addiction Services, (National Advisory Committee on Drugs, 2002)).

The contribution of the voluntary and private sector is acknowledged at the level of health boards and government departments by the inclusion of these groups in the planning, development and delivery of services and by provision of support in terms of resources. From a patient perspective the mix of statutory, voluntary and private organisations helps to provide choice about where to seek help and support.

Relationship between statutory mental health and addiction services

There are some unique relationships between mental health and addiction services at senior management level. In the health boards outside the ERHA mental health and addiction services can fall under the remit of either a single regional manager or different managers in the two services. Where they fall under the same regional manager, the addiction services are included in the mental health services. Where the services are separately managed, the addiction services fall under the remit of the regional manager for community care/services. In some health boards, the addiction services are split into alcohol and drug addiction services, with the alcohol services falling under the remit of mental health. In the three health board areas that make up the ERHA, each service falls under the remit of the director of mental health and addiction services.

Methodology

A mixed-method approach was taken to the study in order to cover the range of the study's objectives. The first phase, a literature review, contextualised dual diagnosis in healthcare generally and identified issues pertinent to Ireland. The review also gave a baseline of best practice internationally to benchmark Irish service provision in relation to dual diagnosis. The second phase, an open forum, enabled a wide range of people and agencies from one geographical area who are involved with people who have a dual diagnosis to contextualise their experience. The rich data gathered in this phase, although in no way capable of generalisation, began to address some of the study objectives concerned with organisational structures, liaison between services and the effectiveness of service provision. Together with the literature review the open forum informed the development of the third phase of the study, the survey instrument. The survey instrument was developed specifically to explore how addiction and mental health services managed dual diagnosis in Ireland. The information emerging from the survey was further complemented by conducting semi-structured interviews with 10% of survey respondents.

Literature review

A critical review of the literature on dual diagnosis in psychology, nursing, ethics, medicine, and sociology related to dual diagnosis was facilitated through searches of databases such as MedLine, PsycLit, and CINAH. Contacts with researchers and reviews of internet resources developed by advocacy groups, service providers, and government bodies in Ireland and internationally, were also made.

The review examined contextual factors underlying need for care, including influences on the present system of organising care (e.g., models of care, historical influences, and the pattern of bio-psychosocial vulnerability and environmental factors) associated with dual diagnosis. The review specifically explored:

- The health and social care needs of this client group;
- Relevant health and social policy, in Ireland and internationally, related to the provision of services to people with dual diagnosis;
- The pattern of provision of services to people with dual diagnosis, taking into account economic, government, voluntary and private provision, and prospective trends in service need;
- International best practice;
- Integration of the review of research, policy and practice, yielding recommendations for the scope and nature of clinically effective practice and future service developments.

Open forum

An open forum was convened comprising a range of people and agencies involved in the care of people who may have a dual diagnosis, including service users, practitioners, voluntary groups, addiction services, mental health services, primary care services, housing organisations, police and social welfare services from one geographical health board area. This forum considered the findings of the literature review and contextualised these into the participants' experience of dual diagnosis. The open forum, along with the literature review, informed the third phase of this study, the national survey.

National survey of service provision for dual diagnosis

A survey instrument was developed which reviewed how addiction and mental health services cared for people with a dual diagnosis in Ireland. Following a pilot study, a targeted sample of clinicians, middle and senior managers at the forefront of addiction and mental health service provision, was recruited to complete this survey. In addition, follow-up interviews were carried out with approximately 10% of respondents. Interviewees were asked to provide documentation or indicate where it could be accessed, that related to policy, organisational structures or service reviews concerning dual diagnosis, and to expand on their responses to the questionnaire.

Chapter 2
Dual Diagnosis: A Literature Review

This literature review is the first of a three-phased national research project examining the management of people with dual diagnosis in addiction and mental health services.

The review specifically explores:

- The health and social care needs of this client group;
- Relevant health and social policy, in Ireland and internationally, related to the provision of services to people with dual diagnosis;
- The pattern of provision of services to people with dual diagnosis, taking into account economic, government, voluntary and private provision, and prospective trends in requirement of support;
- International best practice;
- Integration of the review of research, policy and practice, yielding recommendations for the scope and nature of clinically effective practice and future service developments.

Alongside the overall aims of the study, the literature review identifies many of the health and social care needs of people with dual diagnosis, and models of assessment and treatment appropriate to clinically effective healthcare provision.

The literature reviewed was chosen from a variety of sources to capture the breadth of perspectives and provide a comprehensive review of the relevant research. A computerised search of bibliographic databases such as Web of Science, MedLine, PsycLit, PsycINFO, CINAHL and Science Direct was done, using the key words "dual diagnosis", "co-morbidity", "dual disorder", "mental health", "substance use" and "drug abuser". This search was supplemented by an internet search using the "Google" search engine. In particular the websites of government health departments in the US, the UK, Australia and Ireland and their web-links were searched for relevant publications, particularly policy documentation. Some 100 articles were selected from about 600 abstracts. Articles were chosen to meet the study objectives achievable through the literature review.

For the purpose of this study, it is important to note that the literature review concentrates on dual diagnosis policy and research that does not specify alcohol dependency/misuse as an element of the diagnosis. However, while some studies and treatment models do make this distinction, the literature on dual diagnosis does not generally make distinctions between alcohol and other substances when alluding to dual diagnosis. Consequently, it will be clear that alcohol dependency/misuse cannot be completely excluded from the review.

Dual diagnosis does not have a clear-cut definition and research is consequentially fraught with difficulties. Therefore, the review commences with a discussion on defining what 'dual diagnosis' is. Prevalence will then be examined from an international and national perspective, with some indications of how people are assessed for dual diagnosis in addiction/substance misuse and mental health services.

The relationships between 'diagnoses' in someone with dual diagnosis is more complex than simply having two conditions. The associated difficulties and implications for treatment, service provision and healthcare generally are significant. These relationships and implications are also explored in the literature review.

For several decades, healthcare providers have been developing models of care and services appropriate to the needs of individuals with dual diagnosis. Most of this work has been done in the US, but in the last decade Australia and the UK have also begun to develop service models and treatment programmes that are providing more clinically effective and efficient care in this area. The review discusses these emerging models of service provision and treatment and the associated difficulties, such as inter-service educational needs and cultural barriers between services.

There are clear implications and indications for best practice in the literature, of which some may be relevant to the Irish context. The review concludes with a discussion on the emerging issues for the management of dual diagnosis, how these issues might be further explored and how clinically effective practice may be best supported.

What is Dual Diagnosis?

People with dual diagnosis are not a homogeneous group. The diagnosis is not clear between, or outside of, classification systems, within or between countries. Research methodologies adopt a wide spectrum of definitions, making comparison, replication and application of findings very difficult in practice.

The term 'dual diagnosis' is perhaps a misnomer, though it has been adopted internationally to represent a range of clinical presentations associated with people who have both mental health and substance misuse disorders and related problems. Related terms sometimes used interchangeably with dual diagnosis are: 'dual disorder', 'Mentally Ill Chemical Abusers' (MICA) or 'Chemical Abuse and Mental Illness' (CAMI) in the US (US DHHS, 2000). 'Co-morbidity' of mental illness and substance misuse in the UK policy (NSF, 1999); or 'co-occurrence' of psychosis and substance abuse in Australia (Kavanagh et al., 1998).

This terminology can be further refined when applied to specific conditions, disorders and illnesses. For example, there is a range of mental health problems, including illnesses and syndromes such as schizophrenia, bipolar affective disorder, depression, anxiety and personality disorders. Drug use can be categorised differently or terms used interchangeably. Examples include problem drug use, addiction, drug dependence, substance abuse disorders and substance misuse.

Terms such as co-morbidity do not describe the degree or nature of drug abuse, or whether a causal relationship exists between two or more conditions. An individual's health status can become co-morbid in many different ways, depending on the time sequence and interactions between the two primary conditions (Frischer & Akram, 2001).

The term 'dual diagnosis' is particularly common in psychiatric practice, in describing the combination of severe mental illness (mainly psychotic disorders) and substance misuse. Since the term is imprecise, its use seems only to confirm the inadequacy of current classification systems in describing certain complex presentations (Tyrer, 1996). Tyrer advocates 'co-morbidity' to describe the simultaneous presence of two or more disorders, though this may fail to capture potential causal interactions between psychosis and substance misuse. This description of dual diagnosis encompasses a collection of various behaviours and consequent problems, instead of two defined components in a particular presentation. It is clear from the evidence that the reported rate of co-morbidity of substance abuse among individuals with schizophrenia, for instance, is rising at a significantly higher rate than in non-psychiatric populations (LeDuc & Mittleman, 1995; & Cuffel, 1992).

Any exploration of dual diagnosis, such as the present study, will result in debate and uncertainty rather than consensus. There is no attempt to standardise terminology in this review, the terminology used by researchers in each study is adopted. However, in the chapter on prevalence, any primary research that demonstrates the use of classification systems for 'dual diagnosis' is separated in summary tables from studies that do not.

Drug and alcohol use is a part of recreational activity in western society; later discussion will cite general population prevalence of substance misuse and mental disorder. As dual diagnosis becomes a readily identifiable entity, while remaining unspecific as a diagnosis, it could conceivably encroach on people's lifestyles where previously it did not. Some commentators (McKeown et al., 1998) express concern at what they see as the further medicalisation of people's lives with the emergence in US clinical practice of 'dual diagnosis'. Up until the 1990s there was little literature outside the US in relation to dual diagnosis. Some of the difficulties currently associated with service provision, such as responsibility of care and increased cost, arguably would not exist if dual diagnosis had not been embraced in medical discourse. It is clear from the literature that the complex needs of people who have a dual diagnosis are real and services need to address them. Equally, as more legislative and policy frameworks are put in place for the care and management of these individuals in society, more health and social agencies will have to assume this responsibility.

Relationship between Mental Illness and Substance Misuse

There are various possible relationships between the mental health and the substance misuse aspects, which lead to a dual diagnosis for an individual. These relationships have been well documented (Meyer, 1986; Lehman et al., 1989). Crome (1999) summarises the relationships:

- Substance use (even one dose) may lead to psychiatric syndromes or symptoms;
- Harmful use may produce psychiatric syndromes;
- Dependence may produce psychological symptoms;
- Intoxication from substances may produce psychological symptoms;
- Withdrawal from substances may produce psychological symptoms;
- Withdrawal from substances may lead to psychiatric syndromes;
- Substance use may exacerbate pre-existing psychiatric disorder;
- Psychological morbidity not amounting to a disorder may precipitate substance use;
- Primary psychiatric disorder may lead to substance use disorder;
- Primary psychiatric disorder may precipitate substance use disorder which, in turn, may lead to psychiatric syndromes.

Consequently, substance use may alter the course of the primary psychiatric disorder or, indeed, vice versa (Crome, 1999). Pharmacological interventions may change when a person has a dual diagnosis. Maremmani et al. (1998) reported that the average methadone dosage required to stabilise heroin addicts with a dual diagnosis of anxiety disorder was 80mg/day, compared to 100mg/day for uncomplicated patients. The complex relationships between mental health and substance misuse difficulties give rise to a heterogeneous group, with defining features or diagnostic profiles changing over time (Gafoor & Rassool, 1998).

Gafoor & Rassool (1998) point out that these clients are more likely to come from one of the categories of patients with the following conditions:

- A primary psychiatric disorder with a secondary substance misuse disorder;
- A primary substance misuse disorder with psychiatric complications;
- Concurrent substance misuse and psychiatric disorders, for example alcohol dependency and depression; or
- An underlying traumatic experience, for example post traumatic stress disorder (PTSD), resulting in both substance misuse and mood disorders.

As discussed earlier, the term 'dual diagnosis' is a broad one and, if taken as such, incorporates all these possible relationships and categories. Frequently, particularly in the US, authors try to narrow the definition in order to ease methodological difficulties in research, or to appropriately treat an individual. The concepts MICA and CAMI (US DHHS, 2000) attempt this refinement. The term MICA indicates a primary Axis I diagnosis of a major psychiatric disorder, such as schizophrenia or major affective disorder, accompanied by chemical abuse or addiction. The term CAMI indicates a primary diagnosis of alcohol and/or drug addiction, with associated symptoms of non-severe mental illness. When in remission, CAMI clients do not exhibit symptoms of a major mental illness (New York State Commission in Quality of Care for the Mentally Disabled, 1986; Sciacca, 1991; US DHHS 2000). MICA and CAMI diagnoses are based on the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) (American Psychiatric Association, 1994).

There seems to be a unique relationship between substance use and mental illness. Some research supports the stress vulnerability model, which hypothesises that drug abuse may cause schizophrenia or increase the likelihood of its expression in an already vulnerable individual (Dixon et al., 1991). McLellan et al. (1979) studied amphetamine abusers over six years and found that they were significantly more likely than barbiturate abusers to develop psychotic disorders. Andreasson et al. (1987) reported that Swedish army conscripts who were high consumers of cannabis had a relative risk of developing schizophrenia which was six times that of non users. It has been found that drug abusing patients with schizophrenia are younger (Alterman et al., 1982; Richard et al., 1985; Negrete et al., 1986), have earlier onset of schizophrenia and have better pre-morbid adjustment (Breaky et al., 1974; Tsuang et al., 1982). These findings suggest that drug abuse may trigger the development of schizophrenia, or that some underlying mental health condition is precipitating drug use.

Another reason for high prevalence rates of substance abuse in mentally ill patients is that some people attempt to self-medicate their symptoms (Kasten, 1999; Khantzian, 1985). Some psychiatric patients report that illicit substance use helps reduce symptoms of schizophrenia such as hallucinations

and delusions, while other patients refer to the alleviation of symptoms such as flattening of mood, apathy and social withdrawal as their reasons for substance misuse (Wheatley, 1998). Similarly, Hall et al. (1978) report that psychostimulant drugs such as amphetamines and cocaine reduce the negative symptoms of psychotic illness, such as social withdrawal and apathy, while benzodiazepines and alcohol can temporarily suppress psychotic phenomena. In a review of drug choice for people with schizophrenia, Schneier and Siris (1987) suggest that these patients prefer drugs which might counteract negative symptoms (e.g., cocaine, cannabis, amphetamines, and hallucinogens) rather than potentially depressant drugs, such as sedative-hypnotics, opiates and alcohol. In a study by Dixon et al. (1991), patients with schizophrenia reported that alcohol and cannabis shared common effects of decreasing anxiety, in contrast to cocaine, which increased anxiety. Cannabis and cocaine were more often reported to increase energy. Laboratory studies found that amphetamines challenge tests improve the mood and increase the work efficiency of some patients with schizophrenia (Kornetsky, 1977; Cesarec & Nyman, 1985).

A related hypothesis suggests that patients self-medicate against the extra pyramidal, sedative or hypotensive effects of many commonly prescribed anti-psychotic medications, either by direct action or by altering the medications' metabolism (Knudsen & Vilmar, 1984; Schneier & Siris, 1987; Miller & Tanenbaum,1989). For example, smoking tobacco has been noted to decrease the sedative effects of neuroleptic medication (Pantuck et al., 1982).

It must also be remembered that people with a mental illness use drugs for essentially the same reasons as people in the general population. Fowler et al. (1998) asked mentally ill clients why they used drugs. The main answers were: to enjoy the experience of intoxication; to escape from emotional distress; or to take part in a social activity. One service user said "street drugs fixed the way I was feeling. Any slight lift in mood that I got from anti-depressants wasn't enough" ('Pillar to Post' video recording, 2001). To escape from emotional distress seems to be a critical reason for drug use in dually diagnosed women. Palacios et al. (1999) found high lifetime incidences of emotional, physical and sexual abuse at baseline assessment in a sample of 143 dually diagnosed women in a residential setting: 57.1% had experienced emotional abuse; 48.9% physical abuse; and 39.7% sexual abuse.

Another reason why people with mental health problems misuse substances is that it represents an opportunity to move away from the 'mental patient' label, and to create an alternative identity, which in their eyes, is more socially acceptable (Lamb, 1982).

The relationship between substance misuse and mental health problems is an important and complex one. Although a co-morbid disorder may sometimes resolve during treatment of the primary condition, it is more likely that the clinician is faced with the need to manage the two conditions simultaneously.

Implications of Dual Diagnosis

Clients with co-existing mental health and substance use problems present many challenges for healthcare professionals and services. As a group, dual diagnosis patients are more difficult to treat and to manage because of higher levels of physical, social and psychological impairment, increasing costs for patients, carers, healthcare systems and society at large (see Table 1).

The cost of treating a person with a dual diagnosis exceeds that of treating an individual with a mental health or substance use disorder alone (Kivlahan et al., 1991; Mueser et al., 1992; Kavanagh, 1995; RachBeisel et al., 1999). In the US Bartles et al. (1993) found that annual service costs of treating patients with schizophrenia was higher for those who currently abused substances ($ 17,706), compared with past users ($15,463) and those who never abused substances ($9,617). Dickey & Azeni (1996) examined the annual treatment costs of 16,395 psychiatrically disabled Medicaid beneficiaries with and without a substance use disorder. They found significant differences between those with no substance use disorder, for whom the cost was $13,930, and those with either a treated or an untreated substance use disorder, for whom annual costs were $22,917 and $20,049 respectively.

For the patient with a dual diagnosis, each of the co-morbid disorders can have important implications for the course and prognosis of the other disorder (Williams, 1998); hence, they differ in a number of ways from patients with schizophrenia alone and from other patients with substance use disorder.

Some evidence from mental health treatment settings suggests that prognosis is usually poor in patients who misuse drugs (Cuffel, 1994; DeQuardo et al., 1994; Linszen et al., 1994). Similarly, in the case of drug dependence, concurrent psychiatric conditions, such as depression, have been associated with greater illicit drug use while in treatment and a poorer prognosis (Rounsaville et al., 1982).

Table 1. Implications associated with a dual diagnosis

Exacerbation of symptoms
Non-compliance with medication or treatment
Higher rates of tardive dyskinesia
Increased relapse rates and severity
Increased costs and use of services
Increased risk of violence and offending
Increased risk of suicide
Higher incidence of homelessness
Increased risk of HIV infection
More complex intervention strategies
Increased burden on carers and family
Rejection by psychiatric services
More positive/less negative symptoms
Better pre-morbid functioning
Greater complexity in diagnosis and assessment

Clinical implication and response to treatment

Substance abuse may modify the clinical presentation of mental illness (Sokolski et al., 1994), exacerbate existing psychotic symptoms (Negrete et al., 1986; Drake et al., 1989), lead to higher rates of tardive dyskinesia (Dixon et al., 1992; Bailey et al., 1997) and contribute to non-compliance with treatment (Kosten & Ziedonis, 1997) and medication (Pristach & Smith, 1990; Bartles et al., 1993; Owen et al., 1996). Bowers et al. (1990) identified a reduction in the effectiveness of neuroleptic medication because of illicit substance use. A related issue is that substance use is likely to increase the risk and severity of relapse (Holland, 1998). Menezes et al. (1996) found that admission rates to psychiatric inpatient units, while not significantly higher among the dually diagnosed, were 1.8 times longer in duration. This is a problem for service providers, given the shortage of acute psychiatric beds and the costs for services involved.

Other studies found that rates of hospital admission are higher (Salloum et al., 1991; Bartles et al., 1993; Haywood et al., 1995; Gupta et al., 1996) and dual diagnosis patients have higher rates of discharge against medical advice (Miller & Tanenbaum, 1989). However, a recurring finding favouring some people with dual diagnosis is that the co-existence of schizophrenia and substance misuse was associated with fewer and less severe negative symptoms and better pre-morbid functioning than was the case with single diagnosis (Dixon et al., 1991; Arndt et al., 1992; Serper et al., 1995; Kirkpatrick et al., 1996).

Danger to others

The association between violent behaviour and dual diagnosis is greater than that between violent behaviour and mental illness alone (Swanson et al., 1990; Bartles et al., 1991; Cuffel, 1994; Eronen et al., 1996; Tardiff et al., 1997). Swanson et al. (1990), reporting results from the Epidemiological Catchment Area Study (ECAS), discovered a one-year prevalence rate for violence in people with schizophrenia who also abused substances (30.33%) that was four times greater than that in people with schizophrenia alone (8.36%), which was, in turn, four times greater than that in people with no psychiatric disorder and substance abuse alone (2.05%).

In relation to offending, Scott et al. (1998) examined a group of community care patients (n=27 psychotic illness and substance use, n=65 psychosis only) in an inner-city catchment area in south London and found that dual diagnosed patients were five times more likely than patients with psychosis only to report a lifetime history of criminal offending. Greater severity of offending, such as assault, and increased rates of imprisonment were also found in this group. While overall levels of recent violence in the sample were quite low, the dual diagnosed patients were over six times more likely to report recent hostile behaviour, and key workers were also significantly more likely to report recent violence in dual diagnosed patients. In a replication of the Scott et al. (1998) study with patients in a more demographically representative sample (n=40), Wright et al. (2002) found a slightly higher rate of offending among dual diagnosed patients, but did not find a difference in severity of offending between dual diagnosed and psychosis-only patients.

Suicide rates

The risk of suicide is greater for people with both a mental health and a substance use disorder than it is for people with a single disorder (Drake & Wallach, 1989; Lysaker et al., 1994; Heila et al., 1997). O'Boyle & Brandon (1998) examined the association between suicide attempts and variables such as substances used and personality measures in 103 subjects who had entered a substance abuse programme. They found that 60% of attempters had an additional current diagnosis, compared with 22% of the non-attempters. Eighty percent of attempters had additional past diagnoses, compared to 33% of non-attempters. Most of these diagnoses were for mood disorders, such as major depression.

Homelessness

Homelessness is a common problem among dual diagnosed patients. Susser et al. (1991) found substance abuse to be a risk factor for homelessness among patients admitted to a state mental hospital in the US. Odell & Commander (2000) compared homeless (n=39) and non-homeless (n=39) clients with a psychotic disorder. The homeless clients were more likely than the matched controls to have a diagnosis of a drug use disorder (46% and 10% respectively). One reason for the occurrence of homelessness in dual diagnosis is the fact that mental health residential facilities exclude people who misuse substances, and substance use residential facilities exclude people who have a serious mental illness (Clenaghan et al., 1996).

Adolescents

Substance misuse is a major factor in the development of mental health problems in adolescents. For example, early onset of substance misuse is linked with higher rates of major depressive disorders and it is estimated that one third of young people committing suicide are intoxicated with alcohol at the time of death (DoH {UK}, 2002).

Studies of dually diagnosed adolescents focus mainly on psychopathology in adolescents who abuse substances (DeMilo, 1989; Stowell & Estroff, 1992; Hovens et al., 1994). High prevalence rates have been reported for conduct disorder (32% to 59%) and for mood disorder, including major depression and adjustment disorder (35% to 61%). Wise et al. (2001) found that conduct disorder and attention deficit hyperactivity disorder (ADHD) had a significant negative impact on treatment participation in adolescents who abused drugs.

The implications of dual diagnosis in adolescents are often quite devastating and are associated with academic problems, increased mental health service utilisation, and a history of suicide attempts; there are moderate associations with problems in role functioning and conflicts with parents (Lewinsohn cited by Wise et al., 2001). High rates of unemployment have also been found among the dually diagnosed. In addition to unemployment, young people with a dual diagnosis face the threats to developing self-concept posed by mental health and substance misuse problems. A serious mental health problem, by its very nature, can erode a positive self-concept – a situation that is likely to be compounded by substance misuse (Mitchell et al., 2002).

Risk of increased vulnerability to infection

Another difficulty dual diagnosed clients are subjected to is an increased risk of HIV infection (RachBeisel et al., 1999). Silberstein et al. (1994) tested 118 dually diagnosed, acute-care inpatients for HIV. Twenty-seven (23%) of the subjects tested positive. Dradow (1998) examined HIV status in 147 patients with mental illness and substance abuse and found that 22 (19%) tested positive for HIV. Women were 3.8 times more likely than men to be HIV positive. Such risks may be attributed to the lifestyle accompanying substance use among women, such as exchange of sex for drugs, general prostitution, and the socially biased perception that women who engaged in substance use are more sexually available, thereby putting them at greater risk of sexual violence (RachBeisel et al., 1999).

Risks specific to women

In the case of women, recognition of the impact of childhood abuse on the subsequent course of substance use and substance use disorders has been growing. Rosenberg et al. (1996) found that more than half the women studied with severe mental illness reported that they had experienced sexual abuse before the age of 18. Women who seek treatment for substance use disorder are more likely to report a family history of instability and physical and sexual abuse than are men who seek such treatment (Gomberg & Nierenberg, cited by RachBeichsel et al., 1999). Alexander (1996) has observed that women with severe mental illness and substance use disorder are more likely to have experienced childhood physical or sexual abuse then women with severe mental illness only.

Service users

Although policy developers are now often perceived to be working in partnership with service users in identifying needs in mental health and substance abuse services, there is little evidence of this partnership in the area of dual diagnosis. However, where views from service users were sought (Clenaghan et al., 1996) the following themes were identified:

- There is an extensive and varied range of reasons for taking substances;
- Some users said drug use was a major problem, whereas others said it was not and that it was more of a solution;
- Service users raised the question of where the responsibility for service provision should lie;
- Service users pointed out the financial burden of using substances and the spiral of substance use that that can lead to more substance use.

