Dual diagnosis in older adults: 
A hidden epidemic?

A thesis submitted in fulfillment of the requirements for the degree of Doctor of Philosophy

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July, 2017
Declaration

I certify that except where due acknowledgement has been made, the work is that of the author alone; the work has not been submitted previously, in whole or in part, to qualify for any other academic award; the content of the thesis/project is the result of work which has been carried out since the official commencement date of the approved research program; any editorial work, paid or unpaid, carried out by a third party is acknowledged; and, ethics procedures and guidelines have been followed.

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Abstract
Dual diagnosis in older adults, defined as co-occurring mental ill health and alcohol and other drug (AOD) use disorders, is a poorly researched phenomenon in the older adult cohort that leads to suboptimal health outcomes, higher rates of psychiatric relapse and poor treatment engagement. Despite the recognition of the issues associated with dual diagnosis in younger mental health consumers, assessment and treatment options remain poor for their older counterparts. Likewise, few treatment settings are equipped to cater to the complexity inherent in older adults having dual diagnosis.

This thesis examines dual diagnosis in the context of an inner Melbourne community older adult mental health service, providing crisis assessment, case management and liaison services to individuals aged 65 and over. The aims of this research were to identify the prevalence of dual diagnosis in the service, describe the experiences of consumers in the service with dual diagnosis and the experiences of the clinicians providing care for them. This thesis accomplishes these aims by using an exploratory mixed methods framework, the explanatory sequential design.

The first phase of the thesis uses a file audit methodology to determine the prevalence of concurrent AOD use in individuals assessed by the community mental health service for a two-year period, June 2012-2014 (n=594). Through this process, 93 (15.5%) individuals were identified by clinicians of the mental health service to have problematic AOD use, which was recorded on a simple yes/no checkbox on an electronic assessment document. Of those recorded as using AOD, 65.2% were male and predominantly used alcohol.

The second phase of the project sought to interview consumers with dual diagnosis (n=6) who were identified by clinicians of the service as being difficult to provide care for due to their dual diagnosis. This phase identified themes of longstanding, fluid addiction careers and the notion that older adults often “adapt” their substance use as previously identified in the literature. It also
identified the complexity inherent in older adults with combined mental ill health, AOD use disorders and medical conditions, highlighting the relative simplicity of the term dual diagnosis and its applicability in the older adult cohort.

The final phase of the project interviewed clinicians of the mental health service (n=10) to determine their experiences of providing care for older adults with dual diagnosis. The interview schedule for this phase was informed by both the initial phase of the research and the results of the consumer interview process. This phase identified the frustration evident in caring for older adults with dual diagnosis, and highlighted poor knowledge and inconsistent assessment techniques. The lack of perceived progress in this consumer cohort also led to a feeling of clinical helplessness, ending in therapeutic nihilism where it was felt that nothing could be done to change longstanding patterns of AOD use.

As an exploratory study, this thesis identifies a number of substantial issues in the care provided to older adults with dual diagnosis, and acts as a strong foundation study to inform future research into this cohort. Assessment of older adults with AOD use was found to be poor, with clinicians reporting poor service linkages and difficulty in identifying appropriate treatment options for older adults with dual diagnosis in their care. This thesis makes a number of recommendations for service improvement and future research, including implementing enhanced assessment, exploring wider populations of older adults with dual diagnosis and policy changes.

Older adults with AOD use disorders have been labeled as “invisible addicts” in the media due to poor assessment and recognition of AOD use in this cohort. This thesis adds support to this argument, identifying poor assessment and service provision to older adults with both mental ill health and AOD use disorders. Given demographic changes in Australia, which include the ageing
baby boomer cohort, the time to investigate and implement improved care to older adults is imperative to avoid a hidden epidemic.
Dissemination List

Sections of this thesis have been disseminated as follows:

**Peer Reviewed Journal Articles**


Other Articles


Peer Reviewed Conference Presentations


Searby, A., Maude, P., & McGrath, I. (2016). The Future is Now: Change in Older Adult Mental Health Services to Meet Future Challenges. *International Society of Psychiatric –Mental Health Nurses (ISPN) Psychopharmacology Institute and Annual Conference, Minneapolis, USA.*


**Invited and Keynote Presentations**


**Other Conference Presentations**

Chapter One

Introduction

“You’ll be disappointed here. We don’t get much substance use at all.”