In an educational video called 'Pillar to Post' (2001) developed by the UK mental health voluntary lobby group 'Mind', a service user mentioned that the term dual diagnosis "is a way of suggesting problems without suggesting them. I think sometimes I have more than two problems". Users said that they were often turned away from services and asked to come back when they felt better. One user summed up his experience with services as follows: "My experience is a 'pass the buck' attitude with both the psychiatrist and drug treatment centres. In the mental health service you need to be clean and in a lot of cases I have been clean, but there are drugs on my record, so it is easy for them to say that is the problem and "off you go to the drug treatment centre" and the psychiatrist there says, "I want you off all this medication", and I have just crashed".

The implications of dual diagnosis demonstrate not only the complex needs of this client group, but also the challenge to services to meet these needs. More research needs to be done into the specific components of dual diagnosis and the implications. For example, Smith & Hucker (1994) point out that it is not clear whether the increased rate of violence among the dual diagnosis population is mediated through social factors or if it is directly driven by an increase in psychosis. It is clear, however, that substance abuse should be taken into consideration when attempting to predict future violent or suicidal behaviour in clients with mental health problems.

Prevalence

Although there is an abundance of international literature in relation to dual diagnosis, difficulties arise for the reviewer because of differences in methodology, in sampling and in defining dual diagnosis. These difficulties have hampered consensus in relation to the prevalence of dual diagnosis and have stimulated the ongoing debate.

Despite the difficulties in establishing prevalence, the literature indicates high rates of dual diagnosis that are increasing steadily over time (Jackson-Koku, 2001). Smith & Hucker (1993) propose two factors that may have led to this increase. First, as service delivery moves toward community care, individuals with a psychiatric illness may be increasingly exposed to illicit drugs. Second, there is a general increase in experimentation with illicit drugs in the population as a whole.

There are discrepancies in prevalence ranges reported in the literature, some of which may be accounted for by the nature of different population groups participants were drawn from. As Regier et al. (1990) point out the absence of data on the expected baseline prevalence of discrete disorders in each study population usually obscures both the actuality and the significance of reported high rates of co-morbidity. The authors further highlight that rates of mental illness among patients presently being treated in an addiction service may be different from rates of substance misuse problems among patients presently being treated in mental health settings. Moreover, in the general population mental illnesses are more prevalent than alcohol disorders, which, in turn, are more prevalent than other drug disorders. There is a natural statistical tendency for the rates of co-occurring disorders to be higher in alcohol treatment than in mental health treatment settings, and highest in other substance misuse patient populations.

Another explanation for the disparity in prevalence rates might be the range of assessment or diagnostic tools used in the different studies. This is partly due to the lack of a consensual definition of dual diagnosis. Some studies may have interpreted dual diagnosis as being restricted to individuals who fulfilled the diagnostic criteria of the DSM-IV (Diagnostic and Statistical Manual of Mental Disorders – Fourth Edition) for mental illness and substance use disorder; other studies might have defined the term to include a person who scored high on the Brief Psychiatric Rating Scale and who used cannabis once a month. Assessment scales mentioned in this section are outlined in more detail in Appendix 1.

The bulk of initial research and resulting literature on dual diagnosis originates in the US. Therefore, the review of US prevalence will be presented first, followed by that of the UK, Australia and Europe. Only two Irish studies were found; these are also reviewed. For an overview of studies, see Table 2 and Table 3 on page 35.

General population-based studies from the United States

Two large population-based studies in the US identified a high prevalence rate of substance misuse in people with mental illness (Kessler et al., 1994; Regier et al., 1990). The earlier of these by Regier et al. (1990) was the Epidemiological Catchment Area Study (ECAS) of five US communities with a total sample size of 18,571 respondents from the general population. Using a comprehensive, community-based survey with structured clinical interviews, the authors found that the lifetime prevalence rate of substance misuse in respondents with schizophrenia was 47%. For the general population, both institutionalised and non-institutionalised, the lifetime prevalence rate for any substance use disorder was 16.7%. Fifty-three percent of the people who misused drugs appeared to have a lifetime prevalence of one or more forms of mental disorder. Among those co-morbid mental disorders were anxiety disorders (28%), affective disorders (26%), antisocial personality disorders (18%), and schizophrenia (7%); in the general population these disorders were prevalent at 14.6%, 8.3%, 2.6% and 1.4% respectively.

The US National Co-morbidity Survey (NCS) also revealed a high prevalence of co-morbidity in the non-institutionalised civilian population (n=65,244) (Kessler et al., 1994). The authors found that 26.6% of people who had a lifetime psychiatric disorder as diagnosed by the DSM-III-R, and 11.3% of people who had a psychiatric disorder diagnosed in the previous twelve months, misused substances. These rates were higher in males than in females, 35.4% and 17.9% respectively for lifetime prevalence.

Clinical cohort studies from the United States

Prevalence studies from clinical treatment groups in the US yield different results. Prevalence rates for substance abuse ranged from 24% to 56% in psychiatric inpatient populations (Dixon et al., 1991; Rosenthal et al., 1992; Shaner et al., 1993). The main substances used were alcohol, cannabis and cocaine.

Elangovan et al. (1993) carried out urine toxicology screening on patients who presented to a psychiatric emergency service. The test revealed positive results for cocaine in 26%, sedative-hypnotics in 7%, cannabinoids in 4%, opiates in 3% and amphetamines in 1%.

In a study of cocaine addicts, Ziedonis et al. (1994) found that 55.7% of people seeking treatment had current psychiatric disorders; 73.5% of them had lifetime psychiatric disorders.

Prevalence rates of dual diagnosis in adolescent psychiatric inpatients range from 41% to 51% (Piazza, 1996; Caton et al., 1989). Younger subjects and females had relatively lower rates (37.17% and 38.46% respectively); older subjects and males had higher rates (45.56% and 43.43% respectively).

Clinical cohort studies from Australia and Europe

The quantity of prevalence research findings emerging from Australia and Europe has increased. In Australia, Fowler et al. (1998) reported six-month and lifetime prevalence of 26.8% and 59.8% respectively for substance misuse in 194 outpatients with schizophrenia as determined by the Structured Clinical Interview for the DSM-III-R (SCID-R) (Spitzer et al., 1987). Alcohol, cannabis and amphetamines were the most commonly misused substances.

In an inner London district, Haywood et al. (1995) found that 36% of psychotic patients misused drugs or alcohol. Prevalence rates for substance abuse in the community ranged from 24.4% to 38%

(Menezes et al., 1996; Wright et al., 2000; Weaver et al., 2001). These rates are substantially higher than those in the general population. The Office of Population Censuses and Surveys (OPCS) in 1994 estimated the prevalence of illicit drug use among the general population in the UK at 2.2%. This figure rose to 4% in 2000 (Singleton et al., 2000, p.7).

A national household study of co-morbidity in England and Wales (Farrell et al., 1998) found prevalence rates of Axis I neurotic disorders to be as high as 30% in those who were alcohol dependent and 45% in those who were drug dependent. Manning et al. (2002) found that 89.9% of substance misuse treatment attendees tested positive for dual diagnosis.

In a preliminary analysis using ICD-10 (World Health Organization, 1992) criteria for drug abuse and mental illness, Frischer & Akram (2001) found a 0.12% co-morbid population, retrospectively diagnosed, as recorded in the West Midlands on the General Practice Research Database (1993–1997), giving an indication of the extent of co-morbidity in primary care.

In Germany, Soyka et al. (1993) carried out a prevalence study in two psychiatric hospitals, the Psychiatric Hospital of the University of Munich (group 1) and the Mental State Hospital Haar/Munich (group 2). Estimated lifetime prevalence rates for substance abuse were 21.8% in group 1 and 42.9% in group 2. Three-month prevalence rates for substance abuse were estimated at 21.3% and 29.0%. Alcohol abuse was by far the most common type of abuse, with prevalence estimates of 17% and 34.6%. Prevalence rates for substance abuse were much higher in the more 'chronic' sample of the Mental State Hospital and in male patients.

In Italy, data gathered from 90 opiate-dependent participants in the PISA-Methadone Maintenance Treatment Programme revealed that half of the patients treated suffered from psychiatric co-morbidity. Bipolar disorder (55.6%) was the most common disorder, followed by unipolar depressive disorders (13.4%) and psychotic disorders (11.2%) (Maremmani et al., 2000).

In Sweden, Cantor-Graae et al. (2001) found a lifetime dual diagnosis prevalence rate of 48.3% in 87 patients with schizophrenia who were seen at a psychiatric city clinic, using relevant questions pertaining to substance use from the Structured Clinical Interview for the Diagnostic and Statistical Manual of Mental Disorders (SCID-I) (Spitzer et al., 1987).

Clinical cohort studies from Ireland

In an Irish prevalence study, Condren et al. (2001), using a loose definition of dual diagnosis, found similar prevalence rates of illicit substance and alcohol use in outpatients with schizophrenia (illicit substances 45%; alcohol 33%) and in controls from general practice (illicit substances 43%; alcohol 25%). The authors concluded that illicit substance misuse in patients with schizophrenia may mirror usage in the general population, with rates of misuse reflecting cultural factors rather than illness and patterns of misuse reflecting variations in the availability of drugs geographically. Using more stringent diagnostic criteria, Kamali et al. (2000) found that 39% of inpatients with schizophrenia fulfilled the DSM-IV diagnostic criteria for lifetime history of substance misuse; the main substances of abuse were alcohol and cannabis, or a combination of both. Twenty (19.6%) patients were currently misusing substances.

These studies suggest a high prevalence of substance abuse among people with a mental illness in Ireland, similar to international rates. The slightly higher prevalence rate in the study by Condren et al. (2001) exemplifies the difficulty in establishing true prevalence; more studies need to be carried out to capture a clearer picture of the extent of dual diagnosis in Ireland.

Table 2. Studies documenting prevalence rates of DSM-IV or ICD-10 diagnoses of substance use/dependence in clients who also meet DSM-IV criteria for a major mental illness

Reference	N	Substance	Patients with dual diagnosis (%)	Assessment tool for substance use/abuse	Assessment tool for mental health problems	Setting	Country
Regier et al. (1990)	18571	Any Drug other than alcohol	47.0 27.5	NIHM Diagnostic Interview Schedule	NIHM Diagnostic Interview Schedule	General population, Institution (MH)	USA
Dixon et al. (1991)	83	Any Cannabis Cocaine	48.0 31.3 16.9	DSM-III-R	DSM-III-R	Inpatient (MH)	USA
Peralta and Cuesta (1992)	95	Cannabis	24.0	DSM-III-R	DSM-III-R	Inpatient (MH)	Spain
Rosenthal et al. (1992)	604	Any	24.3	DSM-III-R	DSM-III-R	Inpatient (MH)	USA
Shaner et al. (1993)	100	Any Cocaine	56.0 27.0	DSM-III-R	DSM-III-R	Inpatient (MH)	USA
Soyka et al. (1993)	183 447	Any Any	21.8 42.9	Semi-structured interviews, laboratory tests	ICD-9	Inpatient 'chronic' inpatient (MH)	Germany
Kessler et al. (1994)	65244	Any	26.6	DSM-III-R	DSM-III-R	General population	USA
Ziedonis et al. (1994)	263	Cocaine	55.7	DSM-III-R	DSM-III-R	Outpatient (A), inpatient (A), dual diagnosis units	USA
Piazza (1996)	203	Any	41.0	DSM-III-R	DSM-III-R	Adolescent Inpatient (MH)	USA
Fowler et al. (1998)	194	Any	26.8	SCID-R	SCID-R	Outpatient (MH)	Australia
Cantwell et al. (1999)	154	Any Cannabis	27.3 18.2	ICD-10	ICD-10	First contact (MH)	UK
Kamali et al. (2000)	102	Any Cannabis	39.2 16.7	DSM-IV	DSM-IV	Inpatient (MH)	Ireland
Maremmani et al. (2000)	90	Heroin	42.2	Opioid dependent	Axis I	Opioid dependent	Italy
Wright et al. (2000)	40	Any Alcohol Drug	33.0 20.0 8.0	Semi-structured interviews, laboratory tests	Functional psychosis as noted in case notes	Clients in contact with MH services over last 6 months	UK
Weaver et al. (2001)	851	Any	24.4	DSM-IV	DSM-IV	Inpatient and Community (MH)	UK
Cantor-Graae et al. (2001)	87	Any	48.3	SCID-I	SCID-I	Inpatient (MH)	Sweden
Graham and Maslin (2002)	1369	Any	24.0	DSM-V	ICD-10	Community (MH)	UK
Manning et al. (2002)	50 50	Any Any	38.0 89.9	Bromley dual diagnosis screening tool Bromley dual diagnosis screening tool	Bromley dual diagnosis screening tool Bromley dual diagnosis screening tool	Community (MH) Community (A)	UK

Assessment tools are described in Appendix 1.
Abbreviations: MH= Mental Health Services; A= Addiction Services.

Table 3. Studies documenting prevalence rates of substance use/abuse in clients who also have mental health difficulties.

Reference	N	Substance	Patients with dual diagnosis (%)	Assessment tool for substance use/abuse	Assessment tool for mental health problems	Setting	Country
Caton et al. (1989)	33	Any	51.0	Clinicians' ratings	DSM-III-R	Adolescent inpatient (MH)	USA
Elangovan et al. (1993)	218	Cocaine	25.7	Urine toxicology screen	DSM-III-R	Psychiatric emergency unit	USA
Haywood et al. (1995)	135	Any	36.0	Life event history interview	SADS	Inpatient (MH)	USA
Menezes et al. (1996)	171	Any drug other than alcohol	36.3 15.8	DQI, DAST	Functional psychosis as noted in case notes	Community (MH)	UK UK
Condren et al. (2001)	99	Drugs other than alcohol	45.0	ASI	ICD-10	Outpatient (MH)	Ireland
Karam et al. (2002)	222	Cannabis Cocaine Heroin Tranquillisers	23.4 21.2 23.4 18.9	Chart review	DSM-III-R	Inpatient (MH)	Lebanon

Assessment tools are described in Appendix 1.
Abbreviations: MH= Mental Health Services; A= Addiction Services.

There are obvious limitations to some of these studies in terms of sampling and the diverse definitions of dual diagnosis. In many cases, the results are applicable only to the population under investigation. Such a wide range of prevalence estimates as already discussed might be accounted for in part by methodological differences across studies, including the procedures used to sample the study populations, the assessment techniques and the demographic characteristics of the subjects (Mueser et al., 1992). Weaver et al. (2001) point out that prevalence estimates so far obtained use different methodologies, time scales and assessment methods and hence need to be corroborated by further study.

Lidz & Platt (1995) suggest that because of the covert nature of substance or alcohol use, in the mentally ill as in the rest of the population, it is often difficult to determine accurate rates of consumption, and hence accurate prevalence rates. The authors point out that the absence of any standardised screening instruments for the gathering of more accurate information on the level of illicit substance use in patients with mental health problems exacerbates the difficulties.

The differences in the approaches and findings of reported studies, generally of small sample populations and predominantly relating to North American populations, mean that it is not feasible to generalise interpretations of these findings or clinical consequences. Lack of reported evidence as to the prevalence of dual diagnosis in Ireland also indicates a need for further study if policy development is to be informed.

Assessment of Dual Diagnosis

Given the reported high level of prevalence of substance use among psychiatric patients internationally, and the clinical implications of concurrent mental health and substance use problems, it could be argued that assessment for the presence of dual diagnosis should be a feature of any systematic assessment of people entering either addiction or mental health services so that appropriate treatment can be recommended. Careya & Correiaa (1998) point out that assessment serves multiple purposes, including screening, diagnosis, treatment planning and outcome evaluation. In addition, mis-diagnosis or non-diagnosis can be quite costly for the individual, the healthcare system and society at large.

Substance misuse often goes unnoticed or unrecorded in psychiatric inpatient assessments (Ananth et al., 1989; Elangovan et al., 1993; Shaner et al., 1993). For example, Kirchner et al. (1998) examined medical records for a small sample of 42 inpatients in the US who met DSM-III-R criteria for both schizophrenia and current substance use disorder and found that 24 patients (57%) did not receive a diagnosis of a substance-related disorder at admission, and 19 (45%) did not receive a substance-related diagnosis at discharge. In the UK, Grandison et al. (2001) found that trainee psychiatrists recorded some statement about substance misuse in 60% of cases at the time of admission and this increased to 73% of cases by the time of discharge. However, there was a wide variety in both the quality and extent of enquiry. The type, amount and frequency of drug use was enquired about only in 40%, 21% and 27% of cases respectively during admission. The authors highlight the necessity for a brief , standardised substance use screening questionnaire, which could be usefully incorporated into the existing psychiatric interview format, thus increasing awareness and improving history taking by trainee psychiatrists.

Accurate assessment can be difficult because of the psychomimetic effects of substance misuse (Williams, 1998). Substance misuse can give rise to a wide range of psychiatric syndromes and temporary psychotic states. Examples of these are depressive episodes caused by cocaine withdrawal, or amphetamine-induced psychosis (Careya & Correiaa, 1998). Chronic cocaine abuse or overdoses of cocaine can cause paranoia and delirium (Welti & Fishbain, 1985). It is important, therefore, to rule out the acute effects of substance abuse or withdrawal symptoms by means of comprehensive assessment before making a diagnosis of schizophrenia.

Cohen (1995) claims that, on a national scale, many patients with psychosis as a result of substance abuse are diagnosed and treated as patients with schizophrenia. This finding was based on researchers reviewing the diagnosis of inpatients in a London psychiatric treatment unit. Equally, there is a risk of missing a diagnosis of mental disorder by too readily attributing symptoms solely to drug misuse (Williams, 1998). Cohen (1995) claims that the only way to be sure that psychoactive substances or alcohol cause illness is if the patient recovers when he or she stops using them. If the symptoms return when the substance use is resumed the diagnosis is confirmed. This means that the timing of the diagnosis is important and clinicians should try to make sure that the clients abstain for a certain amount of time so that the diagnosis can be made with confidence. However, abstinence is not always the treatment of choice and some patients might want to control their intake of substances instead.

Clinicians should be alerted to the possibility of a dual diagnosis, particularly when working with young male patients, and when problems such as violence, treatment non-compliance and failure to respond to standard treatments are apparent (Smith & Hucker, 1994).

People with schizophrenia appear to be more susceptible to the harmful effects of substance use than people without a mental illness, and the normal criteria for defining and diagnosing substance abuse may not apply to mentally ill patients. Normal criteria may substantially underestimate the extent of the problem and are perhaps inappropriate to this client group (Smith & Hucker, 1993). When a diagnosis of schizophrenia is confirmed, a variety of factors can interfere with the assessment of a co-morbid substance abuse disorder. There are several methods of assessment available which increase the likelihood of a clinician detecting possible substance use/abuse.

Assessment considerations

A variety of brief self-report screening tools for substance misuse are available to the clinician. When evaluating different screening methods for substance use in mentally ill patients (n=320), Wolford et al. (1999) found that self-report measures for drug use disorder, such as the Drug Abuse Screening Test (DAST) (Skinner, 1982) and the Reason for Drug Use Screening Test (RDU) (Grant et al., 1988), yielded overall classification accuracy of 75%. Within the population of mentally ill patients, there are certain factors to be considered when using these tests (Carey, 2002). First, the social and motivational context of assessment needs to be taken into account. The patient may have an active interest in disguising his or her drug abuse, e.g., in fear of losing basic psychiatric treatment services and entitlements (Ridgely et al., 1990). Second, the patient's mental state can influence accurate reporting. Intoxication at the time of assessment is associated with inaccurate reporting (Brown et al., 1992). Urine samples showed that patients experiencing acute psychiatric distress, e.g., on admission to a treatment setting, are likely to under-report recent substance use (Maisto et al., 1990). Third, chronic cognitive impairment, which characterises many psychiatric conditions, can influence a client's self-report of substance use. This impairment can include problems with memory, temporal ordering of events, abstract thinking, and attention and concentration (Braff, 1993). Finally, the content validity of the assessment tool needs to be considered. Measures may not be sensitive because the item content is poorly matched to the lifestyles and capabilities of substance abusers with major mental illness. For example, Carey et al. (1997) reported that few patients with severe and persistent mental illness hold down jobs or have drivers' licences; many are unmarried, estranged from family, and socially isolated; these circumstances limit the relevance of many of the items of the Addiction Severity Index (ASI) (McLellan et al., 1980). Furthermore, certain items may be ambiguous in the context of psychiatric treatment and symptoms, e.g., the word drug might be confused with medication.

Screening, assessment tools and classification for dual diagnosis

Many instruments have been developed to determine drug use in an individual and also to assess their mental state. These have generally been developed as research tools initially, and subsequently applied in particular clinical cohorts. For example, the Brief Psychiatric Rating Scale (BPRS) (Overall & Gorham, 1962) is normally used to aid clinical judgement and decision making when a mental health professional is assessing a person referred to or within their service. An example in an addiction service might be the ASI (McLellan et al., 1980), an assessment tool developed specifically for people accessing the substance use disorder services. These and the many other assessment tools cannot be applied automatically to the establishment of dual diagnosis, either separately or in combination. As already discussed, the course of either a mental health or a substance misuse difficulty will be affected in the case of a person dually diagnosed. The sensitivity of most of these tools to the complexity of

dual diagnosis, and indeed their validity in a 'different' clinical population, cannot be taken for granted. To date, few assessment tools have been developed in relation to dual diagnosis, and reliability and validity of those that do exist are still being established. One of these, the Dartmouth Assessment of Lifestyle Instrument (DALI) (Rosenberg et al., 1998) has so far been tested only with North American groups.

A range of measurement tools are used to aid the identification of people with dual diagnosis. These tools are usually used in combinations and, although their predictive value may still be questioned, they are nonetheless used. A selection of such tools with brief descriptions are listed in Appendix 1.

Wolford et al. (1999) carried out an evaluation study (n=320) of substance use disorder in persons with severe mental illness and found that many of the available strategies showed limited utility. Self-report measures showed the closest congruence with the author's criterion measures (i.e., DSM-III-R), but even these instruments were somewhat insensitive in this population. The authors speculate that one reason for the poor classification accuracy of available tools is that these instruments were designed to detect substance use disorder in the general population as opposed to that in clinical cohorts. As patients with severe mental illness differ in their patterns of substance misuse (e.g., they tend to use lower quantities of substances), norms established for the general population may not be applicable to psychiatric patients.

Classification for dual diagnosis

- Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)
  The Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) (American Psychiatric Association, 1994) is a multi-axial classification system of maladaptive behaviour. A noteworthy feature of the DSM-IV is its attempt to pay attention to the multiple aspects of a person's life that play roles in their clinical conditions. In addition to describing each clinical condition (Axis I and Axis II), DSM-IV also deals with the relevance to the condition of the medical status of the individual (Axis III), pertinent psychological and environmental problems (Axis IV), and how well the individual is functioning in important domains of life (Axis V). Mental disorders and substance related disorders fall into Axis I. The DSM-IV defines a mental disorder as 'a clinically significant behavioural or psychological syndrome or pattern that occurs in an individual and that is typically associated with present distress (a painful symptom) or disability (impairment in one or more areas of functioning)'. Substance misuse, according to DSM-IV, is 'the maladaptive pattern of use not meeting the criteria for dependence that has persisted for at least 1 month or has occurred repeatedly over 1 month or has occurred repeatedly over a long period of time'. The DSM-III-R was the forerunner of the DSM-IV.

- International Classification of Diseases (ICD-10)
  In the International Classification of Diseases (ICD-10) (World Health Organization, 1992), the range of psychoactive substances are listed as alcohol, opioids, cannabinoids, sedatives or hypnotics, cocaine, stimulants including caffeine, hallucinogens, tobacco, volatile solvents, multiple drug use and other substances. ICD-10 encourages a range of diagnostic categories related to the use of substances as follows: acute intoxication, harmful use, dependence syndrome, withdrawal state, withdrawal state with delirium, psychotic disorder, amnesia syndrome, residual and late onset psychotic disorders, other mental and behavioural disorders, and unspecified mental and behavioural disorders.

Collateral sources of information

Collateral data sources have been found to be useful in substance abuse treatment settings (Maisto & Connors, 1992). Collateral information sources include friends and family, other treatment providers, official records and reports from legal or other agencies. The value of collateral informants increases with the extent of their direct contact with or awareness of the substance use behaviours of the client (Wilson & Grube, 1994). Collaterals may vary in their usefulness depending on the degree of contact and confidence, two dimensions that are relatively easily assessed (Careya & Correiaa, 1998).

One type of collateral information can be obtained from clinicians who know the client. Two clinical rating scales to identify probable substance use disorders have been developed. The Alcohol Use Scale (AUS) and the Drug Use Scale (DUS) are parallel five-point rating scales (Drake et al., 1996). The clinician is asked to consider all available information, e.g., behavioural observations, self-report, family or other reports, accumulated over a period of up to six months, to make ratings on a client's substance use or abstinence, use without impairment, abuse, dependence, and severe dependence. The AUS and DUS are reliable and correspond with more intensive interview-based methods of establishing substance use disorder diagnoses (Careya & Correiaa, 1998). They can be used in both a mental health and a substance abuse setting.

In a substance misuse setting it is important for the clinician to incorporate a mental state examination into the assessment procedure. Firstly such examination may identify a coexisting psychiatric illness that requires treatment and which may be (or may have been) a contributory factor in the initiation and/or continuation of drug misuse. Secondly, because most misused drugs have psychoactive properties, it is logical to seek the psychological consequences of their consumption. They may cause hallucinations or delusions, for example, or they may affect cognitive state, mood and thought. However, these symptoms and signs are not specific to drug misuse and cannot be diagnostic. As part of the examination of the patient's mental state, it is important to ascertain the degree of understanding and awareness of the extent to which his or her drug abuse is problematic and to establish whether the patient is able to attribute any abnormal psychic experiences, such as abnormal visual perceptions, to their use of psychoactive drugs.

Close observations should also be made of general behaviour, restlessness, anxiety and irritability. These may be caused either by intoxication with stimulants or hallucinogens, or by the withdrawal of opiates and sedatives. In contrast, quiet, withdrawn behaviour may follow consumption of sedatives or opiates which, in higher doses, cause drowsiness.

Biochemical methods for assessing substance use/misuse

Biochemical methods of detecting substance use disorders include analysis of blood, breath or urine samples for direct metabolites of substances, or indirect evidence of biological changes often related to prolonged substance abuse, such as elevated liver enzymes or changes in blood chemistry (Gold & Dackis, 1986). For some substances, e.g., cocaine, metabolites remain in a person's system for a limited time after use (Hawks & Chiang, 1986); thus, they are relatively insensitive indices of patterns of abuse, and may result in false negatives if there is substantial delay between last use and testing. Repeated positive findings in biochemical tests can help to establish abuse patterns. The value of indirect biological markers is limited if the abuse patterns have not been prolonged or intense enough to produce such changes, and they are non-specific with regard to substance abuse.

Studies have shown that laboratory tests, such as urine drug screens, detect substance use that is not acknowledged by patients. For example, Galletly et al. (1993) reported that urinalysis detected alcohol or psychoactive drugs in 17% of a sample of persons admitted to a public psychiatric hospital. All of the patients who tested positive for alcohol had reported recent alcohol use, but none of the patients testing positive for drugs had reported using them. Similarly, studies of both inpatients and outpatients with schizophrenia document substantial under-reporting of cocaine use that was revealed only when self-reports were compared to urine drug screens (Shaner et al., 1993; Stone et al., 1993).

Biochemical tests occasionally result in false positive results but more often yield false negatives because of rapid excretion of substances and thresholds for detection (Zanis et al., 1994). False negatives may be more likely in psychiatric patients, who use smaller quantities of substances yet encounter serious consequences from those smaller quantities (Drake et al., 1990).

Although laboratory tests are highly sensitive and specific in detecting substances in urine or blood, a person with a substance use disorder may not have the substance in the urine or blood at the time of the test for a variety of reasons, making it difficult to establish the sensitivity and specificity of laboratory tests for detecting a substance use disorder in practice. One problem for clients with severe mental illness in acute care settings is that there are often long delays between drug use and testing. In a study mentioned above, Wolford et al. (1999) found that urine tests yield statistically significant accuracy for cannabis, but identified only 19% of cocaine abusers. Consequently it might be useful to complement biochemical testing with self-report and collateral information, where available.

Risk assessment

A risk assessment needs to address specific individual factors that contribute to protection of the individual and the wider community. Dual diagnosis clients often have high-risk lifestyles, with greater instability in housing, self-care and relationships. For the dual diagnosed client, substance use is particularly problematic. It can interfere with the effectiveness of psychiatric medications and affect judgement and the capacity for self care. Psychiatric problems can also affect judgement, including the ability to assess risk and maintain safety. Psychiatric problems and substance abuse can both result in suicidal and homicidal tendencies. Therefore, risk assessment and management are critical to effective treatment of the dual diagnosed client (Wellington, 2003).

Exploration of the possible association between substance misuse and increased risk of aggressive or anti-social behaviour forms an integral part of the risk assessment, and should be explicitly documented if present. Furthermore, possible sexual, physical or emotional abuse of dually diagnosed women needs to be taken account of in a risk assessment (DoH {UK}, 2002).

If the client is in imminent danger, action needs to be taken to provide a safe environment. This can include retaining and observing the client, or sending the client to the emergency department of a hospital for evaluation or admission to an inpatient psychiatric unit. If the client poses a risk to others, legal measures may be the appropriate means of assuring that no one is hurt (Wellington, 2003).

Overall, regular patient reviews should take account of the recent or current status of psychological and behavioural factors associated with the individual's complex behaviour (Roach, 2002).

Models of Management/Service Development and Treatment

There are a number of general models of service provision to people with dual diagnosis. However, it is important to note that the use, integration or effectiveness of any model is not determined by any one factor. The organisation of healthcare systems, legislation, policy on provision of services, professional development and education of healthcare staff all contribute to what model is applied. Models also differ between and within countries and treatment approaches do not necessarily fit into a single model.

Before discussing models and treatment in detail, it is useful to contextualise dual diagnosis into some national health policies that drive service provision and are influenced by such factors as legislation, government agendas and historical influences.

United States

Although legislation in the US is integrated in relation to addiction and mental health services and federal policies are conducive to integrated treatment models, treatment is not always integrated in practice. Inter-state and service differences, along with inter-agency policy incompatibility, often render integrated treatment difficult (US DHHS, 2000; Watkins et al., 2001). Nonetheless, there are several models of integrated treatment applied across the US (Freeman, 2001), with case management generally adopted in some form or other.

United Kingdom

Mental health and addiction services have traditionally evolved separately in many countries, with policy reflecting this. As dual diagnosis is a relatively recent concept in some countries, the notion of shared care reflected in policy is still emerging. Therefore, outside of the US, service development has seldom been integrated. However, this is beginning to change. It was only in 1998, when the UK's anti-drugs co-ordinator produced a white paper, *Tackling Drugs to Build a Better Britain* (Home Office, 1998), that dual diagnosis as a concept was recognised (Barker, 1999). Until 1999 UK mental health policy did not recognise dual diagnosis. The radical policy shift in mental healthcare in *Modernising Mental Health Services* (DoH {UK}, 1999) omitted to deal with dual diagnosis even though evidence of its existence had been emerging from UK services during the 1990s. However, with the development of the National Service Framework for Mental Health (DoH {UK}, 1999), dual diagnosis was both recognised and addressed in several standards of care. These were followed by good practice guidelines (DoH {UK}, 2002) designed to aid services in implementing the health policy relating to dual diagnosis.

Ireland

Health and social policy in Ireland has not yet recognised or catered for people with dual diagnosis. Mental health policy to date has promoted the separation of drug and mental health services (*The Psychiatric Services-Planning for the Future,* Dept. of Health, 1984) and these have been evolving separately under different policy initiatives since this time. More recently the *National Drugs Strategy* 2001–2008 (Dept. Tourism Sport and Recreation, 2001) made no reference to dual diagnosis. Yet, as dual diagnosis is being recognised and studied in Ireland, this 'hidden' group of people are emerging.

Perhaps, as happened in the UK, it will only be when there is a critical mass of indisputable evidence as to the existence of dual diagnosis and associated problems for service management that policy will recognise it.

Although not explicit in the healthcare strategy *Quality and Fairness: A Health System for You* (Department of Health and Children, 2001), the principles within this document pave the way for recognising the needs of people with dual diagnosis and developing appropriate services. How this recognition will translate into policy and service development remains to be seen. Any service model will have to consider the long history of separate services, professional development and differences in treatment and management philosophies.

Emerging service models

The general service models emerging seem to reflect a sequential evolution of services that become more integrated over time. There are three principal models emerging: the serial, parallel and integrated models. Developing services often adapt one or more of these models to their existing circumstances.

Serial model

In the serial or sequential model, either the substance misuse or the mental health problem is dealt with initially, depending on which service the person with a dual diagnosis presents to first. This is followed by the treatment of the other problem by the other service. By definition, this model deals with one problem before moving onto another, which can pose some difficulties, considering the interrelationship between both problems in dual diagnosis (US DHHS, 2000; DoH {UK}, 2002). There is potential for people being cared for within this model to be excluded from services they need because of policies associated with such a system. In this way, and because of the chaotic lifestyles of people with dual diagnosis, such patients can often fall through the care net.

The serial model can lead to exclusion, where clients may be told they are not eligible for treatment in one service until their other problem is taken care of. This often leads to patients being 'shunted' between services and thus falling between the two. This model reflects the norm for many mental health and addiction or substance misuse services. From this model the other two models have evolved to meet the particular needs of people with dual diagnosis.

Parallel model

In the parallel model, two separate services provide treatment concurrently, with mental health and substance misuse clinicians liasing to provide the two elements of treatment. Care is provided within existing service provision (US DHHS, 2000; DoH {UK}, 2002). This model can be difficult to operate, as it requires therapeutic cohesiveness which depends on rapport and effective liaison between the clinicians of the two services. According to Mueser et al. (1998), in practice, parallel treatment services have not brought about such collaboration between professionals, and the burden of integration has either fallen on the patient, or, more likely, has not occurred at all. Issues such as communication, incompatible administration systems, confidentiality, philosophies of care and lack of protocols have been identified (McLellan et al., 1983; Rounsaville et al., 1987; Woody et al., 1990; Minkoff & Drake, 1991; Ridgely et al., 1990).

Integrated model

As a response to the problems associated with the first two models, the integrated treatment model evolved. In this shared-care model, mental health and substance misuse clinicians work together with a dual diagnosed client through combined clinics. Shared care can also be achieved through liaison posts, facilitating joint assessment and referrals, as in the US where the caseworker approach is adopted. The caseworker assumes responsibility for integrating the mental health and substance abuse treatments so that the interventions are selected, modified, combined, and tailored to specific patients (Mueser et al., 1998). Outside the US, adaptations of the serial and parallel models are usually applied. However there are more and more services attempting to provide integrated treatment in the United Kingdom and Australia (DoH {UK}, 2002; Kavanagh et al., 1998).

The integrated model also entails the concurrent provision of mental health and substance misuse services but requires the same staff member or clinical team to provide total care for the individual in the same setting. With the integrated model, specialist staff or whole teams have developed knowledge and skills in both mental health and addiction (US DHHS, 2000; DoH {UK}, 2002). A central feature of an integrated model is the concept of stages of treatment, which can provide clinicians with valuable information as to which interventions are most likely to be successful at a particular point in the course of recovery from a dual diagnosis (Mueser et al., 1998).

Ideally the integrated model is the most effective, and the model of choice in the US. However, not all healthcare systems are conducive to this model and, with some treatment innovations and partnership arrangements, the parallel model can also provide a streamlined and effective service. One way of bridging the gap between parallel services is through the employment of liaison workers who are either joint appointments or employed by one service but work across services. Alternatively, specific teams can be set up to work particularly with dual diagnosed clients from both services, providing advice, clinical input, consultancy, training and liaison between services (DoH {UK}, 2002; Kavanagh et al., 1998; NSW {AUS} Health Department, 2000).

Because of the broad definition of dual diagnosis, relying on one service model is not necessarily appropriate or efficient. A sample scenario would be if the predominant problem were in mental illness where the person misuses substances but the effect is limited and only problematic if the illness is not stable. In this case, it may be quite appropriate to have mental health services providing core care, with specialist input from addictions or other agencies when necessary. The majority of people with loosely defined dual diagnosis can be cared for quite effectively through general practice. There is also a core group of people who will have considerable disabilities associated with substance misuse and mental health problems that will need intensive input from integrated parallel services with effective liaison. Definitions of dual diagnosis between services may be locally agreed in order to facilitate agreed models of care. International guidelines acknowledge the limitations of models and the need for flexibility within general models (DoH {UK}, 2002; US DHHS, 2000; NSW {AUS} Health Department, 2000). The New South Wales Department of Health guidelines (2000), for example, incorporate each of the three models of care into overall treatment of people with dual diagnosis. The appropriate model is dependent on where a person is placed on the definition axis for dual diagnosis.

Treatment programmes

Some form of integrated treatment is generally the preferred option, particularly where people are significantly disabled by their dual diagnosis. Because of the implications such as violence, non-compliance, chaotic lifestyles and transient nature of many people with dual diagnosis, providing effective treatment is challenging. However, there are some clear principles and models of treatment emerging. Often these are a combination of interventions used in mental health and addiction services and can work interchangeably across service models.

The identification of an effective treatment approach for people with a dual diagnosis poses a difficult challenge to clinicians involved, especially in light of the wide range of cognitive, affective, and social impairments characteristic of schizophrenia (Morrison et al., 1988). The clinical implications of dual diagnosis amplify the urgency for such a treatment approach as, without effective treatment, these patients are destined to suffer a poor quality of life, housing instability, and repeated relapse and re-hospitalisation, with society paying the high economic costs of managing these erratic illnesses in the community (Mueser et al., 1992).

A recent Cochrane review of effective interventions for dual diagnosis (Ley et al., 2000) found little evidence to support the effectiveness of any particular treatment, or to recommend one approach over any other. Nevertheless, the limited research that has been done can contribute by suggesting specific treatment orientations and components that may be particularly effective in treating patients with severe mental illness and substance use disorder. Ries (1993) gives four reasons for the lack of outcome studies in the area, namely the relative newness of this area of practice, the problems with the definition of 'dual disorder', the heterogeneity of the 'dual disordered' population and the problems with patient compliance with both treatment and research.

Kavanagh et al. (1998) comment that most of the published work in this area has originated in the US, and reflects the predominant local treatment practices for substance abuse. Published treatments typically have an abstinence goal, with a heavy emphasis on 12-step principles. This is despite the fact that people seeking help are often unwilling to abstain completely, or do not respond to a spiritual emphasis. Many also have problems with social anxiety or attention, which create difficulties for a 12-step group approach. While some people may benefit substantially from these groups, other options for this population are needed.

While recognising the limitations of treatment approaches as identified by the Cochrane review (Ley et al., 2000) and discussions thus far in this review, there are a number of treatment approaches to dual diagnosis which have been researched and are purported to be clinically effective in the identified populations. The following review of approaches within or comparing models, gives a flavour of these. This will be followed by a synopsis of particular integrated-treatment approaches reviewed which can be utilised across models.

Comparing models

Two quasi-experimental studies compared integrated treatment with parallel treatment models. Drake et al. (1997) compared outcomes at 18-month follow-up for 158 homeless, seriously mentally ill, addicted persons in an integrated treatment programme (i.e., one agency provided housing services, substance abuse counselling and mental health treatment) with those for 59 similar subjects receiving parallel treatment services (i.e., substance abuse, homeless and mental health services were provided

by three different agencies). Individuals in the integrated treatment group had fewer institutional days and more days in stable housing than those in the parallel treatment group. In addition, subjects in the integrated treatment programme made more progress toward recovery from substance abuse and showed greater improvement in alcohol use disorders than the standard treatment group. Abuse of drugs other than alcohol (primarily cocaine) improved similarly in both groups. Secondary outcomes, such as psychiatric symptoms, functional status, and quality of life, also improved for both groups, with minimal group differences favouring integrated treatment. Finally, patients in the integrated treatment group advanced to significantly later stages of treatment for substance use disorder than did patients in the parallel treatment group, who remained predominantly at the earlier persuasion phase of treatment.

Blankertz & Cnaan (1994) conducted a comparison study of two residential programmes for 176 homeless, dually diagnosed adults. The experimental programme provided integrated mental health and substance abuse treatment within the context of a psychosocial and drug rehabilitation approach, emphasising education and skill development. The control group was treated in a traditional therapeutic community residence, based on the 12-step substance abuse model and directed by a drug and alcohol agency, with mental health services provided elsewhere. The study found that the integrated treatment programme was significantly more effective in maintaining clients in care than was the parallel treatment programme (81% versus 53%). Of those who completed at least 60 days of residential treatment in either group, patients in the integrated treatment programme were more likely to attain a successful discharge.

Drake et al. (1998) carried out a study to compare a group of individuals (n=114) who received standard case management, with a group (n=109) who received assertive community outreach (ACO). Validated substance use and quality-of-life measures showed little difference in outcome between the groups, but the researchers noted a reduction in the severity of substance use and a reduction in the necessity for hospitalisation in the ACO group.

These specialised services, however, are expensive and might only be affordable in major population centres. Results of one study suggest that such services might not necessarily be required. Galanter et al. (1996) found that cocaine addicts with severe mental illness can be treated along with singly diagnosed addicts. Patients with schizophrenia (n=71) and patients with major depressive disorder (n=50) experienced outcomes as good or better than the less impaired (n=177). These outcomes related to retention on the programme, visit rates and urinalysis results. The programme combined peer-led treatment with psychiatric management and pharmacotherapy.

Barrowclough et al. (2001) conducted a comparison study of a group of psychiatric patients (n=18) who received routine care (i.e., psychiatric management by the clinical team, co-ordinated through case management and including maintenance neuroleptic medication; monitoring through outpatient and community follow-up; and access to community-based rehabilitative activities, such as day centres) with a group of psychiatric patients (n=18) who received a programme of integrated care with motivational interviewing, cognitive behaviour therapy and family or caregiver intervention alongside the routine care. In regard to the patient's level of functioning, they found a superior result for the group given integrated treatment measured on the Global Assessment of Functioning Scale (DSM-IV, p.32) at both nine months and twelve months after treatment. At twelve months, the integrated-care group also had significantly lower scores on the Positive Symptom Scale than the routine-care group.

The difference in relapse rates was significant after 12 months: 33.3% in the integrated-care group relapsed, compared with 66.7% in the routine-care group. The integrated-care group had a greater increase in percentage of days of abstinence over baseline values than the routine-care group at all assessment points during and after treatment, although the differences were not significant at any single point in time. The acceptability of treatment was also good, demonstrated by the finding that 94% of the patients completed the programme.

Brunette et al. (2001) argued that the duration of some programmes might have been too short and compared long-term and short-term residential treatment programmes for dual diagnosed patients, both providing integrated substance abuse and mental illness treatment in a day programme setting. Patients in the long-term programme were significantly more likely to become engaged in treatment, and after discharge they were more likely to maintain abstinence and less likely to experience homelessness. Of the 40 patients, 20 (50%) had maintained remission from all substance use disorders, and 16 (38%) had maintained complete abstinence from substance use at six months after discharge. The severity of the substance use disorder had lessened for more than three quarters of the patients. The mean length of stay in the long-term programme was 625 days for the 20 patients in full remission from substance use disorders, compared with 165 days for the 20 patients who still had an active substance use disorder. No statistically significant differences were found between the two groups at follow-up for measures of incarceration, psychiatric hospitalisation or number of moves.

Single model approach

In the US, specialist services have been developed to treat patients with dual diagnosis based in seven community mental health centres in New Hampshire (Drake et al., 1993). The authors suggest a model of care, Assertive Community Outreach (ACO), in which caseworkers have 24-hour responsibility for about twelve clients. The smaller caseloads allow workers time to engage individuals more frequently and for longer periods. Interventions include helping with finances, taking people to work and encouraging access to community facilities. Individual and group methods are employed, which are non-confrontational and do not require immediate abstinence.

One study also found that routine care is quite effective in treating dual diagnosed patients. Dixon et al. (1991) demonstrated that, despite the complexity of the problem, these patients could improve considerably following routine treatment in a New York city teaching hospital. In a sample of 83 psychotic inpatients, authors found that, at discharge, recent drug abusers (n=40) had significantly lower scores on the Brief Psychiatric Rating Scale (BPRS) (Overall & Gorham, 1962) and significantly lower thought disorder scores than the non-drug abusing patient. Moreover, analysis of the Scale for the Assessment of Negative Symptoms revealed that the drug-abusing patients had significantly less affective flattening than the non-drug abusing patients. As the two groups did not differ at admission on the BPRS or negative symptom measures or demographics, the authors conclude that it is possible that drug-abusing patients with schizophrenia respond more quickly or completely to hospital treatment than patients with schizophrenia without drug abuse. The less severe symptoms demonstrated by the drug abusing patients may also have resulted from drug abstinence in the hospital, hence preventing the exacerbation of psychosis in schizophrenia, suggesting only short-term effectiveness of the treatment.

Integrated treatment approaches

A range of integrated treatment programmes has been developed which attempts to meet the needs of dually diagnosed clients in the long term, including outpatient groups, outpatient case management, residential and identified inpatient programmes. The following are just some of these examples.

- Osher & Kofoed (1989) described four common stages of treatment after observing the natural course of recovery of individuals with a dual diagnosis:
  - Engagement
  - Persuasion
  - Active treatment
  - Relapse prevention

Engagement is concerned with establishing and maintaining a working alliance between staff and client. This can be enhanced by the style of interaction, which should be non-confrontational, empathetic and respectful to the client's subjective experiences of substance misuse (DoH {UK}, 2002). In the persuasion stage of treatment the clinician tries to develop the client's awareness that substance use is a problem and tries to create motivation to change, drawing upon principles of motivational interviewing (Miller & Rollnick, 1991). Active treatment involves helping the client to reduce substance use and, if possible, to attain abstinence. As different treatment programmes are developed, different treatment orientations and components have been identified. These include such strategies as harm reduction (Carey, 1996), stage-wise treatment (Osher & Kofoed, 1989; Brady et al., 1996; Carey, 1996; Bellack & DiClemente, 1999), motivational interviewing (Miller & Rollnick, 1991; Baker, 2002), cognitive-behavioural interventions (Mueser et al., 1997; Bellack & DiClemente, 1999) and modified 12-step self-help groups (Noordsy et al., 1996; Vogel et al., 1998). The final stage, relapse prevention, is designed to offer interventions aimed at the prevention and management of future relapses to problematic substance misuse or to mental health problems. This is achieved by aiming to identify high-risk situations for substance misuse and rehearsing coping strategies proactively. Attention is also given to the development of action plans should the client return to damaging substance misuse (DoH {UK}, 2002).

- Minkoff (1989) proposes a combined model in which traditional biopsychosocial and rehabilitation mental health treatments are run alongside the recovery model favoured by some substance misuse services. Four treatment stages are suggested:
  - acute stabilisation
  - engagement
  - prolonged stabilisation
  - rehabilitation

During each of the four stages, psychiatric and addiction treatments are offered alongside each other. Education of clinical staff in the particular philosophies of each treatment model, continuous validation of treatment methods and practical demonstration of treatment efficacy are seen as central to success of this model.

- Kavanagh et al. (1998) describe a method called STOP (Substance Treatment Options in Psychosis) which aims to assist participants to meet their own functional goals and minimise the harm created by substance abuse. It applies the full range of strategies that have been found to be effective in the treatment of substance abuse in the wider population and adapts the treatment to the cognitive capabilities of each individual (Kavanagh, 1995). Crucial to the success of this approach is recognition that people with dual diagnosis are difficult to maintain in contact with services and may need several attempts to control substance consumption. It also has a unique emphasis on education and includes informal carers in the treatment process.

- Teesson and Gallagher (1999) evaluated an outpatient case-management treatment programme for serious mental illness and substance use in an inner city area in Sydney, Australia. The treatment was based on engagement, provision of a comprehensive assessment of alcohol, drug and mental health problems, provision of treatment and provision of relapse prevention. Following treatment, there were no significant differences for any of the mean scale scores, although a trend towards an improvement in social functioning was observed.

- In the UK, Bayney et al. (2002) described the work and patient characteristics of one of the first combined mental illness and drug and alcohol services (MIDAS) based in a mixed rural and urban setting in Hertfordshire. Staffing consisted of three community psychiatric nurses, two drug and alcohol workers, two care support workers and one administrative worker. The services provided by MIDAS have four components: (a) a comprehensive initial assessment within one week of accepting a referral; (b) monitoring of mental illness and drug and alcohol use via an assertive outreach approach; (c) individualised case management via a multidisciplinary approach; and (d) integration of substance misuse and psychiatric illness management. The therapeutic options offered include individual supportive therapy, education and advice on financial and housing issues. There are also family meetings and the team engages patients in relaxation techniques. This is in addition to the team providing conventional medical and psychiatric support to all patients. Neuroleptic medication depot injections and outpatient appointments also occur on site. When looking at 80 case files, Bayney et al. (2002) found no relationship between respondents to the service and basic demographic data. Patients with bipolar affective disorder and personality disorders were more likely to use the services than patients with unipolar disorder or schizophrenia. Despite the use of an assertive service, there was difficulty in engaging patients with co-morbid schizophrenia and drug use. At 18 months, 38% of patients had failed to remain engaged with the service.

- Bartles & Drake (1996) conducted a pilot study of a 12-bed residential treatment centre for dual diagnosis in New Hampshire (US). A staff of mental health and substance abuse specialists provided three to six months of integrated mental healthcare, addiction treatment, and comprehensive, multidisciplinary services for dually diagnosed persons from across the state. Alcohol and drug treatments were based on principles of the 12-step programme of recovery and participation in self-help groups, i.e., Alcoholic Anonymous (AA) and Narcotics Anonymous (NA). In addition to daily psychotherapy groups, discussions of the 12 steps, self-help meetings and group meetings took place. Residents were encouraged to attend AA and NA meetings in the community in the evenings. Random urine drug tests were conducted, and positive drug tests were addressed in treatment but did not automatically lead to discharge.

The authors found that the average length of stay at the residence for the entire study group (n=41) was 68 days. Over one-third of the participants (39%) successfully completed the programme whereas 61% left against medical advice or were transferred to hospital. Programme completers stayed an average of 114 days; non-completers stayed only 36 days on average. Programme completion was unrelated to baseline variables but was significantly related to regular AA or NA attendance and global improvement at discharge.