Clinician to the author on his first day as a MAPS case manager.

Introduction

Dual diagnosis is a complex phenomenon increasingly encountered in contemporary mental health services (Victorian Government Department of Human Services, 2007). Dual diagnosis refers to co-occurring mental ill health and alcohol and other drug (AOD) use disorders, and has been noted to lead to poor treatment outcomes and increased risk of relapse in addition to higher treatment costs and a greater treatment burden on both community and inpatient mental health services (Kenneth Minkoff & Cline, 2006).

Dual diagnosis in older adults has been seldom studied and is often regarded, in a population sense, as an insignificant problem (Prigerson, Desai, & Rosenheck, 2001). However, an ageing population combined with a propensity for greater drug and alcohol use is set to challenge this notion (Bartels, Blow, Brockmann, & Van Citters, 2005). A number of substance using populations, such as those undergoing methadone maintenance therapy, are also ageing and are destined to further challenge the provision of mental health and substance use treatment services to a growing consumer base with increasingly complex needs (Rosen, Hunsaker, Albert, Cornelius, & Reynolds, 2011).

The Victorian Government’s 2007 document Dual diagnosis: Key directions and priorities for service development recognised the challenges of an increasing number of dual diagnosis
presentations to mental health services, recommending greater integration of both mental health and AOD treatment systems, improved treatment for clients and greater support for carers and families of individuals with dual diagnosis. The report also sought to make dual diagnosis “core business” within mental health services. Despite the recognition of improved treatment frameworks as beneficial to both individuals and service providers, co-occurring substance use is often considered ancillary to mental ill health in contemporary mental health services, continuing a fragmented approach to concurrent treatment and management of substance use (Munro & Edward, 2008).

The setting of this study is the Caulfield Hospital Mobile Aged Psychiatry Service, a publicly funded community mental health service providing assessment, crisis response and case management to adults aged 65 and over in the inner south area of metropolitan Melbourne. The service has an ongoing caseload of approximately 150 clients per month, and is operated under a multidisciplinary framework, with a psychiatrist, psychiatric registrar, psychologist, registered nurses, occupational therapists and social workers forming the MAPS team. This research aims to explore dual diagnosis service utilisation and client experiences in the context of this service.

Scope of the Problem

Older adult mental health services face a number of significant challenges over the coming decades related to dual diagnosis. Currently, research indicates the majority of older adults with dual diagnosis involved with mental health services use alcohol (Wang & Andrade, 2013). The ageing of the baby boomer cohort is likely to see not only an increase in AOD use, but also a wider variety of substances than traditionally used by older adults, as indicated by research showing that this may be due to the exposure of this generation to drug use in youth (Cangelosi, 2011).

Another factor is the trend towards the abuse of prescription medications, such as opiates and benzodiazepines (Simoni-Wastila & Yang, 2006). Added to the emergence of substances with
an as yet unknown effect on the human body over time, such as methamphetamine, and the potential for older adult mental health services to need to respond to a wide range of complications of substance abuse disorders is substantial, requiring a considered response to provide services to those in need within the fiscal confines of ever expanding healthcare expenditure.

Perhaps the most concerning element of dual diagnosis in older adults is the notion of an ageing population. Studies in the United States of America have indicated that the number of older adults with mental health or substance use disorders will virtually double by the year 2030 (Bartels & Naslund, 2013), with a similar trend likely to occur in Australian settings. Unfortunately, research has not kept pace with this expected influx of older adults requiring services, with research attention in this cohort being described as “unpopular” and discouraged due to the notion that older adults using substances either die prematurely due to the rigours of drug-using lifestyles or recovering spontaneously with little input from mental health services (Badrakalimuthu, Rumball, & Wagle, 2010).