- In another approach (Clenaghan et al., 1996), the principles of integrated services, intensive case management and assertive outreach are supplemented by an innovative residential treatment programme for dually diagnosed clients.
- A study by Fisher & Bentley (1996) demonstrated the effectiveness of two distinct types of group therapy in tackling dual diagnosis. Both a cognitive-behavioural model and a disease-and-recovery model (based on an addict identity) were effective in inpatient settings. Effectiveness was measured in terms of reduced substance use, improved social and family relationships and social functioning. However, in outpatient settings the cognitive-behavioural model was most effective.

Staff education/skills and liaison

One important aspect of improving communication between the mental health and addiction services is education. To respond to dual diagnosed patients effectively, case managers must be trained not only in the components of clinically effective mental health models (such as psychosocial and medication management) but also in effective interventions in substance misuse (Gournay et al., 1996).

Keeping staff training needs in mind, Maslin et al. (2001) carried out a survey among clinicians from community mental health and substance misuse services in the Northern Birmingham Mental Health Trust. They found that 83% of the respondents had worked with clients with combined severe mental health and substance use problems. When asked about the ways these clients were dealt with, responses showed that staff mainly referred clients to specialist services, sought input from other professionals or focused primarily on the issue the staff member was trained to work with. These findings might be a reflection of the need for more information about, and training in, combined problem issues and non-specialist areas, which was also identified by the respondents (52% and 32%, respectively). Ratings of knowledge of non-specialist areas were low for 25% of staff in substance misuse services and 53% of staff in mental health services. Knowledge ratings of issues relating to dual diagnosis were also low for 18% of staff in substance misuse services and 49% of staff in mental health services. Ratings of competence in non-specialist areas were low for 36% of staff in substance misuse services and 65% of staff in mental health services. Ratings of competence in issues relating to dual diagnosis were low for 29% of staff in substance misuse services and 49% of staff in mental health services. These findings clearly imply that clinicians in mental health and substance misuse services require information and training about dual diagnosis, as the majority of staff in these services are already working with dually diagnosed clients and a lack of confidence and awareness among staff will limit the service received by these clients.

When conducting a survey of staff perceptions of illicit drug use among patients in a medium secure unit in Edenfield (UK), Dolan & Kirwan (2001) found that 70% of members of staff had not received any training on drug misuse or drug-related issues in patients with mental disorder, although the majority of staff (69%) reported that over half of the patients on the unit had a co-morbid diagnosis of drug

misuse and mental illness. Strategies for dealing with drug misuse seemed to focus on security, rather than therapeutic issues (e.g., 35% reported that there were no physical facilities available for patients involved in drug misuse and 37% reported that key worker basic training and support was the only primary training resource).

The *Dual Diagnosis Good Practice Guide* (DoH{UK}, 2002) points out that 'training should be available to all staff who routinely come into contact with people with a dual diagnosis' and that 'training should incorporate three main strands: interagency collaboration and information exchange through interagency training; theoretical and skills-based training; and practice development and supervision'.

Emerging Issues for this Study

By its very nature, dual diagnosis has implications across the spectrum of health, healthcare and social care, from legislation to policy, service development through treatment, and inter-agency cultures. This review is not exhaustive, nor has it been all inclusive. However, in relation to the overall study it has stimulated much debate and yielded relevant information which has informed both the open forum and the national survey.

There is absolutely no consensus on what 'dual diagnosis' is, although the complexities associated with researching, assessing, providing service and treatment to people with dual diagnosis are clear. Making a dual diagnosis ranges from explicitly identifying two or more classified disorders to establishing problematic substance use with the manifestation of some psychological symptoms. The broad definition is cited as being responsible for the methodological difficulties in successfully researching dual diagnosis and establishing the clinical effectiveness of treatment models. The knock-on effect of this is either that the problem is ignored or professionals fail to establish client needs and, consequently to develop appropriate services. Outside the US, health and social policy is still in its infancy in terms of recognising and planning for service provision in this field.

It is clear from prevalence studies to date, that the problem is vast. The few studies carried out in Ireland already hint beyond anecdotal evidence that the problem may be no less widespread here than elsewhere. Because of the complete lack of policy in relation to dual diagnosis and dearth of Irish literature, neither the extent of the problem nor the potential need for services are yet known.

The assessment of dual diagnosis has not been standardised in any way. Tools used are generally validated for use in distinct clinical populations rather than in a dual diagnosed population. This causes difficulties in accurate assessment and, certainly in generalising or sharing diagnosis between services. Furthermore, because of the relationship between mental health and substance use in people with dual diagnosis, existing measurement tools are not necessarily applicable. There have been some inroads in developing tools that are specific to dual diagnosis, and shared protocols between services.

The often unique relationship between mental health and substance use is not necessarily considered in service or treatment options. It is clear that this population has specific implications for care, because of their high risk, chaotic lifestyles, discrimination, vulnerability among specific groups and danger of slipping through the care net.

A range of service and treatment models has emerged over the last few decades that services can consider in relation to their client group. Although one model is perceived as the most effective, it

must be pointed out that this integrated model may not be applicable generally outside the US, from where it has emerged. Particular treatment models, e.g. abstinence 12-step approach, are not necessarily transferable to every population. Because of the broad definition, services either adopt a locally agreed definition between services or categorise clients to various definitions and provide agreed services accordingly.

It is clear from the literature that if a service is to be effective in meeting the needs of people with dual diagnosis, it will have to adapt. Communication, liaison between people and services, cultural 'mind-set' shifts and shared educational initiatives are some of the principal aspects to be addressed.

These issues and other aspects of dual diagnosis specific to Irish circumstances are further explored in phases two and three of this study.

Chapter 3
Open Forum

Purpose of Open Forum

The open forum comprised a range of people and agencies involved with people who may have a dual diagnosis (e.g. service users, practitioners, voluntary groups, addiction services, mental health services, primary care services, housing organisations, police and social welfare services) from one geographical health board area. The purpose of the open forum was to use participants' expertise to identify opportunities and challenges for organisations who may provide services for people with dual diagnosis. In doing so, the forum considered the findings of the literature review and contextualised these into the participants' experiences of dual diagnosis. Along with the literature review, the forum informed the third phase of the study. The following objectives, derived from overall study objectives, specifically relate to one geographical health board area.

Objectives

- To identify the range of services which already do and/or potentially could, provide dual diagnosis services
- To describe the working structure of a typical addiction service and how people are assessed for dual diagnosis
- To describe the working structure of a typical mental health service and how people are assessed for dual diagnosis
- To identify service users', carers' and practitioners' perceptions of services and suggestions for improvement, if any
- To determine the accessibility of services to people with a dual diagnosis
- To identify the mechanisms in place to provide services to specific groups, such as women, adolescents, the homeless, prisoners and ex-prisoners
- To document how services for dual diagnosis interface at present – primary/secondary care and mental health/addiction services
- To describe the impact of legislation and policy on service provision
- To explore which model applies to existing provision for dual diagnosis in mental health and addiction services and how this meets clients' needs
- To identify the opportunities and challenges within existing organisations for best practice in the assessment and treatment of people with dual diagnosis
- To investigate which model is most appropriate, why, and how it might be put in place.

Rationale for Open Forum

As identified in the literature, there is difficulty with consensus in relation to dual diagnosis. For this study it was important to consider the views of as many disciplines, agencies, people and services involved with dual diagnosis as possible. Perhaps it is only when all views are available that some consensus, or at least understanding and articulation of some of the difficulties associated with dual diagnosis, will emerge. It was essential to examine this in an Irish context in order to ensure the national survey posed the relevant questions and could, consequentially, evaluate the effectiveness of existing dual diagnosis provision by addiction and mental health services in Ireland.

Dual Diagnosis – Working Definition

A working definition for 'dual diagnosis' emerged from the literature review:

> **"the co-existence of both mental health and substance misuse problems for an individual"**

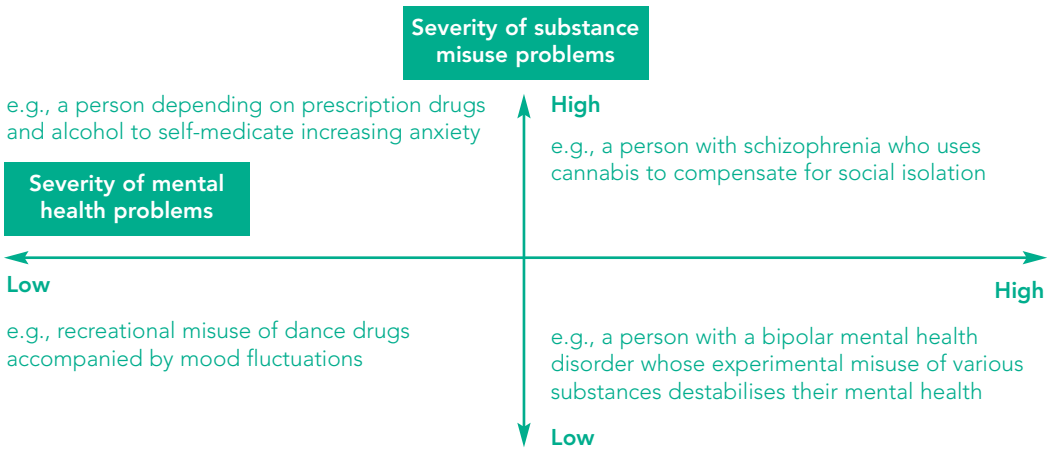
This working definition must be viewed in the context of associated terminology that is used, often interchangeably, in different countries, by different disciplines and from different perspectives. The term is not necessarily a diagnosis in itself (outside the US). Therefore, the common and interchangeable terminology that may be convenient does not effectively describe the complexities associated with a person who has a dual diagnosis.

Such terminology includes:

'Dual disorders', 'co-morbidity', 'co-occurrence' of mental illness and substance use disorder, MICA (Mentally Ill Chemical Abusers) or CAMI (Chemical Abuse and Mental Illness), already discussed in the literature review.

There is no consensus on whether or not a person with dual diagnosis has to have specified diagnoses. This working definition encompasses the broad spectrum of interpretations in the literature as to what constitutes 'dual diagnosis'. Figure 1 offers some insight as to the complexities associated with the management of dual diagnosis when the range of presenting problems can be so wide.

Figure 1: Interpreting dual diagnosis



Adapted from Dual Diagnosis good practice guide (DoH {UK}, 2002)

Methodology

An open forum in one geographical health board area was attended by a self-selected group of people from various agencies, service-user and carer groups, and included the statutory mental health and addiction services for that area. It is important to note that, although the organisational innovations and challenges to the provision of effective dual diagnosis services were explored and recommendations made, these are not automatically representative of any other geographical area in the country. However, in the process of designing the national survey, the potential for geographical similarities was explored.

Participants

Fifty-eight people participated in the forum. These were self-selected or nominated individuals who had been purposefully approached through the project team. The project team initially examined the spread of organisations, individuals, and disciplines represented in this geographical area, in relation to dual diagnosis. A grid of services, agencies, people and disciplines was drawn up. Up to 60 people were perceived by the team to be manageable in a one-day workshop-style forum, as well as being representative across the geographical area. The purposeful sample was then chosen within this number and from the grid.

Process

The forum consisted of presentations on two topics relevant to dual diagnosis and informed by the literature review. Each presentation was followed by a series of one- hour workshops titled as per the forum objectives listed at the start of the chapter. Participants were assigned to workshops, ensuring appropriate representation in each one. Workshop groups changed participants each time. A chairperson guided each workshop according to set criteria, including a summary feedback to the main forum following each workshop. A scribe was recruited in each workshop who recorded the discussion according to set criteria and handed this to the project team.

After each chairperson summarised to the main group, individual comment was invited and recorded before moving on to the next summary feedback. Some of this feedback was general rather than specific to the workshop title under discussion.

All participants were also asked to offer individual written comments in relation to each workshop or generally, throughout the day. This was in the form of 'post-it' notes stuck to the written flip chart summaries strategically placed around the walls of the main presentation area of the forum.

All recorded information was then collated under relevant objective titles and emerging themes were identified, including those that transcended individual objectives and were more generally applicable.

Results and Analysis

Transcribed information was initially recorded either as general feedback or under specific objective headings, represented by each workshop title. Transcriptions underwent inductive analysis and emerging themes were identified.

These underwent further analysis to establish if there were particular themes emerging that would specifically impact on innovation and challenges for organisations providing or potentially providing healthcare for people with dual diagnosis (Table 4). These core themes were applicable across the majority of workshops and impact on organisational structures, service delivery and the potential management of dual diagnosis between services, now and in the future.

Table 4. Core themes emerging from open forum

■ Difficulties in conceptualising and defining dual diagnosis
■ Issues with recognising and assessing dual diagnosis
■ Policy development to date does not recognise dual diagnosis
■ Role of GPs and primary care
■ Service not client-centred
■ Stigma, discrimination and marginalisation
■ Accessing service
■ Communication and liaison
■ Structures and protocols
■ Evidence-based practice
■ Education – knowledge and skills
■ Falling through the care gaps
■ Cultural dilemmas
■ The meaning of multidisciplinary and wider-team approach
■ Respecting professional care and treatment
■ Service models

Discussion

Difficulties in conceptualising and defining dual diagnosis

There were many different disciplines and people from a variety of agencies present. Conceptualising dual diagnosis as an entity in itself, outside of what services normally deliver, seemed difficult. For people who may be more used to understanding health problems as either A or B, e.g. psychiatric illness or heroin addiction, to now try and conceptualise several interrelating conditions combining to give a dual diagnosis was a lot to ask. A cited complex example was a client with a mental disorder who was coming off heroin through methadone maintenance, which initially led to compensatory abuse of alcohol. Where does such a client belong in the spectrum of diagnoses? The working definition of dual diagnosis was tentatively accepted. However, if services were to respond to dual diagnosis, the way in which it would be defined was considered very important. Some people felt it needed to be narrowed down to be manageable, while others envisaged different models of service delivery appropriate to 'severity of dual diagnosis'. How dual diagnosis is conceptualised and defined will be essential to any protocols or service agreement and will influence how overall services will

respond. For example, there was some suggestion that people with serious mental illness and an addiction existing concurrently would need an integrated service approach, whilst problematic substance users with mental health difficulties could be dealt with in general practice with specialist input from either addiction or mental health services as appropriate. This suggestion concurs with some of the models of practice identified in the literature review.

Issues with recognising and assessing dual diagnosis

Some services do not recognise or necessarily assess for dual diagnosis. Simply recognising that someone uses drugs or is on methadone can be enough to exclude that person from a psychiatric service, rather than assessing the needs associated with their dual diagnosis. Similarly, if people are known to have mental health difficulties they automatically have difficulty accessing addiction services. Although first contact is with primary care, GPs do not necessarily assess for dual diagnosis. Usually, where necessary, they refer to either addiction or mental health services. Dual diagnosis is not part of the normal assessment routine of doctors, who in the main, predominate initial assessment, as it is not really recognised in mainstream addiction or mental health services. There is little service cross over in education or joint development of skills in relation to dual diagnosis. That issues of recognition and assessment of dual diagnosis exist, therefore, is not surprising.

Policy development to date

Dual diagnosis is not explicitly referred to in any government policy to date. Some service development response to policy is contrary to effective service delivery for dual diagnosis, e.g. mental health policy and the separation of services and rationalisation of inpatient care. The ethos of some government policy, e.g. National Drugs Strategy, contradicts some aspects of the integrated nature of effective service provision for dual diagnosis. People with dual diagnosis are invisible in the plethora of strategy documents published to date, despite the implications for health and social care of this chaotic and complex client group. Without a policy framework conducive to effective care, this group of people could remain invisible. Although, as identified in the literature review, it was not until there was indisputable evidence as to the existence and implications of dual diagnosis that government policy and ensuing service guidelines began to emerge in the UK.

Role of GPs and primary care

Although not the remit of this research project, it was evident during the course of the open forum that primary care, and GPs in particular, were integrally involved with dual diagnosis. As often the first point of contact and principal carers for the majority of people who may have a dual diagnosis, it is not possible or realistic to consider any model of service provision for dual diagnosis without the active participation of professionals in primary care. Therefore, any organisational structures responding to dual diagnosis will be at least tripartite, before even considering other agencies, self- help groups and voluntary organisations. Again, the literature clearly defined the role of general practice within some best practice models elsewhere in the world. It would seem, at least within the geographical area represented at the forum, that this integral role of primary care, is also the case in Ireland.

Service not client-centred

At present, clients are required to fit into service models, rather than services responding to client needs. Services are not holistic and dual diagnosis clients are likely to be excluded from, and shunted between, services. Although there are some advances generally towards service user involvement in service planning and evaluation, in relation to dual diagnosis this is not yet evident. As dual diagnosis is not yet a mainstream concept within services perhaps this is neither surprising nor deliberate.

Stigma, discrimination and marginalisation

People with dual diagnosis are frequently discriminated against, feel doubly stigmatised and are constantly marginalised. Treatment prescribed in one service is denied in another. Because of their diagnosis they are refused treatment by some services, e.g. non-prescribing of methadone. By being associated with substance misuse and mental illness they are doubly stigmatised and this can be even greater if they are a prisoner or homeless. By nature they are at risk, they are vulnerable, they are on the edge of society. Because of incongruent policy and service provision, they are excluded and inadequately provided for.

The forum agreed that people diagnosed with personality disorder are also marginalised and pose further challenges in relation to dual diagnosis. There was some consensus that this group of people are likely to have a dual diagnosis and consequently any model of service provision must consider their needs.

Accessing service

Many services are inaccessible to people with dual diagnosis. This is partly because of services not taking or sharing responsibility for care, but also because of the nature of this client group and the inadequacy of service provision. Homelessness has a strong correlation with dual diagnosis, yet this group of people cannot even access a GP; or services are normally community based, yet they have no home or community to be treated in. Services for women do not provide the supports necessary to allow a client who may be the primary carer in a family, to take time out for treatment. There needs to be some systematic system of referral and subsequent treatment for people who may have a dual diagnosis.

Communication and liaison

Effective communication between services and informal and formal liaison is paramount for any provision of services to people with dual diagnosis. This was clear in all workshops and it was the breakdown or lack of this communication that was frequently held responsible for inadequate care. Without improving communication and liaison between services, it will not be possible to develop effective services for dual diagnosis.

Structures and protocols

There are no structures or protocols to deal with dual diagnosis in place either between services or often between different aspects of the same service. Where there are informal structures and word-of-mouth protocols, the services are perceived to be more progressive than where there are no such

links. These are absolutely necessary for any service provision and to support any communication framework and shared or joint-care arrangements. These structures are essential for any systematic referral process.

Evidence-based practice

There is ample evidence to guide services in providing effective and efficient care for people with dual diagnosis. Between services it is likely that a lot of this evidence is being applied, although where there is lack of communication, liaison, agreement and co-ordination of care, practice can be compromised. Treatment is being duplicated; some treatment effective in treating one condition needs to be altered when dealing with dual diagnosis. Assessment methods are different for one condition or two parallel conditions than for dual diagnosis. As yet, we do not have any indication of the extent of dual diagnosis in this geographical area or in the rest of Ireland, which again makes it difficult to organise effective services. We can only be guided by indications of prevalence from studies elsewhere and by examples of best practice presently being utilised.

Education – knowledge and skills

Traditionally, staff in both addiction and mental health services have sought educational opportunities and developed skills in isolation from each other. Similarly, other disciplines have done the same. This separate development has been identified as a barrier to effective care and treatment of people with dual diagnosis. There is a consensus that whatever model of care is adopted, or regardless of how services continue to address the issue of dual diagnosis, joint education and skills development in relation to dual diagnosis is key to effective treatment. This is true not only because people from both services will then understand dual diagnosis and feel comfortable treating this client group, but because, through sharing skills, learning together and working with the problems associated with dual diagnosis, other issues will be resolved by default. Communication, networking and improved liaison will automatically occur. Inter-professional and service boundaries will be blurred and the service specific cultures that have historically emerged and that are detrimental to dual diagnosis care will hopefully be somewhat eroded.

Falling through the care gaps

Clearly, with separate services offering fragmented care to individuals and no process of interlinking services or sharing information, there will be gaps in service provision. Dual diagnosed clients are the most likely to fall through these gaps because of their particular vulnerabilities already alluded to. If services are to narrow these gaps and prevent clients slipping through the care net, they will have to address all of the issues discussed above.

Cultural dilemmas

The different professional ethos and perceptual cultures that are unique to addiction and mental health services cannot be underestimated. They underpin attitudes, treatment protocols, exclusion criteria, and ultimately, the quality of care a person with a dual diagnosis will receive once they are in contact with a particular service. The unique cultures are not necessarily wrong; they are possibly quite appropriate to the non dual diagnosed clients under the care of any service. There lies one of the

prime difficulties with dual diagnosis. People normally fall into one or other diagnosis, even if one predominates. So, they do not fit into any one culture and, for professionals to understand where they fit, they may need to undergo a culture shift, i.e. to fit the needs of the individual client. Educational and communication suggestions already discussed may facilitate this.

The meaning of multidisciplinary and wider-team approach

The multidisciplinary and the wider team were an integral part of all discussion, irrespective of how teams operated across services. It was evident that in some cases the team leader made service decisions based on their team's own philosophy of care, as opposed to that of a wider service team. This may account for some of the discussions around local practices prevailing, as opposed to agreed policies or protocols driving care in relation to dual diagnosis. Where assessment and decision making were clearly carried out by a team approach as opposed to unidisciplinary, communication and service liaison were more effective.

Respecting professional care and treatment

Differences in treatment models, service ethos, skills and approaches have already been discussed. One of the difficulties with people being passed between services is that one service does not accept the treatment model of another and therefore changes the treatment to suit their own model. There is not necessarily discussion over shared or joint care. The loser here is the patient, who either has treatment denied or has it changed, not to suit his or her needs but to suit the local service or the preference of the professional person in the other service. There are some informal agreements between services and, in some cases, formal protocols which respect the knowledge, skills and treatment prescribed by professionals from another service that specialises in one aspect of a patient's care. There is a suggestion that this respect should be formalised and shared so that care is not denied or changed to suit the interests of others and that the client's rather than the service's needs are being addressed.

Service models

Existing service models are generally serial and ineffective, mainly because of some of the issues already discussed. Some services have moved towards parallel models, and even towards integration in some cases. There is a preference for a parallel model, generally with robust liaison, formal structures, protocols for care and formal communication channels. However, this is influenced by the severity of dual diagnosis. If dual difficulties are minor, then it is likely that they can be managed in primary care with input from either mental health or addiction services, similar to a serial model with effective liaison. However, as the needs of individuals become more complex and one or other specialist service is required, a parallel model would be preferred. An integrated model, according to the literature, is the model of choice, although outside of the US a mixture of parallel, serial and sometimes integrated models are used. The open forum discussions emerged along the same lines of thought. An integrated service in this geographical and organisational context is not necessary to provide best practice, once the links between services and other considerations are robust. However, there was a consensus that there is a small core group of people who may have such complex needs associated with dual diagnosis that a specialised team, unit or service would be appropriate. This core group has not yet been identified. Finally, the open forum recognised that dual diagnosis and the care

context will be very specific to Ireland and, indeed, to individual areas and services in Ireland. So, although there are models of best practice researched and devised elsewhere, this unique context would have to be taken into consideration if developing dual diagnosis services further.

Open Forum Conclusion

Some of the core themes emerging from this open forum are synonymous with similar issues identified in the literature review. All of them pose challenges and opportunities to any organisation exploring how it might provide more effective services for dual diagnosis. They raise many questions, some of the answers to which are beyond the scope of this study.

The questions and issues cannot be generalised, nor are they meant to be. They have been incorporated into the third phase of this study, the national survey, which targeted addiction and mental health services around the country. The results of this survey identify how dual diagnosis is being managed, whether there are any organisational structures that impact on this provision, and how services could be further improved. The open forum discussion is incorporated into the overall discussion of findings in chapter 5.

Chapter 4
National Survey

Purpose of Survey

A targeted survey was carried out in the third and final phase of the project. Senior managers and clinicians from the addiction and mental health services, statutory as well as voluntary, were asked to complete a questionnaire. In conjunction with the overall aims of the study, the survey aimed to get an overview of how dual diagnosis is presently managed and provided for by addiction and mental health services throughout the country. Issues more specifically addressed in the survey are listed in Table 5.

Table 5. Issues specifically addressed in the survey

■ Policy and service structures
■ Service provision
■ Assessment
■ Co-ordination of care
■ Attitudes towards the management of clients with a dual diagnosis.
■ Difficulties involved with service provision for people with a dual diagnosis

Rationale for Survey

Although there is ample literature indicating best practice for the management of dual diagnosis, there is little research published in the Irish context. Because dual diagnosis is not formally recognised it is difficult to find any statistics or other documentation that might indicate how dual diagnosis is managed in Ireland. While the open forum identified how dual diagnosis is managed in one geographical area and identified relevant issues, findings could not be generalised. By comparing with the international literature and being informed by the findings of the open forum, the national survey offers an opportunity to evaluate the effectiveness of existing dual diagnosis provision by mental health and addiction services in Ireland.

Methodology

Survey instrument

The survey instrument (see Appendix 2) was designed by the research team principally to meet the aims and objectives of the study, building on findings from phases one and two of the research project. The first part of the survey asked respondents to report on the health board they worked in, their current work role and which sector their service fell into. Respondents were also asked to define the type of service they worked in and to relate their answers in Part 2 of the questionnaire to this service. The second part contained questions on themes that had been identified in the literature review and the open forum as areas of importance in the effective management of people with a dual diagnosis. These themes are listed in Table 5 above. This part of the survey was presented in two columns, one for mental health and one for addiction, in order to facilitate respondents who had a dual responsibility over, or within, both services. The third part of the survey instrument included thirteen statements to be rated on a Likert-type scale, eliciting respondents opinions and attitudes in relation to dual diagnosis. The fourth and final part of the survey encouraged respondents to give their definition of dual diagnosis, their opinion of the difficulties involved with service provision for

people with dual diagnosis, and further comments. The survey instrument comprised 36 items, principally involving tick-box responses but allowing some scope for qualitative information. It took between 11 and 20 minutes to complete.

Follow-up interviews

Follow-up interviews were carried out with 10% of respondents across addiction and mental health services where responses had been returned. This was done in order to corroborate some of the responses from the survey and to further explore the respondents experience and delivery of services. The interview was semi-structured and focused on the issues which were highlighted in the survey (see Appendix 3).

Participants

Survey

In order to reflect the national context in which services to clients with dual diagnosis are delivered, the survey population included service managers and clinicians from all of the ten health boards, including the three area health boards in the Eastern Regional Health Authority (ERHA). As the survey was targeted, specific people were chosen to participate either by the research team or by the overall manager of services. People were selected from both mental health and addiction services in each health board as follows: the general manager(s) of the service, at least one clinical director and one director of nursing, a service manager for each county, and a clinician for each county. A voluntary service provider in both mental health and addiction was also targeted, but very few voluntary mental health service providers were successfully identified. In some cases, suitable participants were suggested by other participants in the study.

Between 16 and 27 people were targeted from each health board; 190 questionnaires were sent out, with a 74% response rate. The unequal distribution was due to differing numbers of counties in health boards and the diverse organisation of addiction and mental health services in each health board. For example, in some health boards, addiction services were under the remit of the mental health services, in which case the service managers were identical for both services, e.g. the director of nursing line managed the mental health and addiction team. In some health boards alcohol addiction services were under the mental health service management and drug addiction services were under the management of community services. In other health boards, mental health services and alcohol and drug addiction services were separate.

Interviews

Fifteen interviews were carried out in total, eight in addiction and seven in mental health services. These included service managers and clinicians across all health boards and one voluntary addiction agency. It was not possible to get the participation of a representative of a voluntary mental health service. Few voluntary service providers exist and, of those that do, circumstances beyond the control of the research team prevented participation.

Procedure

Survey

A small pilot study was carried out in one of the health boards to identify any potential problems with the survey instrument. After the pilot study was completed, a letter was sent out to each of the overall service managers in each health board to ask for permission to carry out the survey and to confirm that the targeted participants were appropriate. Once they endorsed the study, each identified potential participant was contacted by phone and asked if they would participate in the survey. Before they were asked if they would like to fill in the survey, the nature and aim of the study was explained and the commissioning body named. Subsequent to their agreement, a survey questionnaire was posted to them, including a cover letter explaining the research process, a research summary and a return envelope. Participants were assured that their responses would remain confidential and their names and services would be anonymous outside of the research team. They were also assured that the report would refer to regional circumstances as opposed to individual services. In order to maximise the response rate, a reminder letter containing a copy of the survey instrument was sent out when surveys had not been returned within two weeks. If surveys were not returned within two weeks of that time a reminder phone call was made. This robust reminder procedure was justified because adequate representation from each targeted area was needed.

The participants were asked to adopt the following definition of dual diagnosis that had emerged from phases 1 and 2 of the research when answering the questionnaire: 'the co-existence of both mental health and substance misuse problems for an individual'.

Interviews

Interviews were carried out and recorded on minidisk by the research associate in the place of work of the participants. Before the interviews started, written consent was sought regarding audio recording of the interview. The interviews lasted between 18 and 40 minutes. After the interview, participants were asked if they had hard copies of the assessment tool, and policies, structures or service reviews mentioned during the interview. If this material was not received on site, but the interviewee agreed to send it by post, two follow-up calls were made where appropriate. The taped interviews were transcribed.

Analysis

Data were analysed using SPSS 11.0 for windows and SPSS Answer tree. In reading the analysis it is important to keep in mind the following:

- In the analysis of Likert items a lower mean score indicates stronger agreement
- Data on the rating of items by the sample as a whole were analysed without substitutions for missing values, resulting in uneven numbers of respondents carrying through in the analysis.
- Some data are presented as service responses, in such analysis the total maximum n = 159. Where data are presented as individual responses, the total maximum n = 141. The difference in totals is explained by a dual responsibility across addiction and mental health services in the case of some respondents. Their responses therefore related to two services.
- In looking at the differences between clinicians and managers, note that clinical directors and directors of nursing are included in the manager grouping because they were targeted for their management function.

- Although analysis was carried out on all of the items and across different dimensions, e.g. addiction services/mental health services, managers/clinicians, only significant results are included.

Results

Presentation of results

Quantitative data are presented under each heading where available. This is then followed by qualitative data from the survey where the respondents were asked to elaborate on their answers through open-ended questions included in the survey. Finally, information gleaned from interview data and relevant documentation is included.

Response rates and general characteristics of respondents

One hundred and forty-one (response rate 74%) people returned questionnaires. Of these n=74 represented mental health, n=43 represented addiction and n=24 represented both addiction and mental health services. Target representation was achieved, with at least one manager and one clinician from mental health and addiction services in each health board and clinical staff from each county completing the survey. The exception was the voluntary sector which had a low response rate. The highest proportion in terms of non-response was that of local service managers, at 48%. During follow-up phone calls some of these explained that they did not feel capable of filling out the survey and had therefore passed it on to another member of staff, or they heard that someone else in their service was filling out the survey and they felt that their answers would be similar so they did not have to fill one out themselves. The questionnaire was not directed or designed around either a clinical or a managerial perspective, nor was this problem of managers identified during the pilot phase. For the distribution of answers by health board, and the current role of respondents, see Tables 6 and 7.

Table 6. Response characteristics per health board

Health Board	Number receiving questionnaire	Number of responses	Response rate (%) per health board	Percentage of overall sample
Midland	16	9	56.3	6.4
Mid-Western	18	9	50	6.4
North Eastern	17	11	64.7	7.8
North Western	18	12	66.7	8.5
South Eastern	27	22	81.5	15.6
Southern	17	13	76.5	9.2
Western	20	17	85	12.1
ECAHB	16	13	81.3	9.2
NAHB	17	13	76.5	9.2
SWAHB	16	14	87.5	9.9
Across ERHA	5	5	100	3.5
National Remit	3	3	100	2.1
Total	190	141	(total) 74.2	100

Table 7. Current work role of respondents

Role	Frequency	Percent
Clinical Director	25	17.7
Counsellor	16	11.3
Director of Nursing	21	14.9
General Manager	10	7.1
Nurse	11	7.8
Occupational Therapist	7	5.0
Psychologist	3	2.1
Psychiatrist	6	4.3
Regional Co-ordinator	6	4.3
Service Manager	13	9.2
Social Worker	2	1.4
Other	21	14.9
Total	141	100

When respondents indicated that they did not belong to any of the current work role categories which were given in the survey, they were asked to specify what their current work role was under the 'other' option in Table 7. Of the 21 who chose the 'other' option, eight were general managers of addiction or mental health services but their titles were slightly different; examples include, assistant chief executive officer or regional manager. Two were outreach workers, another two were hospital managers and a further two were individuals who were involved in policy or service planning on a national level. The remainder included individuals who were targeted for their specific experience of dual diagnosis, such as service users.

Policies, structures and exclusion criteria

Policies and structures play a major part in how care is delivered to an individual. While policies might be informal or formal guidelines on service delivery, structures are the more concrete part of how it is actually delivered. Structures can be both formal and informal.

Policies

Twenty-one percent of services had a specific policy on dual diagnosis. Of these, 19% in mental health services and 25% in addiction services indicated that they have a policy.

When comparing health boards regarding the existence of a policy on dual diagnosis (see Table 8), few of the mental health and addiction services agreed on the non-existence of a policy. The discrepancy between answers could suggest that there is no definitive policy on dual diagnosis and, even in health boards from which documentation obtained included specific policies, not everybody seemed to be aware of them. In some health boards where people responded that specific policies existed, little documentation was obtained during follow-up to support these responses.

Table 8. Percentage of people per health board who answered yes or no to the question 'Do you have a service policy that specifically addresses dual diagnosis?'

Health Board	Mental Health		Addiction	
	Yes	No	Yes	No
Midland	0%	100%	0%	100%
Mid-Western	0%	100%	33.3%	66.7%
North Eastern	33.3%	66.7%	20%	80%
North Western	0%	100%	0%	100%
South Eastern	14.3%	85.7%	18.2%	81.8%
Western	28.6%	71.4%	18.2%	81.8%
ECAHB	25%	75%	50%	50%
NAHB	10%	90%	75%	25%
SWAHB	44.4%	55.6%	28.6%	71.4%
Southern	12.5%	87.5%	20%	80%

***Percentages are calculated from the total number of responses from within mental health or within addiction services per health board.**

Where the survey asked respondents to elaborate on the content of a policy relating to dual diagnosis, a general referral policy was most frequently mentioned. Within some addiction services, provision for access to a consultant psychiatrist was referred to as a policy. Other examples included assessment procedure, people with a dual diagnosis being prioritised for treatment, or not offering methadone or detoxification in mental health services. This implies that there are no general or specific policies on dual diagnosis. Instead policies address different aspects of dual diagnosis. There were no responses to the request to attach copies of policies to the survey.

Throughout the follow-up interviews it was not possible to corroborate the scope of policies as reported in the survey. Requested formal documentation regarding policies was received from only three managers from three different health boards. These policies referred again to specific aspects of dual diagnosis, rather than addressing all aspects of dual diagnosis inclusively. Although it was clear that formal policies do exist within the three area health boards in the ERHA, the survey results show that not all staff seemed to be aware of them. From interviewees outside the three area health boards in the ERHA who did indicate that they had a policy on dual diagnosis, documentation was not received.

In summary:

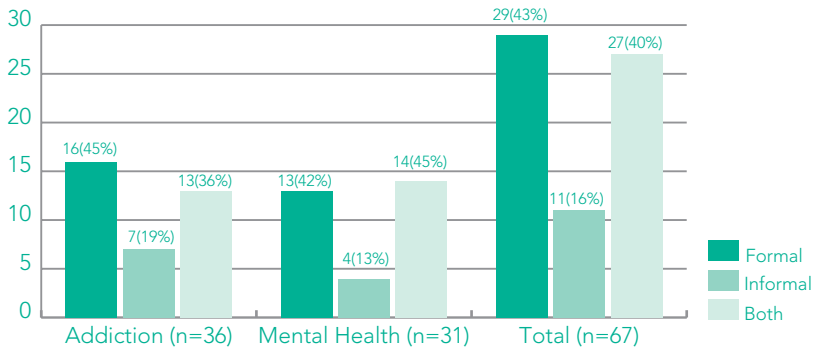
- Twenty-one percent of services indicated that they had a policy on dual diagnosis;
- There is little agreement within health boards on the existence of policies specifically relating to dual diagnosis;
- Qualitative descriptions of policies include: referral, assessment, prioritising for treatment and not offering methadone in psychiatric units;
- Policies address aspects of dual diagnosis rather than dual diagnosis as a whole;
- In health boards from which hard copies of policies were received, few respondents were aware of them.

Structures

Responses indicated that 43% of services (n = 67) had specific structures relating to dual diagnosis in place.

Of the respondents who reported that they had structures in their service, 43% indicated that the structures were formal and 16% indicated that they were informal, with 40% indicating that they were both formal and informal (see Figure 2).

Figure 2: Numbers and level of formality of structures for those who indicated that they had structures in place



When looking at answers specific to health boards in relation to structure for dual diagnosis (see Table 9, Figures 3 and 4) a similar picture to the existence of policies emerges. Respondents from two health boards agreed on the existence or non-existence of structures in their health board. Respondents working in the ERHA were also clear on the existence of structures, with those in mental health indicating that they did not have any and those in addiction indicating that they did.

Table 9. Percentage of people per health board who answered yes or no to the question 'Do you have structures in place which specifically address dual diagnosis'?

Health Board	Mental Health		Addiction	
	Yes	No	Yes	No
Midland	42.8%	57.2%	75%	25%
Mid-Western	0%	100%	66.7%	33.3%
North Eastern	33.3%	66.7%	40%	60%
North Western	55.5%	44.5%	40%	60%
South Eastern	61.5%	38.5%	45.5%	54.5%
Western	35.7%	64.3%	36.4%	63.6%
ECAHB	25%	75%	66.7%	33.3%
NAHB	30%	70%	75%	25%
SWAHB	22.2%	77.8%	42.8%	57.2%
Southern	0%	100%	100%	0%

***Percentages are calculated from the total number of responses from mental health and from addiction services per health board.**

Figure 3: Percentages of responses from mental health services by health board indicating whether they have structures in place which specifically relate to dual diagnosis

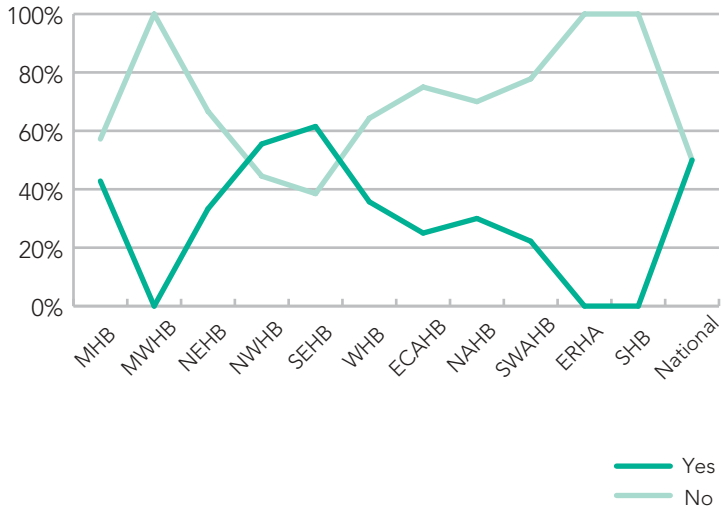
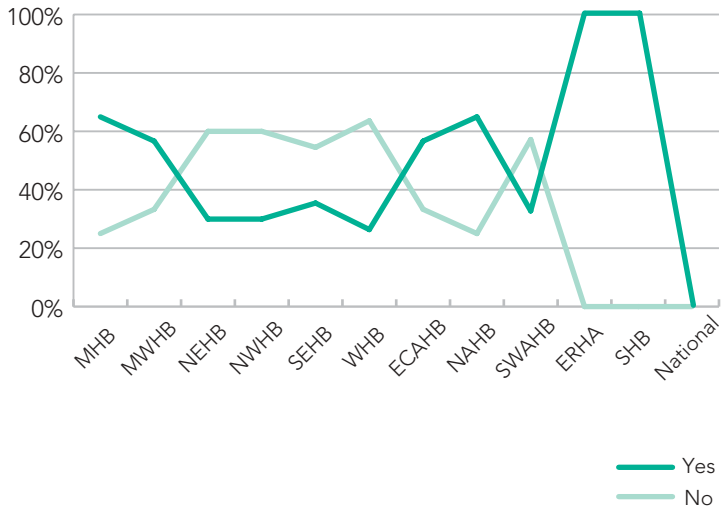


Figure 4: Percentages of responses from addiction services, by health board, indicating whether they have structures in place which specifically related to dual diagnosis



When given space in the survey to elaborate, respondents described structures that concerned the organisation of sector teams, e.g. multidisciplinary team approaches or delivery of substance misuse services under the mental health remit. One of the most frequently referred to structures in the addiction services was the support of a consultant psychiatrist with an interest in substance misuse. In the mental health services, referral to addiction counselling services seemed to be the predominant structure, with some also offering a detoxification programme. Both services indicated that they liaised with the other. Furthermore, the addiction services in the three area health boards in the ERHA indicated that they had dual diagnosis clinics in major addiction centres. Very specific structures were also mentioned throughout the country: one service held a weekly dual diagnosis group; and alcohol rehabilitation groups were formed by some mental health services.

There was no real discrepancy in relation to structures, between information gained from the surveys and that from the interviews. The addiction services in the three area health boards in the ERHA each had a consultant psychiatrist as part of their team, who held dual diagnosis clinics. Referrals to that clinic, as well as assessment, were structures mentioned during the interviews with participants from these services. When asked if they knew about these clinics only one participant was aware of them.

In general, structures for dealing with dual diagnosis patients in either addiction or mental health services included: referral to addiction counsellors within the services; addiction counsellors with a background in psychiatric nursing; or specified dual diagnosis trained staff who operated a key worker system for clients with dual diagnosis. Answers to the question on structures from health boards outside ERHA referred to more large scale structures, such as the organisation of the two services within the individual health boards, i.e. the addiction services were attached to the mental health services or the director of nursing line-managed the co-ordinator of addiction services. All respondents in addiction and mental health services indicated that they had access to a consultant psychiatrist to whom they could refer a person with a dual diagnosis. Finally, consistent with the surveys, the discussion of a client with dual diagnosis at a multidisciplinary team meeting was often reported as a structure regarding dual diagnosis.

Interviewees were asked whether their service had a system in place to ensure that clients did not fall into the gap between the two services. No formal system seemed to be in place in most of the health boards. Follow-up by the key worker was mentioned most frequently as a system. Other examples were out-patient appointments and referral to a dual diagnosis clinic. In one instance, outreach workers were viewed by the clinician as constituting such a system.

In summary:

- 43% of services indicated that they had structures regarding dual diagnosis.
- There are significantly more structures in addiction services (56%) than in mental health services (33%).
- 43% of structures were formal, 16% informal and 40% both formal and informal
- There is little agreement within health boards on the existence of specific structures for dual diagnosis.
- Qualitative descriptions of structures include: multidisciplinary team approach; substance misuse services being part of the mental health remit; referral; and detoxification within mental health units.
- Within the three area health boards in the ERHA, special dual diagnosis clinics are held in major addiction centres by the consultant psychiatrist who is part of the addiction services.
- Structures can be inter- or intra-service.
- Very few formal systems are in place to ensure that clients with a dual diagnosis do not fall between the two services.

Exclusion criteria

Forty-nine percent of services indicated that they applied criteria that exclude people with a dual diagnosis from treatment in their service. Exclusion criteria are more frequent in addiction services (58%) than in mental health services (43%). The most frequently mentioned exclusion criterion in mental health services was substance misuse as the primary disorder, and in addiction services it was

presentation in the acute phase of a major mental illness. Violent behaviour was also mentioned in both services under exclusion criteria. Furthermore, some addiction services did not accept clients for treatment if they were deemed unable to cope with the treatment, e.g. because of lack of reflective capacities, or if the consultant psychiatrist advised against treatment. Some mental health services mentioned that they did not prescribe methadone and therefore sometimes could not take a client who was on a methadone programme; others said they would administer methadone if it was already prescribed.

When examining the attitudes of respondents from all services to methadone treatment, overall 71% of respondents answering this question agreed with the statement 'A client who is on a methadone treatment programme on admission to a psychiatric unit should be administered methadone there'. When comparing the mean ratings of this statement for people who work in the addiction services, mental health services or who have a dual responsibility, there was a significant difference ($p = 0.001$), in that people who work in the addiction services were more likely to agree with the statement than people who work in the mental health services.

The interviews confirmed the exclusion criteria that were emerging from the survey, which related to the safety of other patients and staff, and the primacy of either disorder which would be more suitably treated in the appropriate service. Most of the service managers in mental health services admitted that their service did not dispense or administer methadone but, where it was needed, alternative arrangements were made, e.g. the clients could get it through their GP or their family can bring it to the unit. However, the picture looked different from an addiction services perspective. It was reported that they found it difficult to have clients accepted for treatment for psychiatric problems by mental health services even when they were stabilised on methadone.

Overall, 78% of respondents disagreed with the statement 'Not treating people with a dual diagnosis is justified within our service provision'.

In summary:

- 58% of addiction services and 43% of mental health services responded that they have criteria operating that exclude people from being treated in their services.
- Exclusion criteria are both formal and informal, with 22% formal and 28% informal.
- Qualitative descriptions of exclusion criteria include: if substance misuse is the primary disorder in mental health services and an acute phase of a major mental illness in addiction services; violent behaviour; inability to cope with rigours of treatment.
- Some mental health services indicated that they would not treat a person who was on a methadone maintenance programme.
- People who work in the addiction services are significantly more likely to agree with the statement 'A client who is on a methadone treatment programme on admission to a psychiatric unit should be administered methadone there' than people who work in the mental health services.
- Overall, 78% either disagreed or strongly disagreed with the statement 'Not treating people with a dual diagnosis is justified within our service provision'.

Assessment

Sixty-six percent of services reported that they always assessed for dual diagnosis, Table 10 gives a breakdown of how this assessment takes place.

Table 10. Frequencies of type of assessment carried out by services that indicated that they always or sometimes assessed for dual diagnosis

Type of Assessment	Always (n=105)	Sometimes (n=36)	Total (n=141)
Clinician rating scales	37	7	44
Clinical records	75	19	94
Report from carers	63	22	85
Self-report	76	20	96
Self-report scales	8	3	11
Urine/blood samples	51	10	61
Informally	25	19	44
Other	18	4	22

*** Figures do not add up to the total number per column, as it was possible to give more than one answer.**

Other assessments carried out in relation to dual diagnosis reported in the survey included information from referral sources, psychiatric assessment in addiction services and observation.

Although a relatively high number of services assessed for dual diagnosis, this was not backed up by assessment documentation requested and obtained from the interviewees. While all six assessment tools used by addiction services included sections on psychological and psychiatric health, and the one assessment tool used by mental health services included sections on the amount of alcohol consumed over a certain period of time, these tools were not specifically validated for assessing dual diagnosis. This information was also corroborated in the interviews, except in the case of one interviewee who said that their service did not assess for dual diagnosis; however the other respondents to the survey from that health board area indicated that they always or sometimes assessed for dual diagnosis.

The survey also asked services if, once a diagnosis was made, they recorded the number of people with dual diagnosis; 37% indicated that their service did so. Some mental health services indicated that they recorded ICD-10 admission and discharge diagnoses or that they collected performance indicators for the inspectorate of mental health. Some addiction services said that they recorded which agency the client was referred from or had contact with. Of the services that recorded this data, 71% said they included this in service reports or reviews. None of this information could be corroborated by information obtained in the follow-up interviews. Information from the service reviews received is discussed in detail later in this report, but when these reviews were checked for figures on dual diagnosis patients, none could be identified.

Sixty-three percent of respondents (n =131) agreed with the statement 'Staff in my service are adequately trained to assess for dual diagnosis'. For statutory services, there was a significant difference ($p = 0.02$) between managers and clinicians as to the extent of agreement with the same statement (see Table 11).

Table 11. Frequencies and percentages of ratings of the statement 'Clinical staff in my service are adequately trained to assess for dual diagnosis' by managers and clinicians

	Manager (n=94)	Clinician (n=49)	Total (n=143)
Strongly Agree	22 23.4%	7 14.3%	29 20.3%
Agree	44 46.8%	19 38.8%	63 44.1%
Neither	14 14.9%	12 24.5%	26 18.2%
Disagree	14 14.9%	8 16.3%	22 15.4%
Strongly Disagree	0	3 6.1%	3 2.1%

***Percentages are calculated from the total number of responses from managers and clinicians.**

Ninety-three percent of respondents (n =134) agreed with the statement 'Screening for dual diagnosis on entry to mental health or addiction services should be routine' with no disagreement.

Seventy-one percent of respondents (n =134) agreed with the statement 'Our service effectively identifies clients with a dual diagnosis'.

In summary:

- 66% of respondents indicated that they always assess for dual diagnosis, 23% sometimes assess, 3% never assess and 8% did not know if their service assesses for dual diagnosis.
- A high proportion used clinical records, reports form carers, self-reports and urine or blood samples to assess for dual diagnosis.
- No respondents used a specifically validated tool to assess for dual diagnosis.
- Documentation received confirmed that mental health services often enquire about substance use and addiction services enquire about psychological and psychiatric health or history.
- 37% of respondents indicated that their service recorded numbers for people with a dual diagnosis, of these, 71% said they included records in service reviews or evaluations. This could not be corroborated with documentation received.
- 63% agreed or strongly agreed with the statement 'Clinical staff in my service are adequately trained to assess for dual diagnosis'.
- Managers agreed more strongly with the above statement than did clinicians.
- 93% agreed or strongly agreed with the statement 'Screening for dual diagnosis on entry to mental health or addiction services should be routine'.
- 71% agreed or strongly agreed with the statement 'Our service effectively identifies clients with a dual diagnosis'.

Treatment

Once a diagnosis of co-morbidity of a mental health and an addiction problem is established, it is important to see how services go about the treatment of such a client. Do services operate from a certain model when treating clients with a dual diagnosis? Co-ordination of care becomes vital when care takes place within two settings. Finally, it was of interest whether specific services were available for these individuals.