Dual diagnosis presentations to mental health services carry a substantial financial cost, both in terms of direct service provision and loss of productivity to society. Individuals with dual diagnosis often require extensive inpatient treatment under restrictive interventions, and as mentioned in the introduction, often have poorer treatment outcomes in comparison to individuals with a mental illness alone (Brady et al., 1996). With a burgeoning population of adults ageing into aged psychiatry services, it is essential to explore dual diagnosis in older adults in a local context in order to facilitate effective responses to what may be the greatest challenge to aged psychiatry services in the future.
Significance of the Study

The creation of this thesis emerged from the author’s experiences in adult mental health inpatient wards, where dual diagnosis was indeed the status quo. A sizeable proportion of individuals discharged from the wards often returned to polysubstance use immediately after leaving the hospital, however the author’s experience was that substance use was largely ignored, or abstinence dictated as being of benefit to an individual’s mental health. After moving to a case management role in the Mobile Aged Psychiatry Service (MAPS) at Caulfield Hospital in Melbourne, Victoria, the author found a small population of older adults managed by MAPS with co-occurring substance use disorders. Often, these individuals received very little support concerning their substance use disorder and provoked a large degree of anxiety and debate amongst the team regarding their management.

To date, no Victorian study has explored service response to dual diagnosis in older adults. Much of the published literature concerning dual diagnosis in older adults emanates from the United States, leaving the Australian perspective of this challenging problem unexplored. This study, although attempting to address the dearth of local literature concerning dual diagnosis in older adults, is primarily envisaged as a service improvement project. Accordingly, the core aims of this study relate to improvement of MAPS in its response to dual diagnosis. To this end, the ultimate goal of the study is to guide the formation of service delivery where dual diagnosis is treated effectively and humanely, while being guided by consumer and clinician experience.

Accordingly, this study is significant in that it intends to harness this knowledge to position MAPS as a model service in providing care to older adults with dual diagnosis. To facilitate this goal, this study takes place in three methodological phases. The first phase involves a file audit process, examining admissions and assessments undertaken by the service in order to determine the
prevalence of substance use disorders within MAPS core client population. A number of
demographic variables are also examined in this process.

The second phase of the study employs a qualitative, semi-structured interview process to
describe the experiences of consumers of MAPS services. History data for each of the participants
is also explored, both to demonstrate the course of their dual diagnosis and explore previous
interactions with both mental health and drug and alcohol services. The participants’ experiences
with services are also explored in order to guide the recommendations of this thesis in accordance
with the principles of consumer involvement and service guided by consumer experience (Hare,
Law, & Brennan, 2013; Salzer, 1997).

The third and final phase of this study also employs a semi-structured interview
methodology to define the experiences of clinicians from the MAPS team in caring for older adults
with dual diagnosis, and in formulating improved care for older adults experiencing dual diagnosis.
This phase of the research seeks to engage clinicians to develop procedures and service response to
dual diagnosis, in addition to enabling clinicians to evaluate their own practices and introduce
change (Davison, Hauck, Martyr, & Rock, 2013). This design has been based on the atheoretical
model of “practice-based evidence,” as proposed by Leeman and Sandelowski (2012).

This study holds significance in that it proposes change driven by both consumer and
clinician. It is guided by the experiences of individuals as both consumers of MAPS services and
clinicians providing care to older adults with dual diagnosis, and provides recommendations to
develop dual diagnosis capacity within the Caulfield Hospital Aged Psychiatric Service to a level
whereby timely assessment and efficient, compassionate, cost effective care is achieved with every
individual utilising MAPS services.
**Focus and Research Questions**

The focus of this study is the phenomenon of dual diagnosis in older adults and how it is currently managed within an inner Melbourne community mental health service. The key research questions guiding this study are:

1. Does the Caulfield Hospital Mobile Aged Psychiatry Service care for a significant dual diagnosis population, and if so, how does this population appear demographically?
2. What are the experiences of older adults with dual diagnosis who receive care from the Caulfield Hospital Mobile Aged Psychiatry Service?
3. What are the experiences of Caulfield Hospital Mobile Aged Psychiatry Service clinicians caring for the older adult dual diagnosis cohort, and can these experiences inform future service transformation to improve care?