Seventy-one percent of services indicated that they did not follow a specific treatment model for dual diagnosis, compared to 15% that did. There was little difference between mental health and addiction services in this regard.

Respondents were asked to elaborate on the model that their service applied to the management of dual diagnosis. A number of models were put forward:

- Combined care with the other service;
- Involvement of all expertise within the multidisciplinary team;
- Treatment is tailored to the client, hence is individualised;
- Specific interventions such as Cognitive Behavioural Therapy or Dialectical Behaviour Therapy or Open Groups for people with dual diagnosis.

There is some suggestion here of confusion between a service model and a treatment approach. Three service models were adopted from the literature review as best practice for the survey:

1. **Serial model** where one service first treats that aspect of dual diagnosis which is their speciality, then refers the client on to the other service;
2. **Parallel model** where both services treat the client simultaneously on the aspect of dual diagnosis which is their speciality;
3. **Integrated model** where both aspects of dual diagnosis are dealt with simultaneously by one agency.

When looking at how care is co-ordinated when a client with a dual diagnosis presents to a service, the most popular way seems to be to refer them to the other service for parallel treatment (see over Table 12). Quite a high number of respondents indicated that they co-ordinated care other then in a serial, parallel or integrated model (answer options on questionnaire). However, on closer analysis of the qualitative answers on the 'other' option, it became clear that they were, in fact, using one of the three models to co-ordinate care. There are some discrepancies between managers' and clinicians' views on how care is co-ordinated (see over Tables 13 and 14), although no significant difference was found. Care co-ordination did not take place systematically in any health board.

Table 12. Frequencies and percentages in mental health and addiction services Indicating how care is co-ordinated when a client with dual diagnosis enters either service

Model of Service	Addiction only (n=41)	Mental Health Monly (n=71)	Addiction both (n=22)	Mental Health both (n=23)	Total (n=157)
Serial	6 14.6%	11 15.5%	5 22.7%	3 13%	25 15.9%
Parallel	18 43.9%	37 52.1%	12 54.5%	14 60.9%	81 51.6%
Integrated	11 26.8%	17 23.9%	8 36.4%	9 39.1%	45 28.7%
Other	14 34.1%	13 18.3%	4 18.2%	2 8.7%	33 21%

***n= The number of people in mental health and addiction services who answered this question. However, more than one answer could be ticked, so the column totals will be greater than the number of responses for each service.**

***Percentages are calculated for each cell by dividing the number of that cell by the service total for that column.**

Table 13. Frequency of responses from managers and clinicians within addiction services indicating how care is co-ordinated when a client with dual diagnosis enters their service

	Manager (n=40)	Clinician (n=23)
Serial	8 20%	3 13%
Parallel	17 42.5%	13 56.5%
Integrated	9 22.5%	10 43.5%
Other	11 27.5%	7 30.4%

***Percentages are calculated from the total number of responses from managers or clinicians.**

Table 14. Frequency of responses from managers and clinicians within mental health services indicating how care is co-ordinated when a client with dual diagnosis enters their service

Model of Service	Manager (n=61)	Clinician (n=32)
Serial	6 (9.8%)	7 (21.9%)
Parallel	33 (54.1%)	18 (56.3%)
Integrated	17 (27.9%)	9 (28.1%)
Other	11 (18%)	3 (9.4%)

***Percentages are calculated from the total number of responses from managers or clinicians.**

When conducting the interviews and asking for further description of the model of treatment and care co-ordination, it became clear that more services operated a serial approach to treatment as opposed to a parallel approach than was indicated in the survey results. This was particularly apparent in the case of mental health services. However, addiction services outside the three area health boards of the ERHA did seem to follow a parallel model. The addiction services within the three area health boards in the ERHA seemed integrated for dual diagnosis cases for which the mental health component was mild, although relying on a consultant psychiatrist only and not a service, and parallel when it was severe, i.e. when a client required inpatient care. The voluntary service seemed to operate a specific service for people with an addiction, but when a client with a dual diagnosis came into the service, they were willing to adapt their programme to the client's needs.

In the survey, 93% of mental health services (n = 98) answered that their service treated people who had substance misuse problems; 81.6% indicated that they treated alcohol and drugs problems.

Seventy-six percent of services indicated that they did not offer a specific dual diagnosis service and 18% indicated that they did. Of those offering a dual diagnosis service, 20% were in addiction and 16% in mental health services. Specific dual diagnosis clinics or assessment of clients by a consultant psychiatrist were the most frequently named specific services within the addiction services. In the mental health services, diagnosis by a consultant psychiatrist was frequently mentioned. The multidisciplinary team was mentioned by both services, and self-help groups were identified by those with dual responsibility. Table 15 gives an indication of how clients found out about these services.

Table 15. Frequency of responses of how clients find out about the specific dual diagnosis services

	Yes (n=27)
It is advertised	1
Consultant referral	21
Counsellor referral	15
Through their GP	16
Through inter-service liaison	14
Through other patients	6
Through word of mouth	6
Other	7

***Respondents could tick more than one response.**

Follow-up interviews corroborated the emerging picture from the survey, namely that there are few specific dual diagnosis services. Only the interviewees from the three area health boards in the ERHA indicated that they had a specific dual diagnosis service, namely the addiction services referring to their dual diagnosis clinics. One specific service not captured in the survey but mentioned in one of the interviews was that in one of the mental health services when a cohort of people with addiction problems came together and different group sessions were held on issues relevant to dual diagnosis. In contrast, some specific services identified in the survey could not be confirmed by the interviewee from that health board area. This, however, might reflect difficulties in communication rather than non-existence of those services.

Overall, 39% of respondents (n =132) agreed with the statement 'Clinical staff in my service are adequately trained to treat dual diagnosis (see Table 16). There was a significant difference in the overall rating of this statement between managers and clinicians (p = 0.018), with managers more likely to agree.

Table 16. Frequencies and percentages of ratings of the statement 'Clinical staff in my service are adequately trained to treat dual diagnosis' by respondents who work in mental health services, addiction services or have a dual responsibility for both

	Addiction (n=39)	Mental Health (n=71)	Dual Responsibility (n=22)	Total (n=132)
Strongly agree	2 5.1%	10 14.1%	1 4.5%	13 9.8%
Agree	7 17.9%	20 28.2%	12 54.5%	39 29.5%
Neither	15 38.5%	14 19.7%	5 22.7%	34 25.8%
Disagree	13 33.3%	23 32.4%	2 9.1%	38 28.8%
Strongly disagree	2 5.1%	4 5.6%	2 9.1%	8 6.1%

***Percentages are calculated from the total number of responses from each of the services.**

Seventy-five percent of respondents (n =130) agreed with the statement 'A fully integrated, specialised service is the best way to effectively help people with a dual diagnosis'.

In summary:

- 71% of respondents indicated that they did not follow a specific treatment model for dual diagnosis.
- Qualitative descriptions of specific treatment models used include: combined care with other service, involvement of all expertise within the multidisciplinary team, treatment tailored to client or specific interventions such as cognitive behavioural therapy or dialectical behavioural therapy (CBT or DBT).
- The co-ordination of care most frequently indicated is parallel (52%), followed by integrated (29%) and serial (16%).
- Managers and clinicians view the nature of care co-ordination differently.
- Co-ordination of care did not take place systematically in any health board.
- 93% of respondents from mental health services indicated that their service treated people who had substance misuse problems, with 82% treating both alcohol and drugs problems.
- 76% of respondents indicated that their service did not offer a specific dual diagnosis service and 18% indicated that it did.
- Qualitative responses in the survey regarding a specific dual diagnosis service included: psychiatrist assessment; dual diagnosis clinics (ERHA mainly); multidisciplinary teams and liaison with addiction counsellors.
- Clients found out about the specific dual diagnosis service mainly through consultant or counsellor referral, their GP or through inter-service liaison.
- 39% agreed with the statement 'Clinical staff in my service are adequately trained to treat dual diagnosis'.
- 75% agreed with the statement 'A fully integrated service is the best way to effectively help people with a dual diagnosis'.

Communication/liaison

As most of the services operate serial or parallel models of care for people with dual diagnosis, communication between the addiction and mental health services was seen as the vital ingredient for effective care for these clients.

Of the services surveyed, 24% indicated that they did not have any formal communication with the other service. There was a significant difference between respondents working in either addiction or mental health services and those who had a dual responsibility for two of the formal communication options, namely the joint assessment ($p = 0.017$) and joint case management ($p = 0.0001$). Those with dual responsibility indicated that their service had more joint assessment and joint case management.

Types of formal communications reported included:

- Liaison worker;
- Joint assessments;
- Joint case management;
- Combined clinics;
- Service level agreements;
- Substance misuse counsellors as part of mental health services attending clinical meetings;
- Addiction services saw consultant psychiatrists weekly visits as formal communication.

Most services indicated that they did have informal communication with the other service, with 54% of services (n =154) reporting 'negotiated care' as the main form of communication. Other forms of informal communication included:

- Both services being under one management;
- Personal contact through networking;
- Telephone feedback;
- Referrals;
- On a case-to-case basis.

Those interviewed generally viewed communications as being quite good. However, no formal communication structures were reported, with most communication taking place on an informal basis. Outside the three area health boards in the ERHA informal communication was partly facilitated by the fact that addiction services are often part of the mental health services and that all professionals come together at multidisciplinary team or sector team meetings. In one health board in which addiction and mental health services were separate, frustration with the mental health services was expressed in as far as they did not take referrals that did not suit or, if they did take referrals, they might not correspond back regarding that client.

Other methods of communication between services included:

- Attendance by an addiction counsellor at an acute psychiatric unit;
- Regular meetings between the psychiatrist with an interest in substance abuse and the mental health services;
- Frequent contact between managers;
- Frequent contact between consultants.

When asked to rate whether 'Communication between addiction and mental health services is adequate to treat dual diagnosis effectively' a significant difference ($p = 0.032$) was found between addiction and mental health services. Respondents from addiction services were more likely to disagree with the statement than those from mental health services.

In summary:

- 24% of services indicated that they did not have formal communication with the other service, i.e. addiction or mental health service.
- Of those who did have formal communication, 30% indicated that this was through joint case management, 17% thorough service level agreements and 10% through joint assessment.
- Those with dual responsibility indicated that their service had more joint assessment and joint case management than those with single service responsibility.
- 54% of services indicated that they had negotiated care as type of informal communication.
- From the interviews, it emerged that people were generally happy with the communication between the two services. No formal communication structures were mentioned.
- In the survey, significantly more people from the addiction service were likely to disagree with the statement 'Communication between addiction and mental health services is adequate to treat dually diagnosed clients effectively' than people from the mental health services.

GP relationship and interface with primary care

General practitioners have a role in the care of dually diagnosed clients. They can act as a referral source to addiction or mental health services, or they treat clients with a dual diagnosis themselves.

Table 17 (see over) gives some indication of how mental health and addiction services interact with primary care in cases of dual diagnosis.

Table 17. Frequencies of responses of mental health and addiction services identifying how their service interacts with primary care.

Methods of Interaction	Mental Health			Addiction		
	Always	Never	Sometimes	Always	Never	Sometimes
Receive referrals to service from GP when already diagnosed	23	8	48	14	2	42
If referral not appropriate to your service do you send back to GP?	21	12	41	19	7	30
If referral not appropriate to your service do you refer on to appropriate service?	37	5	37	37	0	21

*** Totals will vary as some respondents answered only one of these questions.**

Of all mental health and addiction services surveyed, 78% agree that 'GPs should be more involved in the care of clients with a dual diagnosis'. Respondents working in both services were significantly more likely to agree with this statement
($p = 0.025$) than those working solely in mental health services.

The relationship between services and GPs was explored during interviews. The importance of the GP as a referral source was frequently reported, with some services receiving or accepting referral only from GPs. There was an awareness of the importance of managing the link with the GP in the community, particularly in relation to clients with a dual diagnosis.

Accessibility

Accessibility of services was addressed during the follow-up interviews, but specific information was difficult to capture as everybody had a different idea of what accessibility meant. It could be anything from waiting times to who can refer or if there are facilities evenly distributed over the health board area.

Mental health services seemed to encourage initial referral from a GP, or only accepted referrals from GPs, which was seen as a problem of accessibility by respondents in addiction services. Addiction services seemed to be more flexible in accepting referrals, including those from self-help groups, family members or the client himself or herself. Within the addiction services in the three health board areas of the ERHA it was mentioned that access to the consultant psychiatrist worked well and was facilitated by him or her attending clinics in different locations. One interviewee said that the health board helpline made the services very accessible; another interviewee saw the resource of mental health headquarters in each sector as helpful to accessibility. Only one interviewee mentioned that their service, a voluntary one, would take clients from outside the health board area.

Services for certain cohorts

Table 18 offers a break down of the services offering specific services to adolescents, ex-prisoners, homeless people and women.

Table 18. Frequencies of response and percentages of mental health and addiction services indicating whether they offer specific services for specific groups

	Mental Health (n=98)	Addiction (n=67)	Total (n=165)
Adolescents	22 22.4%	32 47.8%	44 26.7%
Ex-prisoners	5 5.1%	17 25.4%	22 13.3%
Homeless people	20 20.4%	26 38.8%	46 27.9%
Women	12 12.2%	21 31.3%	33 20%
Other	14 14.3%	9 13.4%	24 14.5%

***Respondents could tick more than one response, so percentages do not add up to 100.**

Seventy-five percent of respondents (n =135) disagreed with the statement 'It is easy for homeless dually diagnosed people to access the services'. Respondents from addiction services were significantly more likely to disagree (p = 0. 032) than those from mental health services.

Service reviews/evaluations

Only a few interviewees indicated that their service had service reviews and evaluations. Very few returned hard copies of reviews after being asked in the interview. Only two reviews and two evaluations were received. These two evaluations, however, did not contain information directly relevant to dual diagnosis. Two service plans were also received; neither commented directly on dual diagnosis, but did contain information on service structures that might impact on dual diagnosis. As so few service reviews were received, it is difficult to relate information from these to information received from the survey.

Difficulties in service provision

In the latter part of the survey respondents were invited to give their opinion on the difficulties involved in service provision for people with dual diagnosis. The answers revolved around four areas (1) service/structures, (2) communication/co-ordination, (3) the individual with dual diagnosis and (4) staff who work with this client group.

Service/structures

Both addiction and mental health services saw access to services as a difficulty or, as one respondent put it, 'adequacy of opportunity'. Moreover, the battle for funding was mentioned frequently, as well as the general lack of resources. A general frustration became apparent that no single clinician is

responsible for the management of this group of people and that the approach to care is disjointed and inconsistent. These factors might lead to the clients falling between the gaps, which was pointed out as a problem. Respondents from both services repeatedly pointed out and seemed to agree that general mental health services did not deal well with substance abuse. Difficulties in relation to service and structures mentioned only by respondents working in mental health services were lack of time, lack of inpatient detoxification facilities, deciding the priority between the existence of both sets of problems, and poor follow-up; whereas respondents from the addiction services saw a problem in the lack of clarity regarding the referral process.

Communication/co-ordination

Lack of integrated care was mentioned by respondents, and the lack of communication and liaison which was specified frequently by respondents from both services could be partially responsible. This could be a result of the territorial battles or 'power struggles', which, according to the respondents, seemed to take place in the services. Lack of willingness to share responsibility or devolve responsibility was mentioned repeatedly.

The individual with dual diagnosis

Respondents from both services found that clients with dual diagnosis were hard to engage because of their problems and because they often lacked motivation and were un-co-operative. Relapse and non-compliance were also seen as problems. More often mentioned by respondents working in the mental health service was that clients with a dual diagnosis could be disruptive, aggressive and antisocial.

Staff working with clients with a dual diagnosis

Lack of knowledge, awareness or skills concerning dual diagnosis, leading to lack of confidence in working with this client group was the single most frequently mentioned difficulty regarding the management of this client group by respondents from both services. Furthermore, misdiagnoses, mistreatment or complete lack of assessment was seen as a stumbling block in effectively dealing with this client group. Also frequently mentioned by respondents were prejudice or stigma toward these clients and therefore a reluctance to work with them. In the section of the questionnaire containing the attitude scales, 63% of respondents (n =135) agreed with the statement 'I came across prejudice in service provision against people with a dual diagnosis' (see Table 19).

Table 19. Frequencies and percentages of ratings of the statement 'I came across prejudice in service provision against people with a dual diagnosis' by respondents who worked in mental health services, addiction services or had a dual responsibility for both

	Addiction (n=41)	Mental Health (n=71)	Dual Responsibility (n=23)	Total (n=135)
Strongly agree	9 22%	17 23.9%	8 34.8%	34 25.2%
Agree	20 48.8%	24 33.8%	7 30.4%	51 37.8%
Neither	7 17.1%	14 19.7%	4 17.4%	25 18.5%
Disagree	4 9.8%	11 15.5%	2 8.7%	17 12.6%
Strongly Disagree	1 2.4%	5 7%	2 8.7%	8 5.9%

***Percentages are calculated from the total number of responses from each of the services.**

Interviews

The information regarding perceived difficulties of management of clients with a dual diagnosis received from the interviews is in accordance with the data received from the survey. During the interviews the view was frequently expressed that clients with an addiction used a 'dual diagnosis' to abuse the system in order to get a bed or avoid a court case. In one case it was mentioned that even GPs use dual diagnosis as an excuse to get a client into the mental health services after five o'clock as the addiction services are only open from nine to five.

An additional difficulty mentioned during the interviews was that 'people with a dual diagnosis aren't shouting', and hence it might not be a priority for a service to look at the quality of care offered to these clients.

Discussion

Before drawing the findings from each phase of the research into a combined discussion, there are some survey results which are anomalous and raise particular questions in relation to the understanding of dual diagnosis. Only a minority of respondents reported the existence of policies and/or specific structures regarding dual diagnosis, with most reporting that there were no specific services for people with dual diagnosis. In fact, both addiction and mental health services operated specific exclusion criteria against people with dual diagnosis. Even where policies were reported, it was not possible to corroborate this with requested documentation and follow-up interviews. Where any documentary evidence relating to dual diagnosis was forthcoming, it consisted mainly of copies of initial assessments that mentioned substance use or psychological problems. It was similarly not possible to corroborate 37% of responses indicating that services recorded a dual diagnosis. Despite the apparent lack of services treating dual diagnosis, the majority of respondents did not justify not treating people with dual diagnosis in their services.

Contradictions include the fact that despite the inadequacy of services for dual diagnosis, 93% of respondents from mental health services treated people with substance misuse problems. This anomaly is one of several which call into question people's understanding of the concept of dual diagnosis. Also interesting is that the majority of respondents thought that clinical staff were adequately trained to assess for, and identify, dual diagnosis in their client groups. Again, no documentary evidence was forthcoming to support these findings. For example, no specific dual diagnosis assessment tools were found during the study. Respondents also felt that routine screening for evidence of dual diagnosis should be in place in all services. The status quo seems to create circumstances with little formal structures or service provision. Also, while the majority of respondents said their service assessed for dual diagnosis with an apparent well-trained clinical staff group in relation to assessing dual diagnosis, there are obvious exclusion criteria. Why train staff and include assessment for dual diagnosis when exclusion criteria are in place anyway?

Contrary to the reported quality of assessment and lack of formal service provision, respondents maintained that clinical staff in their service were not adequately trained to treat dual diagnosis, while arguing for an integrated service as the most effective way of treating dual diagnosis. Is the level of assessment skill a preparation for excluding people with dual diagnosis, a partial response to under-resourced services that are not yet skilled in appropriate interventions, or are staff picking up collateral that signifies, e.g. substance use or psychological problems rather than the existence of dual diagnosis?

There are also some reported difficulties and anomalies in relation to communication with GPs and primary care and between addiction and mental health services. Although the study did not address primary care specifically, the results show clearly that improved communication with, and involvement of, GPs is essential for effective management of dual diagnosis. Although interviewees reported that there was good communication between services, the initial survey responses indicated that there was little formal communication and, particularly from respondents in addiction services, that communication was inadequate to treat dual diagnosis effectively.

Chapter 5
Discussion of Research Findings

The earlier sections of the report set out a review of the research literature related to the study of dual diagnosis and primary research carried out in the Irish context. The critical analysis of the research literature identifies issues of definition associated with dual diagnosis, but the trend emerging is of a relatively prevalent phenomenon with clear implications for health and well being. The primary research carried out for the study establishes for the first time in Ireland a picture of the services provided to people with dual diagnosis through mental health and addiction agencies. Several themes can be identified from the open forum and survey results; these are discussed below:

- The concept of dual diagnosis
- Organisational strategies and structures
- Management of services and co-ordination of care
- Culture, ideology, education and professional relations
- Assessment, diagnosis, prevalence and treatment
- Intra- and inter-organisational communication
- Prospective management of people with dual diagnosis

The concept of dual diagnosis

As identified in the literature, there are great difficulties in defining dual diagnosis and several factors impact on these difficulties. Participants in the open forum were asked to use a wide-ranging working definition of dual diagnosis that emerged from the literature. Their difficulties mirrored those in the literature, where most people wished to narrow the definition down to 'suit' capabilities and practices of their different services and to make dual diagnosis manageable. One of the conclusions emerging from the forum was to adopt a tiered approach to defining and managing dual diagnosis according to severity, in a similar way to the New South Wales guidelines (NSW {Aus} Health Department, 2000).

The same working definition of dual diagnosis used in the open forum was adopted for the national survey. The quantitative and qualitative responses indicate some confusion over what dual diagnosis actually means. Perhaps this is not surprising considering the difficulty with definition. However, even where services were spoken of as integrated, the perception was that each diagnosis would be dealt with separately, as opposed to the individual experience of dual diagnosis and associated complexities. At times, some of the open-ended responses and corroborative information from interviews suggests almost a purposeful splitting of the 'dual diagnosis'. Certainly, the survey reports of prejudice, exclusion and lack of treatment services for dual diagnosis would call into question whether dual diagnosis as a single concept could be accepted. This is not unusual and concurs with the literature review and open forum experience in terms of professional and organisational cultures or mind sets that impact on perceptions of dual diagnosis. Inconsistencies in reports of treatment may be a further indication of the confusion concerning dual diagnosis. For example, 93% of respondents from mental health services say they treat substance misuse, but 77% say they do not offer a specific service for dual diagnosis. The current lack of clarity around the concept of dual diagnosis may become clearer in future discussion, particularly in light of its apparent invisibility outside of clinical discourse and practice. The difficulties in defining and working with dual diagnosis do not detract from the number of services, albeit small, that are specifically developing innovative ways of managing dual diagnosis more effectively.

Organisational strategies and structures

All services that participated in the study were involved at some level in providing care for people who have mental health and substance misuse problems. There were some structures, usually informal or within systems as opposed to throughout systems, but with little uniformity across health boards. Where structures were specified in relation to dual diagnosis, these were generally reliant on a post, person and/or a particular professional role. Considering the complex difficulties that people with dual diagnosis present with, these structures may not be adequate to meet their needs. The disparate nature of structures across services helps account for the fact that, even where structures were identified, they were not commonly recognised outside of the services involved. It is difficult to establish if the array of structures, both formal and informal, were specifically relating to dual diagnosis or to the service provision generally. With the lack of specific structures such as policy, designated teams, and service reviews/plans in most areas, it is not possible to reach a conclusion on this.

Some of the policies and decision making structures described by respondents may preclude people with a dual diagnosis from having their needs addressed. For example, both addiction and mental health services operate exclusion policies, affecting people with mental health difficulties and those who misuse drugs respectively, despite exclusion policies being contrary to the fact that respondents felt dual diagnosis was justifiably treated in their services. In these cases, it may be that the ideology underpinning the provision of services needs to be questioned and subjected to critical analysis. Where these structural difficulties exist, a serial model of service provision would seem to be the most viable option.

The survey results, corroborated by follow-up interviews and analysis of available service documentation, in addition to outcomes of open forum, clearly identify a lack of strategic direction and a deficit of formal organisational structures related to dual diagnosis. This observation must be viewed, perhaps within the wider strategies and organisational structures. National policy does not reflect the existence of dual diagnosis. If anything, developments have helped perpetuate a segregation of any 'duality' in diagnosis and, in terms of service development, the trend would be towards encouraging serial models of care for dual diagnosis. Dual diagnosis in formal terms is practically invisible, with no obligation to record the diagnosis, to treat or to manage. This is similar to the situation in the UK before national policy began to recognise and provide guidance in relation to dual diagnosis (Home Office {UK}, 1998 & DoH, {UK}1999). This occurred only after indisputable evidence of the existence and implications of dual diagnosis for people and service provision. As yet, there is little published evidence in the Irish context.

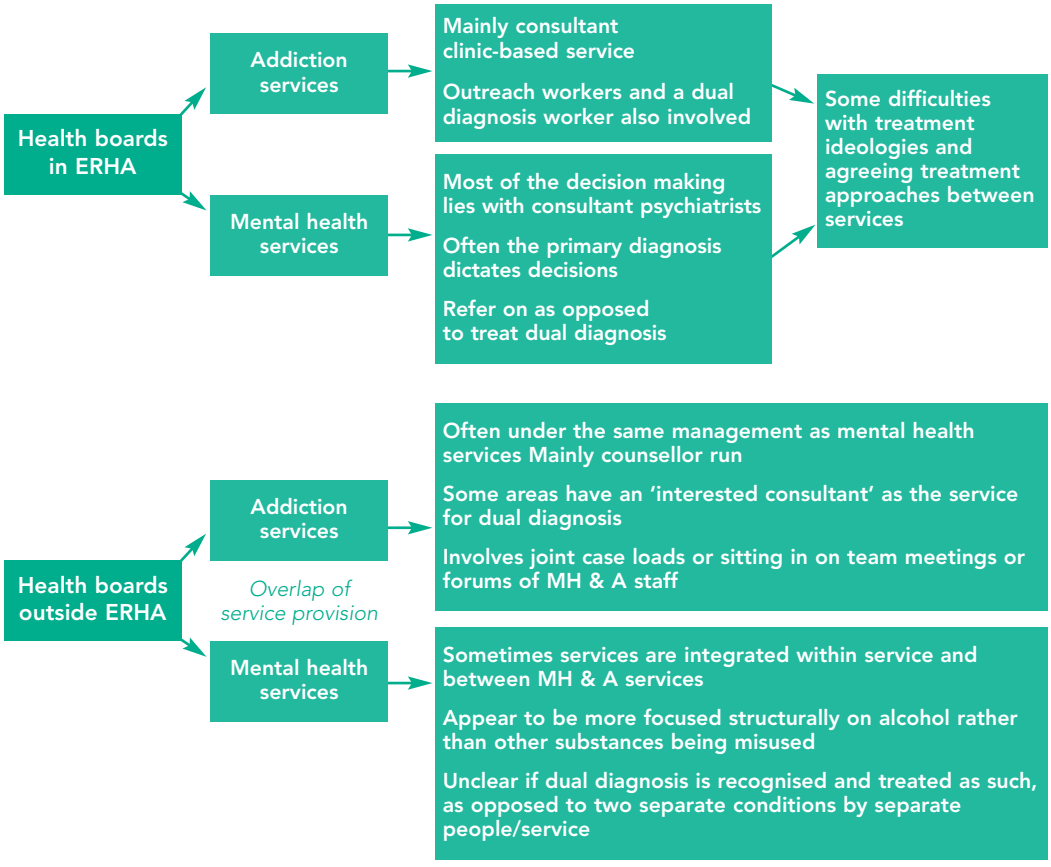
Management of services and co-ordination of care

In the absence of an explicitly stated template for service delivery, but where dual diagnosis services are specifically identified, it is difficult to establish how dual diagnosis is managed. There is little apparent consistency in terms of a service model or treatment approach within services, between services and between clinicians and managers of services. The research evidence suggests that, if care is not integrated, then even a parallel service model will not work unless there are clear structures in place with effective collaboration, communication systems and shared ideologies (Mueser et al., 1998).

However, there do appear to be some consistencies emerging in relation to the delivery of services. In some cases this is obviously planned, though not necessarily documented so. In other areas it seems to be the way services have emerged. How services are structured and interface with each other impacts on how dual diagnosis is approached. Within the ERHA area health boards, mental health and addiction services appear to operate normally as separate services. This is reflected in the approach to dual diagnosis. Outside the ERHA, addiction and mental health services tend to have more cross over and often fall under the same management structures. Again, these structures are reflected in how dual diagnosis is approached. There are some aspects of care that are similar across all service provision. For example, decision making across the board rests with consultant psychiatrists and in all cases the process of care is based on this structure. Outside the ERHA there appears to be more intra-professional involvement, perhaps because of the way services are physically structured. Separate services also have intra-professional involvement, with, for example, the outreach teams in addiction services or the development of designated dual diagnosis workers in some services. A unidisciplinary approach is not consistent with best practice. However, where specific dual diagnosis services do exist in Ireland, under the direction of named consultants, there are identified structures in place and these initiatives stand out, in the absence of alternative service provision. Figure 5 indicates where there are general similarities across services in the management and co-ordination of care for people with dual diagnosis.

An integrated service model is the preferred option, with respondents agreeing that people with dual diagnosis should be treated in either addiction or mental health services. There are inconsistencies in reported service models and there is no clear agreement in any service on what model is being applied.

Figure 5: Management and co-ordination of care for people with dual diagnosis



Culture, ideology, education and professional relations

Conflicting perceptions emerged from the study. People in services reported the idea and practice of a client-centred approach in their service, while rationalising why some people with dual diagnosis should not be treated in the services. Reports of exclusion criteria and prejudice emerging from the survey also contradicted the existence of a client-centred approach.

Services have generally evolved in such a way that mental health problems are managed as separate entities to substance misuse problems, even where these services overlap. This separation seems embedded in service cultures, treatment ideologies and attitudes of professionals towards people presenting with either set of problems. This may not necessarily be an issue when dealing with people whose problems are best served by such approaches. Unfortunately, dual diagnosis does not fit into one or other service culture. Unless services and individuals can begin to collaborate and even compromise ideologies, the needs of people with dual diagnosis cannot be addressed within existing cultures.

The results indicate a diagnosis-centred care as opposed to a client-centred care when considering dual diagnosis. People are stigmatised and labelled by virtue of exclusion criteria, prejudice and being considered 'difficult'. This is further compounded by the practice of people being passed between different services. Treatment approaches perceived as therapeutic in one service may be stopped and replaced in another. Even where there are reports of integrated care, there appears to be separate approaches for mental health and substance misuse problems that do not necessarily look at the combined difficulties of the individual with dual diagnosis. Respondents reported having a lack of knowledge in relation to dual diagnosis. This causes difficulties that are made worse when their education and training does not adequately address dual diagnosis. Knowledge and understanding of the implication of dual diagnosis and shared learning among disciplines also featured in the literature as ways of lowering the barriers between 'mental health' and 'substance misuse' service cultures.

There is evidence of cultural shifts and attempts to develop collaborative practices. Reported joint case management, key working and developing liaison workers will bridge existing barriers and ideologies as they have done elsewhere. The impetus appears to be coming from within services and although it may take some time to see any impact on service provision, the potential is there.

Assessment, diagnosis, prevalence and treatment

Clearly, addiction and mental health services assess for the presence of mental health and substance misuse problems respectively. Respondents also felt that clinical staff were adequately trained to assess for dual diagnosis and 70% reported that their services effectively identified clients with dual diagnosis. However, the survey and follow-up interviews could not confirm the use of any formal assessment tools specifically designed to aid dual diagnosis. Dual diagnosis was not normally formally recorded and it was not possible to corroborate assertions that it was in some cases. Therefore, apart from the few published studies, there are no prevalence rates for dual diagnosis.

There are several contradictions in the survey results, which, again, raise the question as to how respondents conceptualised dual diagnosis when responding to questions. The example cited, where 93% of respondents from mental health services said they treated people with substance misuse problems, yet 77% of these said they did not have a specific dual diagnosis service, is pertinent.

Respondents' beliefs that they adequately assess dual diagnosis did not follow through into treatment and service provision. There was some debate over what service models are in place, compounded by the fact that most services did not follow a specific treatment model. Staff generally did not feel that clinical staff were adequately trained to treat dual diagnosis, with clinicians more likely than managers to report this.

Most clinical staff were perceived to adequately assess for, yet not to treat, dual diagnosis; nor did they provide a specific dual diagnosis service. An assumption could be made on the basis of these results that, generally, people with dual diagnosis must be treated within existing non-specific treatment and service models. So, even where serial and parallel service models are applied, treatment needs are not necessarily being met when people with dual diagnosis move between services. Caution must be taken with this assumption, in view of the lack of clarity around the concept of dual diagnosis and the wide-ranging definition.

Intra- and inter-organisational communication

Inevitably, people with dual diagnosis in Ireland will move between services or be referred on to another professional within services. Serial and parallel models of service provision are the norm. These by nature require excellent communications and collaboration between services and different disciplines if people are to receive effective healthcare. The survey identified a range of formal and informal mechanisms for communication which respondents generally felt were acceptable to their organisations. Much of the communication is informal and unstructured but respondents saw some merit in this, as being possibly more flexible. One interviewee articulated this in the following quote:

> *"The most important thing in my view is really the relationship between the services. Like, if you develop a good relationship, based on mutual respect and trust, I think that the patients will receive the best treatment. It should be structured, but sometimes structures are too restrictive rather than, you know, allowing you the freedom, like in our case here to pick up the phone and say 'listen, help' whereas if there is a protocol and you have to write, it takes time and so on ..."*

It is possible that staff believed communication in relation to dual diagnosis within services was adequate because intra-organisation communication was good anyway. Therefore, they may expect similar structures to work with dual diagnosis. Dual diagnosis is managed mainly between services; this is where communications need to be particularly effective, but are not necessarily so. Some other anomalies arose in relation to communications. A number of respondents from mental health services suggested that referrals must come officially through GPs, so technically, if addiction services were liaising with mental health services in relation to someone with dual diagnosis, the referral would have to go through the GP. The open forum discussions also referred to the need to recognise the principal role of GPs in the management of dual diagnosis, often the sole treatment agency. Although the role of GPs in the management of dual diagnosis was not explicitly part of the study remit, it is clear that any effective service provision must have GPs and other primary care professionals at its centre.

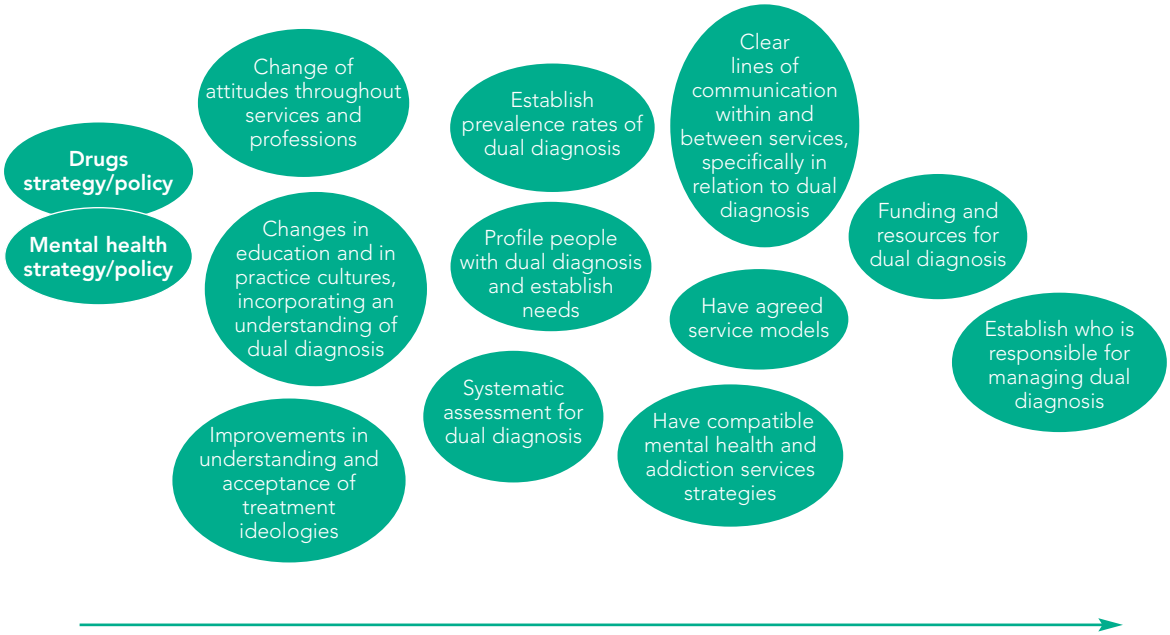
Communication between disciplines may be excellent and consequently there may be a perception that communications are fine over all. The survey results identified that in the majority of cases people found out about dual diagnosis services via consultant referral. Interview results identified that one of the ways in which the existence of dual diagnosis services becomes known in services is by word of

mouth, for instance, following a clinical placement in a dual diagnosis service. Most designated dual diagnosis services essentially comprise a consultant psychiatrist. Research evidence does not necessarily support the sole reliance on a unidisciplinary approach to referral and consequent care, where it may limit the potential effectiveness of treatment and service provision for dual diagnosis. Despite good intra-disciplinary communications, if the liaison does not include all people involved in the provision of care, effectiveness may be compromised.

Prospective management of people with dual diagnosis

People are managing dual diagnosis in mental health and addiction services. They are doing so in the absence of clear national guidelines and not necessarily according to best practice. However, services are dealing with a sometimes invisible concept, though one that has a serious impact on people's lives. There are clear indications from this study as to how these services in Ireland can develop. Figure 6 shows a synopsis of what respondents felt needed to be in place for a more effective service to emerge for people with dual diagnosis. While the diagram reads from left to right, this is not necessarily the order of importance, as all of these components need to be developed and may do so over different time frames; the sequencing is important, in that some developments will not easily occur unless preceded by another.

Figure 6: How respondents view the best way to manage dual diagnosis



Chapter 6
Conclusions and Implications for Practice

At present in Ireland dual diagnosis is not clearly understood as a concept nor is it formally recognised in mainstream addiction and mental health services. There are a number of evolving services specifically acknowledging and beginning to treat people with dual diagnosis. As yet, most services do not offer a specific treatment model for dual diagnosis. The prevalence rate of dual diagnosis among people with mental health and substance use problems is high outside of Ireland, anywhere between 15% and 60%, depending on the expanse of dual diagnosis definition and whether clients are inpatients or living in the community. It is not possible to estimate the numbers of people with dual diagnosis in Ireland because of the lack of formal recording and the small number of prevalence studies completed. Some preliminary studies suggest that prevalence rates could be as high as 43% (Condren et al., 2001) in a community sample or 37% (Kamali et al., 2000) for an inpatient group. Assuming that clinical cohorts of people accessing addiction and mental health services in Ireland have some similarities in the problems they experience, then high prevalence rates are likely to continue emerging in the research.

There is a large research base relating to dual diagnosis emerging from other countries, with several models of best practice to suit a wide definition of dual diagnosis. The US advocates an integrated model of service delivery and the UK advances three models but opts for an adaptation of a parallel model with some integration. Others, such as New South Wales in Australia, determine models based on the severity of the dual diagnosis. If dual diagnosis is to be recognised and managed effectively in Ireland, cognizance will need to be given to this evidence. However, services in Ireland associated with dual diagnosis have developed in their own unique way.

This study aimed to: identify the needs of people with dual diagnosis and models of assessment and treatment appropriate to clinically effective service provision; and, identify how Irish addiction and mental health services provide care and how effective existing organisational structures are in providing existing or potential care for people with dual diagnosis. A range of objectives was identified that enabled the study to meet these aims and all have been achieved to some extent. A number of themes in relation to the effective management of dual diagnosis were identified for further discussion. By resolving some of the issues within these themes, a more effective approach to the management of dual diagnosis is possible. Services have developed with their unique organisational structures, none of which would necessarily prevent effective management of dual diagnosis once the existing issues have been addressed.

The study had an ambitious set of objectives, and in the event, all could not be achieved in full. Service users did participate in the open forum, but not in the survey or follow-up interviews. Therefore, the picture emerging in relation to the management of dual diagnosis in addiction and mental health services is predominantly from the perspective of the clinicians and managers within services. Although outside the aims of this study, a clear message arising from the results relates to the role of primary care, in particular that of GPs. This role is perceived as integral to the management of dual diagnosis and to any service model being developed. For example, the service model in New South Wales places responsibility and resources for the majority of dual diagnosis with primary care.

The results of this study provide a picture of how dual diagnosis is being managed in addiction and mental health services. There are other aspects and perceptions of service provision yet to be added; however, this is an initial template to work from. It is timely that dual diagnosis is being highlighted now, when addiction and mental health service strategies, and the organisation of health services

generally, are under review. Now that an invisible phenomenon is being seen, it will be possible to indicate that national policy and organisational structures need to be put in place to effectively manage dual diagnosis in the future.

If services are to be managed in such a way that the needs of people with dual diagnosis can be met, there are several challenges ahead. Every service develops its own culture, has unique approaches to treatment and fosters particular communication strategies. Sometimes the organisational structures, needs and perceived remit of the services seem to dictate care. If the individual experience of the client can remain central to how services for them are managed, then none of these challenges will be insurmountable.

Implications for Practice

Dual diagnosis needs to be recognised and addressed in national policy, particularly in relation to mental health, drugs and alcohol. Because of the complex difficulties experienced by people with dual diagnosis and consequent service provision, these policies should have some overlap in relation to dual diagnosis. It is important that policy development is congruent with best practice.

Dual diagnosis potentially represents a significant number of people accessing primary care, addiction and mental health services. Service reviews should recognise and make provision for dual diagnosis at regional and local level. Although the numbers are not yet known, it would be prudent that service strategies account for the impact that dual diagnosis may have on service provision and resources.

Cultural differences, treatment ideologies and the paucity of education and understanding in relation to dual diagnosis needs to be addressed. Undergraduate and continuing education programmes for different disciplines working in addiction and mental health services could incorporate dual diagnosis into their syllabi. Specific dual diagnosis multidisciplinary/agency educational programmes can be developed that enable various disciplines to understand and respect each others' roles, in addition to alternative and equally effective approaches to care.

Clinically effective service models and treatment approaches need to be developed that fit the context of people in Ireland with dual diagnosis and Irish healthcare provision. It will be essential to underpin any developments with an appropriate education programme that fosters understanding, shared ideology and joint working. Otherwise, existing misconceptions and interpretations may diminish the effectiveness of such programmes.

There are a number of areas requiring further research if dual diagnosis is to be more effectively managed. As yet the prevalence of dual diagnosis in Ireland can only be estimated. Without a profile of people with dual diagnosis in Ireland, assessment of their needs can only be based on those of people with similar problems in other countries. Once people with dual diagnosis are being identified, their views will need to be sought in relation to their experience and the management of dual diagnosis. The role of primary care in providing services for dual diagnosis is not yet clear. Thus, some areas yet to be researched include: prevalence; needs assessment; service users' experience and perceptions; and the role of GPs and primary care.

As illustrated in the literature review, other countries have dealt with the complexities of managing dual diagnosis by developing national guidelines for services providing care. It may be appropriate to develop guidelines for Irish services. If this strategy is adopted, it would be important not to assume that good practice elsewhere can necessarily be transferred to the Irish context. Although the present study has explored the management of dual diagnosis, more research may need to be carried out before guidelines that are applicable to Irish healthcare can be developed.

Dual diagnosis is only beginning to be visible in healthcare provision and not yet in national policy. Therefore, it is imperative that appropriate research, such as this report, is disseminated widely and discussed at appropriate forums, so that it can play a part in ensuring that dual diagnosis is firmly on the agenda for services involved in the provision of care.

Glossary

In the literature review some terms have been used interchangeably. The lack of uniformity of terminology used is mainly due to the use of terms as they are described in the referenced studies, which will often depend on their country of origin. Below are some key words that are used interchangeably.

- Patient/Client/Service User
- Addiction/Substance abuse/Misuse
- Mentally ill/Psychiatric

Abstinence 12-Step Approach	The abstinence 12-step approach is a programme originally used by Alcoholics Anonymous (AA) in order to help alcoholics stay sober. It is based upon using twelve specific steps to recovery. At meetings, people gather to share what members of AA call their 'experience, strength, and hope'. The AA member uses these twelve steps to stop drinking and to keep from drinking again. This approach has since been adapted by a variety of professionals across a variety of conditions.
Adjustment Disorder	The term used for a condition where an individual develops emotional and behavioural symptoms in response to a stressful situation.
Amphetamines	Amphetamines are a type of stimulant drugs which speed up bodily processes, and include caffeine (coffee, tea, soda), nicotine (cigarettes), and cocaine. Some of the effects include increased heart rate, increased respiration, reduced appetite, and increased energy.
Antipsychotic medication	Drugs used to treat psychosis, including schizophrenia and mania. They also have tranquillising effects, reducing agitation.
Assertive Community Outreach (ACO)	An active form of treatment delivery: the service can be taken to the service users rather than expecting them to attend for treatment. Care and support may be offered in the service user's home or some other community setting, at times suited to the service user rather than focused on serviced provider's convenience. Workers would be likely to be involved in direct delivery of practical support, care co-ordination and advocacy as well as more traditional therapeutic input.

Attention Deficit Hyperactivity Disorder (ADHD)	ADHD is a neurobehavioural disorder, which interferes with a person's ability to stay on a task and to exercise age-appropriate inhibition (cognitive alone or both cognitive and behavioural). Some of the warning signs of ADHD include failure to listen to instructions, inability to organize oneself and school work, fidgeting with hands and feet, talking too much, leaving projects, chores and homework unfinished, and having trouble paying attention to and responding to details. There are several types of ADHD: a predominantly inattentive subtype, a predominantly hyperactive-impulsive subtype, and a combined subtype.
Axis I	Axis I is one of the levels or axes of the DSM-IV which helps the clinician to evaluate the client referring to clinical disorders. Clinical disorders are assigned to 14 categories, including Anxiety Disorders, Childhood Disorders, Cognitive Disorders, Dissociative Disorders, Eating Disorders, Factitious Disorders, Impulse Control Disorders, Mood Disorders, Psychotic Disorders, Sexual and Gender Identity Disorders, Sleep Disorders, Somatoform Disorders, and Substance-Related Disorders.
Benzodiazepines	A class of drugs that act as minor tranquillisers and are commonly used in the treatment of anxiety.
Bipolar Affective Disorder	This describes a disturbance in mood, resulting generally in either depression or elation, which is often chronic and recurrent in nature. There are usually alterations in activity, sleep and appetite.
Biopsychosocial approach	An approach to health and illness that suggests that links between the nervous system, the immune system, behavioural styles, cognitive processing, and environmental factors can put people at risk for illness.
Case Management approach	The case management approach is an approach to healthcare in which a case manager: Provides an individual, client-centred assessment/Identifies aims and goals to meet the client's needs /Is an advocate for the injured person and their family /Works as a facilitator and innovator to access appropriate resources to meet the client's needs /Liaises with appropriate agencies to secure and justify funding to meet the client's needs /Implements and co-ordinates community rehabilitation programmes /Implements and co-ordinates programmes to promote return to work or occupational balance /Liaises with relevant people to ensure educational

	requirements and aspirations are met /Sets up and monitors care regimes /Recruits, trains and supervises support workers /Monitors the long-term needs of the client.
Catchment Area	A catchment area is a geographic area for which a mental health service has responsibility.
Co-morbidity	The simultaneous presence of two or more disorders, often refers to combinations of severe mental illness, substance misuse, learning difficulties and personality disorder.
Conduct Disorder	A persistent pattern of behaviour that involves violation of the rights of others (disobedience, destructiveness, jealousy, boisterousness, inadequate feelings of guilt).
Depression	A negative mood state, which involves a feeling of sadness. A severe depression can meet the criteria for an affective disorder and require treatment.
Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)	The DSM-IV is the reference book used by mental health professionals to diagnose mental health disorders. A noteworthy feature of the DSM-IV is its attempt to pay attention to the multiple aspects of a person's life that play roles in clinical conditions.
Dual Diagnosis	Dual diagnosis referred to in this report is defined as the "co-existence of both mental health and substance misuse problems for an individual". However, dual diagnosis is a global term and both the term and the understanding of the term are interchangeable and might vary according to professional views or views portrayed in national reports. For a description of these different understandings consult the section of this report entitled, What is dual diagnosis?
Epidemiological	Epidemiological means, of, or relating to, epidemiology, a branch of medical science in which the incidence, distribution and control of disease is studied. This applies not only to the study of such classic epidemics as plague and cholera, but also to all forms of disease that relate to the environment and ways of life, such as links between smoking and cancer, diet and coronary disease, and communicable diseases.
Extra Pyramidal Side Effects	Are some of the side effects that can be experienced by people who are taking neuroleptic medication. These include, people feeling overly restless, overly anxious, experiencing tremors. They can also include rigidity of various muscles.

Hypotensive	Hypotensive drugs lower the blood pressure.
Intellectual disability	Intellectual disabilities relate to difficulties with thought processes, learning, communicating, remembering information and using it appropriately, making judgements and problem solving. It is a lifelong disability that can affect many different areas of a person's life. The range of intellectual disability varies greatly, spanning from a mild intellectual disability requiring low support, through to severe intellectual disability requiring complex support.
International Classification of Diseases (ICD-10)	The ICD-10 is a classification system of diseases developed by the World Health Organization.
Key Worker system	A system in which a worker with responsibility for co-ordinating care reviews for mental health service users with complex needs, and for communicating with others involved in the service user's care. Key workers usually have the most contact with the service user.
Likert Scale	A rating scale measuring the strength of agreement with a set of clear statements.
Mental Illness	A range of diagnosable mental disorders that excludes learning disability and personality disorders.
Metabolites	Substances produced during metabolism.
Methadone	A long-acting synthetic narcotic analgesic used as a substitute for heroin, permitting withdrawal without development of acute abstinence syndrome.
Mood disorders	These reflect a disturbance in mood, resulting generally in either depression or elation, which is often chronic and recurrent in nature. There are usually alterations in activity, sleep and appetite.
Neuroleptic Medication	Neuroleptic medication refers to a group of drugs normally used in the treatment of mental illness featuring psychotic symptoms.
Opiate	A class of drugs (e.g., heroin, codeine, methadone) that is derived from the opium poppy plant, contains opium, or is produced synthetically and has opium-like effects. Opioid drugs relieve pain, dull the senses and induce sleep.
Personality Disorder	This covers a variety of clinically significant conditions and behaviour patterns, which tend to be persistent and to arise in childhood or adolescence. They are not secondary to other mental disorders but may co-exist

	with them. The disorder will generally involve problematic relationships and may be associated with personal distress. A very small subgroup of those with personality disorder may be antisocial and dangerous.
Post-traumatic stress disorder	Post-traumatic stress disorder is a psychological disorder where individuals suffer emotional distress from a traumatic past experience or set of experiences. Stimulus that reminds them of the event or events can cause flashbacks and irritability.
Premorbid	Existing before the onset of a mental disorder.
Prevalence	Prevalence is a way of describing the occurrence of disease in a population. Prevalence is the proportion of people in the entire population who are found to have disease at a certain point in time, without regard to when they first got the disease.
Prognosis	Prediction of the outcome of an illness.
Psychoactive properties	Properties of substances whether synthetics or plants which elicit effects on the mind, especially mood, thought or perception.
Psychomimetic	Where the effect of substance misuse can mimic symptoms of acute mental illness.
Psychosis	Psychosis is a severe mental disorder in which the person experiences delusions, hallucinations, breaks from reality, and a variety of other extreme behavioural disturbances. This is usually so severe that the person requires treatment.
Relapse	The return of signs and symptoms of an illness after the patient has enjoyed a period of disappearance of these signs and symptoms.
Schizophrenia	Schizophrenia is a severe psychotic mental illness in which there may be distorted perceptions and thinking, as well as inappropriate or blunted mood. Individuals with this disorder may hold beliefs that seem impossible to others.
Tardive dyskinesia	Tardive dyskinesia is an extra pyramidal side effect caused by the long-term use of neuroleptic medication. It includes abnormal movements and characteristic gait.