**Structure of the Thesis**

This thesis is arranged in nine chapters. The second chapter provides a background to the study. The third chapter provides a review of contemporary literature concerning dual diagnosis in older adults. Chapter Four describes the research process of the study, while Chapter Five explores the results of the quantitative phase of the study. Chapters six and seven describe the qualitative findings of the study concerning service users and clinicians. In Chapter Eight the findings of the study are discussed along with their implications. Chapter Nine provides a number of recommendations for service improvement and concludes the thesis.
Chapter Two

Background to the Study

Introduction

A dichotomy exists between the mental health and the alcohol and other drug treatment sectors, who often operate with quite divergent workforces, treatment priorities and legislative structures informing their overall service mandate (Flatau et al., 2013). This disjunction is most evident when examining the Mental Health Act, which enables authorised mental health services to dictate compulsory care of individuals who meet the criteria for a mental illness that requires immediate treatment due to imminent risk to the individual or community, deterioration in health, and no less restrictive means to provide this treatment (Parliament of Victoria, 2014).

Recent efforts to introduce compulsory treatment in drug and alcohol treatment cohorts have resulted in a number of concerns (Hall et al., 2012; Hall, Farrell, & Carter, 2014). Although legislation does exist within substance use treatment spheres to compel individuals to treatment, being the Severe Substance Dependence Act (2010), it is rarely used (Medew, 2012). Individuals are often mandated treatment by the judicial system, through the use of court orders, which are often criticised as to their lack of success (Klag, O'Callaghan, & Creed, 2005). In spite of these legislative avenues, the alcohol and other drug treatment system largely operates guided by an individual’s willingness to engage and participate in treatment.

Another key point of difference between the two treatment systems is the debate between harm minimisation and abstinence. Alcohol and other drug services often work under a harm reduction framework, offering advice to individuals who continue using substances in order to reduce the harm that may come from using these substances (Ball, 2007). Needle exchanges,
primary outreach health programs and supervised injecting clinics are examples of programs working under a harm reduction paradigm. This concept is in its infancy in Victorian mental health services, who may ascribe to harm reduction at a policy level, however often employ clinicians who insist on abstinence as the only goal of AOD treatment due to the increased rate of relapse and deleterious effects AOD use may have on an individual’s mental state (Mancini & Linhorst, 2010).

When considering that individuals with co-occurring substance use disorders and mental illness often need to access both treatment systems, the opposing paradigms of each become more relevant. While compulsorily treated in a mental health system, often as an inpatient in a psychiatric ward of a public hospital, individuals with dual diagnosis may encounter significant roadblocks in their attempts to access treatment from alcohol and other drug services. Often, these roadblocks may be related to their psychiatric disability or perceived readiness to change (Ouimette et al., 2007). It is these factors that lead researchers to discuss the notion of integrated treatment as integral to the successful management of substance use disorders in the context of dual diagnosis.

The intention of this chapter is to discuss these background issues as they relate to the phenomenon of dual diagnosis in older adults. Contemporary research has attempted to explore these concerns in the adult mental health setting, however they become more relevant to the contemporary older adult mental health services who have seen little in the way of challenges from complex dual diagnosis presentations (Bartels, Blow, Van Citters, & Brockmann, 2006). Older adult mental health services have traditionally seen a number of individuals who use alcohol as a primary substance whereas the ageing consumer of adult mental health services is likely to use a number of substances (polysubstance use), including amphetamines, prescription benzodiazepines and opiates (Shah & Fountain, 2008).
Inception of the Topic and Personal Reflection

The impetus for exploration of this topic came from the author’s experiences in acute adult inpatient mental health services, where dual diagnosis is quickly becoming the status quo; estimates of up to 70% of inpatient populations having co-occurring lifetime substance use disorders have been recorded in the literature (Ogloff, Lemphers, & Dwyer, 2004). The complexity of co-occurring substance use disorders in severe mental illness led me to complete a Graduate Diploma in Alcohol and Other Drug Studies, which also had the advantage of providing an insight into the alcohol and other drug treatment system. It also allowed me to discuss the contemporary situation of dual diagnosis with clinicians who worked solely in substance use treatment domains. The ideas that were presented in the existing literature regarding the longitudinal progression of alcohol and other drug use, as well as substance use disorders in older people, needed further exploration to understand AOD use patterns in an older population.