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Appendix 1

List of assessment tools that have been used to aid identification of dual diagnosis

This list and brief description does not attempt to analyse the sensitivity and robustness of any of the instruments; it is not clear as to the tested reliability and validity of some. Where this information was available, it is included.

Measurement tools specifically relevant to aiding dual diagnosis

- Drug Abuse Screening Test (DAST) (Skinner, 1982)

  The DAST was originally developed for the detection of primary drug misuse or dependence, with a 28-item scoring form which demonstrated psychometric properties in a psychiatric patient population (Staley and El-Guebaly, 1990).

  Cocco and Carey (1998) investigated two versions of the DAST, 10-item and 20-item, in 97 patients who had been receiving treatment at a public psychiatric facility. They found that the DAST demonstrated internal consistency, temporal stability and test-retest reliability. It also showed criterion validity when used to predict relevant substance-use-disorder diagnoses.

- Dartmouth Assessment of Lifestyle Instrument (DALI) (Rosenberg et al., 1998)

  Rosenberg et al. developed this screening tool specifically for the identification of substance use disorders in persons with severe mental illness. The Dartmouth Assessment of Lifestyle Instrument (DALI) consists of 18 items derived from several existing screening tools and is administered by an interviewer; items were selected to maximise prediction of substance use disorder diagnoses. Eight items predict drug use disorders and nine items (with two overlapping items) predict alcohol use disorders.

  The preliminary report indicates that this test is reliable over time and across interviewers, and more sensitive and specific than the DAST. To date, the DALI seems to be the only screening instrument specifically designed to identify substance use disorders among acutely ill psychiatric patients. Inter-rater reliability ranges from 0.96 to 0.98, depending on whether the focus is on alcohol use or cannabis and cocaine use, and test-retest reliability is very good (kappa=.90). By design, this set of items produced higher sensitivity and specificity than the DAST. Furthermore, the DALI appears to be equally effective for both genders, across levels of cognitive functioning and diagnosis (Carey, 2002).

- National Institute of Mental Health (NIMH) Diagnostic Interview Schedule (Robins et al., 1981)

  The NIMH Diagnostic Interview Schedule and its successor, the Composite International Diagnostic Interview (CIDI) (Robins et al., 1988) are highly structured diagnostic instruments for assessing alcohol, other drug and mental disorders in the same interview. It can be used by trained interviewers who are not clinicians. It is designed specifically for use in large epidemiological studies (Regier et al., 1990, Kessler et al., 1994). The CIDI shows good inter-rater reliability (Wittchen et al., 1991), good test-retest reliability (Wacker et al., 1990) and validity in almost all diagnoses (Janca et al., 1992; Farmer et al., 1987).

- The Bromley dual diagnosis screening tool

  The Bromley dual diagnosis screening tool was designed by Manning et al. (2002) to present a dual diagnosis screening mechanism that is comprehensive, accurate and reliable, without

compromising brevity, and can be used by a range of staff irrespective of professional background. It consists of five components, namely (1) a modified version of the 'Mini-screen' (Sheehan et al., 1998) which screens for 10 common mental health disorders, with an additional three questions screening for three common personality disorders, (2) a five-item screen for psychosis, (3) a five-item screen for problematic alcohol misuse, (4) the MAP grid which screens for illicit drug use within the last 12 months, and (5) demographic information. It comprises low thresholds for substance use, so as not to result in false negatives. Although for Manning et al. (2002) this tool successfully identified dual diagnosis patients in a mental health and substance abuse service, further validation and reliability testing is necessary.

Measurement tools particularly used for substance misuse

- Substance Abuse Subtle Screening Inventory (SASSI) (Miller, 1985)

  The SASSI is a 78-item questionnaire that can be completed in approximately 15 minutes. The questionnaire consists of six clinical and two supplementary scales. Two of the clinical scales measure defensiveness and deception. This allows for the accurate classification of examinees who are attempting to conceal a substance-use disorder. No validity or reliability studies could be identified, but the test author reports that the SASSI has between a 90% and 95% agreement rate with counsellor diagnosis regardless of model or theoretical approach and reliability coefficients for the six clinical scales range from .86 to .92 (see Piazza, 1996 p. 218).

- Reason for Drug Use Screening Test (RDU) (Grant et al., 1988)

  The RDU is a 31-item screening instrument for the diagnosis of drug use disorder. Questions focus on reasons for drug use (e.g., relief of psychological discomfort or social enjoyment). Items are written in the current tense and are answered 'yes' or 'no', yielding a maximum score of 31. The RDU has high internal-consistency reliability and accurate detection of current drug-use disorder with non-psychiatric patients (Grant et al., 1988).

- Addiction Severity Index (ASI) (McLellan et al., 1980)

  One of the more commonly used standardised assessment instruments in the substance use disorder field is the ASI. This is a structured clinical interview developed to assess the treatment problems found in alcohol- and drug-abusing patients. The ASI may be administered by a technician in 20 to 30 minutes, producing 10-point problem severity ratings in each of six areas commonly affected by addiction. Studies have indicated that the ASI is reliable over three-day intervals and across different technicians (McLellan, 1985). In the same study, comparison of the ASI severity ratings and composite measures with a series of previously validated tests indicate evidence of concurrent and discrimination validity. The reliability and validity results were consistent across subgroups of patients categorised by age, race sex, primary drug problem, and treatment centre.

- Substance Misuse in Adolescents Questionnaire (SMAQ) (Swadi, 1997)

  The SMAQ is recommended as a screening instrument for substance misuse in adolescents. This is a short questionnaire (nine yes/no items) which helps child welfare workers identify adolescents who need a detailed multidisciplinary assessment. Psychometric evaluation in a community-based

British population of substance misusing adolescents (Willner, 2000) showed that the SMAQ showed good reliability, both within the overall sample of respondents and in the drug-using sample, and suggested that a total of five 'yes' answers or more is a strong indication for referral.

Measurement tools particularly used for mental state assessment

- Mini Mental State Examination (MMSE) (Folstein et al., 1975)

  The MMSE is a well established and brief cognitive screening instrument that has high inter-rater reliability and which is easy to use. The instrument has standardised instructions, takes an average of 10 minutes to administer and examines the attention and memory (orientation, recall of words, recognition of sentences and drawings, and initiation and maintenance of verbal and motor responses). Individual points are assigned to the subscales, with a total score of 30 points representing optimal performance. Cognitive impairment is defined according to the standard cut-off as a score equal to or below 24 points.

- Brief Psychiatric Rating Scale (BPRS) (Overall & Gorham, 1962)

  The BPRS is an assessment procedure which monitors the 'natural history' of the experience of psychosis, or the differential effects of treatment. The BPRS provides comprehensive rating of change across 16 'symptoms constructs', each of which is rated on a seven-point scale. The scale is completed in 20-25 minutes. A few minutes are spent establishing rapport, 10 minutes in non-directive interaction and 5-10 minutes in direct questioning. It is recognised that the successful use of the scale relies on the clinical skills of the interviewer. Owen et al. (1996) found the BPRS to have good inter-rater reliability (ICC=.97).

- Schedules for Clinical Assessment in Neuropsychiatry (SCAN) (World Health Organization, 1994)

  The SCAN is a set of instruments aimed at assessing, measuring and classifying the psychopathology and behaviour associated with the major psychiatric disorders of adult life. It consists of (i) a structured clinical interview schedule, (ii) a glossary of differential definitions, (iii) an Item Group Checklist and (iv) a Clinical History Schedule. It provides differential definitions of symptoms and signs to be assessed by the interviewer. The interview takes between 60 and 90 minutes and data can be used to score ICD-10 and DSM-IV diagnoses. Brugha et al. (1999) found that lay interviewers coped at least as well with psychotic as with neurotic symptoms as trained interviewers. In the study, concordance for any disorder was 0.74; for any specific psychotic disorder 0.63; for any specific neurotic disorder 0.63. Sensitivity ranged from 0.6 to 0.9 and specificity from 0.8 to 0.9; there was no evidence of rater bias.

- Global Assessment Scale (GAS) (Endicott et al., 1976)

  Another assessment tool which is often used as an outcome measure is GAS. It provides a global rating of mental health rated from 1 to 100. Anchor points are provided and ratings are made on the basis of overall clinical impression rather than on the basis of a specific interview. Higher scores are indicative of better mental health. The inter-rater reliability depends on the way it is administered: a review of semi-structured interview transcripts gave the lowest inter-rater reliability coefficients, and ratings made in a group the highest (between 0.61 and 0.91) (Endicott et al., 1976). The slightly modified Global Assessment of Function (GAF) Scale is included in DSM-IV.

- Structured Clinical Interview for the Diagnostic and Statistical Manual of Mental Disorders (SCID) (Spitzer et al., {4th Ed}, 1990)

  The SCID uses a standard series of questions to determine whether specific symptoms are present that allow diagnosis according to DSM-IV criteria. The interviewer is provided with a glossary of symptom definitions, a series of questions pertinent to symptoms, a set of topics requiring information, and cut-off points that indicate when to stop probing on a particular topic. The clinician is also given instructions for rating, in numerical terms, the presence and severity of symptoms. The SCID encourages the interviewer to ask follow-up questions based on clinical judgement. Its reliability in making diagnoses appears to be satisfactory (Spitzer et al., 1992; Williams et al., 1992). The Schedule for Affective Disorders and Schizophrenia-Lifetime Version

  (SADS-L) (Spitzer, 1978) is a forerunner of the SCID and was used in some of the earlier studies of dual diagnosis.

- Strengths and Difficulties Questionnaire (SDQ) (Goodman, 1997)

  For adolescents, SDQ may be used to screen for psychiatric disorder. The SDQ is a brief questionnaire (around 39 items) that can be administered by parents and teachers of 4- to 16-year-olds. A self-report version for 11- to 16-year-olds is also available (Goodman et al., 1998). It covers areas of emotional and behavioural difficulties and also enquires about problems in these areas and, if such exist, asks about resultant distress and social impairment. It has adequate discriminant and predictive validity (Goodman, 1997). Reliability is satisfactory, whether judged by internal consistency (mean Cronbach's alpha: 0.73), cross-informant correlation (mean: 0.34), or retest stability after 4-6 months (mean: 0.62) (Goodman, 2001).

Appendix 2
Survey instrument

Section 1

General Questions

Please tick the appropriate box for each question.

Q.1 Which Health Board Area do you work in?

- ☐ Midland
- ☐ Mid-Western
- ☐ North Eastern
- ☐ North Western
- ☐ South Eastern
- ☐ South Western
- ☐ Southern
- ☐ Western
- ERHA:
  - ☐ East Coast Area
  - ☐ Northern Area
  - ☐ South Western Area
- ☐ Across ERHA services

Q.2 What is your current work role?

- ☐ Clinical Director
- ☐ Counsellor
- ☐ Director of Nursing
- ☐ General Manager
- ☐ Nurse
- ☐ OT
- ☐ Psychologist
- ☐ Psychiatrist
- ☐ Regional Co-ordinatorc
- ☐ Service Manager
- ☐ Social Worker
- ☐ Other

(please specify) _____

Q.3 Which sector does your service fall into?

- ☐ Statutory
- ☐ Private
- ☐ Voluntary/Non Statutory

Q.4 Please define the type of service you work in and which your responses relate to

_____

_____

_____

_____

If you are working in a *mental health service* please fill out the right side of the table.

If you are working in an *addiction service* please fill out the left side of the table.

If you are working in *mental health and addiction services,* please fill out the *left and the right side* of the table as they may be different for each service. In this case, we apologise for the extra time.

Addiction Services

Q.5 Does your service treat people who have substance misuse problems?

- ☐ Yes
- ☐ No

Q.5a If yes, do you treat?

- ☐ Alcohol only
- ☐ Drugs only
- ☐ Alcohol **and** Drugs

Mental Health Services

Q.5 Does your service treat people who have substance misuse problems?

- ☐ Yes
- ☐ No

Q.5a If yes, do you treat?

- ☐ Alcohol only
- ☐ Drugs only
- ☐ Alcohol **and** Drugs

Addiction Services

Q.5b Tick the different drugs you are dealing with.

- Alcohol ☐
- Cannabis ☐
- Cocaine ☐
- Ecstasy ☐
- Heroin ☐
- LSD ☐
- Magic Mushrooms ☐
- Prescription Drugs ☐

(give examples) _____

_____

- Solvents ☐
- Other ☐

(please specify) _____

_____

Q.6 Estimate what percentage of your current clients have a dual diagnosis?

_____ %

Mental Health Services

Q.5b Tick the different drugs you are dealing with.

- Alcohol ☐
- Cannabis ☐
- Cocaine ☐
- Ecstasy ☐
- Heroin ☐
- LSD ☐
- Magic Mushrooms ☐
- Prescription Drugs ☐

(give examples) _____

_____

- Solvents ☐
- Other ☐

(please specify) _____

_____

Q.6 Estimate what percentage of your current clients have a dual diagnosis?

_____ %

Section 2

Policy/Service Provision

Please tick the appropriate box for each question

Addiction Services

Q.7 Are there some people with dual diagnosis who would not be treated in your service?

- Yes ☐
- No ☐

If no, please go to Q.8

Q.7a If yes, what criteria do you use for deciding not to treat them in your service?

_____

_____

_____

_____

Mental Health Services

Q.7 Are there some people with dual diagnosis who would not be treated in your service?

- Yes ☐
- No ☐

If no, please go to Q.8

Q.7a If yes, what criteria do you use for deciding not to treat them in your service?

_____

_____

_____

_____

Addiction Services

Q.7b If yes, are these criteria?

- ☐ Formal
- ☐ Informal
- ☐ Formal **and** Informal

Q.8 Do you have a service policy that specifically addresses dual diagnosis?

- ☐ Yes
- ☐ No

Q.8a If yes, describe this policy.

_____

_____

_____

_____

_____

_____

_____

(Please attach additional pages if necessary or a copy of the policy, if available)

Q.9 Do you have structures in place which specifically address dual diagnosis?

- ☐ Yes
- ☐ No

Q.9a If yes, describe these structures.

_____

_____

_____

_____

_____

_____

_____

(Please attach additional pages if necessary)

Q.9b Are these structures?

- ☐ Formal
- ☐ Informal
- ☐ Formal **and** Informal

Mental Health Services

Q.7b If yes, are these criteria?

- ☐ Formal
- ☐ Informal
- ☐ Formal **and** Informal

Q.8 Do you have a service policy that specifically addresses dual diagnosis?

- ☐ Yes
- ☐ No

Q.8a If yes, describe this policy.

_____

_____

_____

_____

_____

_____

_____

(Please attach additional pages if necessary or a copy of the policy, if available)

Q.9 Do you have structures in place which specifically address dual diagnosis?

- ☐ Yes
- ☐ No

Q.9a If yes, describe these structures.

_____

_____

_____

_____

_____

_____

_____

(Please attach additional pages if necessary)

Q.9b Are these structures?

- ☐ Formal
- ☐ Informal
- ☐ Formal **and** Informal

Addiction Services

Q.10 Do you offer a specific dual diagnosis service?

- Yes ☐
- No ☐
- I don't know ☐

Q.10a If yes, please briefly describe this service.

_____

_____

_____

_____

_____

_____

_____

_____

_____

Q.10b If yes, how do people find out about this specific dual diagnosis service?

- It is advertised ☐
- Consultant referral ☐
- Counsellor referral ☐
- Through their GP ☐
- Through inter-service liaison ☐
- Through other patients ☐
- Word of Mouth ☐
- Other ☐

(please specify) _____

_____

Q.11 Does your service formally record the numbers of people with dual diagnosis?

- Yes ☐
- No ☐
- I don't know ☐

Mental Health Services

Q.10 Do you offer a specific dual diagnosis service?

- Yes ☐
- No ☐
- I don't know ☐

Q.10a If yes, please briefly describe this service.

_____

_____

_____

_____

_____

_____

_____

_____

_____

Q.10b If yes, how do people find out about this specific dual diagnosis service?

- It is advertised ☐
- Consultant referral ☐
- Counsellor referral ☐
- Through their GP ☐
- Through inter-service liaison ☐
- Through other patients ☐
- Word of Mouth ☐
- Other ☐

(please specify) _____

_____

Q.11 Does your service formally record the numbers of people with dual diagnosis?

- Yes ☐
- No ☐
- I don't know ☐

Addiction Services

Q.11a If yes, please describe how.

_____

_____

_____

_____

_____

Q.11b Is this information included in service reports/reviews?

Yes ☐
No ☐
I don't know ☐

Mental Health Services

Q.11a If yes, please describe how.

_____

_____

_____

_____

_____

Q.11b Is this information included in service reports/reviews?

Yes ☐
No ☐
I don't know ☐

Section 3

Co-ordination of Care

Please tick the appropriate box for each question

Addiction Services

Q.12 If somebody with a dual diagnosis enters your service, how is care co-ordinated?

Referral to mental health service to treat mental health difficulties first and then accept back ☐
Referral to mental health service for concurrent treatment ☐
Through protocols that ensure combined treatment takes place ☐
Other ☐
(please specify) _____

_____

Q.13. What formal communication links do you have with mental health services?

None ☐
Liaison worker ☐
Joint assessment ☐
Joint case management ☐

Combined clinics ☐
Service level agreements ☐
Other ☐
(please specify) _____

_____

_____

Mental Health Services

Q.12 If somebody with a dual diagnosis enters your service, how is care co-ordinated?

Referral to mental health service to treat mental health difficulties first and then accept back ☐
Referral to mental health service for concurrent treatment ☐
Through protocols that ensure combined treatment takes place ☐
Other ☐
(please specify) _____

_____

Q.13. What formal communication links do you have with mental health services?

None ☐
Liaison worker ☐
Joint assessment ☐
Joint case management ☐

Combined clinics ☐
Service level agreements ☐
Other ☐
(please specify) _____

_____

_____

Addiction Services

Q.14 What informal communication links do you have with mental health services?

Always ☐

Always ☐

Always ☐

(please specify)

_____

_____

Q.15 How does your service interact with primary care in relation to duel diagnosis?

Receive referrals to service from GP when already diagnosed

Always ☐ **Never** ☐ **Sometimes** ☐

If referral not appropriate to your service do you send back to GP?

Always ☐ **Never** ☐ **Sometimes** ☐

If referral not appropriate to your service do you refer on to appropriate service?

Always ☐ **Never** ☐ **Sometimes** ☐

Other *(please specify)*

_____

_____

_____

Q.16 Who does your service have specific services for?

	Yes	**No**
Adolescents	☐	☐
Ex-prisoners	☐	☐
Homeless People	☐	☐
Women	☐	☐
Other	☐	☐

(please specify) _____

_____

Q.17 Do you follow a specific treatment model for dual diagnosis?

Yes ☐

No ☐

I don't know ☐

Mental Health Services

Q.14 What informal communication links do you have with mental health services?

Always ☐

Always ☐

Always ☐

(please specify)

_____

_____

Q.15 How does your service interact with primary care in relation to duel diagnosis?

Receive referrals to service from GP when already diagnosed

Always ☐ **Never** ☐ **Sometimes** ☐

If referral not appropriate to your service do you send back to GP?

Always ☐ **Never** ☐ **Sometimes** ☐

If referral not appropriate to your service do you refer on to appropriate service?

Always ☐ **Never** ☐ **Sometimes** ☐

Other *(please specify)*

_____

_____

_____

Q.16 Who does your service have specific services for?

	Yes	**No**
Adolescents	☐	☐
Ex-prisoners	☐	☐
Homeless People	☐	☐
Women	☐	☐
Other	☐	☐

(please specify) _____

_____

Q.17 Do you follow a specific treatment model for dual diagnosis?

Yes ☐

No ☐

I don't know ☐

Addiction Services

Q.17a If yes, please describe briefly how.

Q.18 Which treatment model would you think is the most appropriate?

Mental Health Services

Q.17a If yes, please describe briefly how.

Q.18 Which treatment model would you think is the most appropriate?

Section 4

Assessment

Please tick the appropriate box for each question

Addiction Services

Q.19 On entering your service are people assessed for dual diagnosis?

- Always ☐
- Never ☐
- Sometimes ☐
- I don't know ☐

Q.19a If always or sometimes, how do you assess for dual diagnosis?

- Clinician rating scale ☐
- Clinical records ☐
- Report from carers ☐
- Self report ☐
- Self-report scales ☐
- Urine/Blood samples ☐
- Informally ☐
- Other ☐
  (please specify) _____
  _____
  _____

Mental Health Services

Q.19 On entering your service are people assessed for dual diagnosis?

- Always ☐
- Never ☐
- Sometimes ☐
- I don't know ☐

Q.19a If always or sometimes, how do you assess for dual diagnosis?

- Clinician rating scale ☐
- Clinical records ☐
- Report from carers ☐
- Self report ☐
- Self-report scales ☐
- Urine/Blood samples ☐
- Informally ☐
- Other ☐
  (please specify) _____
  _____
  _____

Section 5

The Management of Dual Diagnosis

Please tick the box which best describes your response to the following statements:

	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree
Q. 20. People with a dual diagnosis should be treated by mental health services					
Q. 21. People with a dual diagnosis should be treated by addiction services					
Q. 22. Clinical staff in my service are adequately trained to treat dual diagnosis					
Q. 23. Clinical staff in my service are adequately trained to assess dual diagnosis					
Q. 24. A fully integrated, specialised service is the best way to effectively help people with a dual diagnosis					
Q. 25. Communication between addiction and mental health services is adequate to treat dual diagnosis clients effectively					
Q. 26. Our service effectively identifies clients with a dual diagnosis					
Q. 27. GPs should be more involved in the care of clients with a dual diagnosis					
Q. 28. I have come across prejudice in service provision against people with a dual diagnosis					
Q. 29. Not treating people with a dual diagnosis is justified within our service provision					
Q. 30. It is easy for a homeless dually diagnosed person to access appropriate services					
Q. 31. I have a good understanding of what dual diagnosis means					
Q. 32. Screening for dual diagnosis on entry to mental health or addiction services should be routine					
Q. 33. A client who is on a methadone treatment programme on admission to a psychiatric unit should be administered methadone there					

Q.34 In this questionnaire we asked you to adopt this definition of dual diagnosis: "Co-existence of both Mental Health and Substance Misuse Problems for an individual". What would your definition of dual diagnosis be?

Q.35 In your opinion what are the difficulties involved with service provision for people with dual diagnosis?

(Please attach additional pages if necessary)

Q.36 Please use this space below to add further comments you think we may find helpful.

Thank you again for taking the time to complete this questionnaire.

Appendix 3
Schedule of semi-structured interview

1. (Ice-breaker) Give an introduction on research and explain how the interview fits into the research process (i.e. backup for survey).
2. In your service, do you come across Dual Diagnosis?
3. Policies and structures regarding dual diagnosis (specialized staffing, resources, services arrangements for dual diagnosis)
   - talk me through them
   - are they in use
   - this is in your service, what about other services
   - do you have any hard copies or electronic versions.
3. In your standard assessment do you assess for DD (substance abuse/MH)? (Do you have a copy of assessment tools you are using?)
4. How do you get around treating people with DD?
   - are there any specific intervention you offer to people with DD?
   - is there a specific model you use for DD (give examples serial/parallel/integrated model)
   - how do you think it could be managed? What would be the best way forward?
   - which system do you have in place to make sure that people with DD don't fall through gaps?
   - are you aware of any services specific to dual diagnosis in the area
   - exclusion.
5. Describe your communication with addiction services/MH services
   - specific protocols involved
   - GP relation.
6. What difficulties do you see in the service provision for people with dual diagnosis in the Irish context? Any suggestions on how these difficulties could be overcome?
7. Services review and evaluation.
8. Is there anything you could add?

NDP
NATIONAL DEVELOPMENT PLAN

Your Plan - Your Future

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