My move to the Caulfield Hospital Mobile Aged Psychiatry Service (MAPS) was driven by a desire to experience community mental health nursing; however this move also allowed me to explore dual diagnosis in older adults. As the opening line to this thesis indicates, dual diagnosis was not considered to be a concern in an older population. Through participating in clinical discussion and case management of consumers of the service, it quickly became apparent that there was a cohort of individuals with co-occurring mental illness and AOD use disorders. Examining the literature surrounding the topic of dual diagnosis in older adults led to the discovery of a small number of studies, which was in stark contrast to my experiences in the under 65 age group, where dual diagnosis is heavily researched and written about.

The combination of a lack of research, along with my experiences case managing a group of individuals with both long experiences of mental health services and drug and alcohol use led to the development of the research questions of this thesis. Given that the limited studies concerning dual
diagnosis in older adults are mainly based on quantitative analysis of prevalence, there appeared to be a need for a study exploring service provision, and the experiences of both users and providers of this service. The aim of this study would be to illustrate both the nature and complexity of dual diagnosis in older adults and the utility of empowering clients and clinicians to formulate service improvement recommendations that are realistic, cost effective and achievable.

**Defining Dual Diagnosis**

Dual diagnosis is currently defined as a DSM-V mental illness diagnosis in tandem with a substance use disorder (Smith & Morris, 2010). Early literature sometimes describes this phenomenon as co-existing severe mental illness and substance use or abuse, or dual disorder (Clark & Drake, 1994). In spite of this ambiguity, contemporary mental health services in Victoria, Australia regard dual diagnosis as defined: mental illness in conjunction with AOD use (Victorian Government Department of Human Services, 2007).

In terms of the older adult mental health population, dual diagnosis is a term that often encompasses more than two diagnoses. Older adults often present to mental health services with complex health needs in addition to mental health and substance use disorders, making the notion of dual diagnosis somewhat arbitrary (Moos, Mertens, & Brennan, 1995). As individuals with dual diagnosis age, they are likely to encounter a number of challenges to their physical health as a result of lifestyle, licit and illicit substance use and potentially the adverse effects of pharmacotherapy used for psychiatric treatment (Robson & Gray, 2007). Throughout this thesis, although dual diagnosis is used to define a co-existing mental illness and AOD use disorder, recognition should be given to the complexities that go beyond this diagnosis in the older adult population, as explored in the discussion section of this thesis.
Although the definition itself of dual diagnosis is simple in respect of terminology, it remains one of the greatest challenges to contemporary mental health services (Cleary, Walter, Hunt, Clancy, & Horsfall, 2008). The growing prevalence of comorbid substance use disorders and mental illness in the adult (under 65) mental health setting is concerning, not least due to higher rates of relapse, greater severity of psychotic symptoms and behavioural outcomes that often manifest as violence and aggression (Brady et al., 1996). Although, as demonstrated in Chapter Five of this thesis, the older adult mental health cohort does not experience as high a prevalence of dual diagnosis, ageing adult mental health consumers often show no signs of abating their AOD use (Beynon, 2008). This phenomenon, along with late-onset commencement of substance use in older adults, indicate a challenge to older adult mental health services and looks certain to require changes in service delivery in order to meet the needs of this complex consumer cohort.

**DSM-V definition.**

The Diagnostic and Statistical Manual of Mental Disorders Fifth Edition (DSM-V), published by the American Psychiatric Association (2013) is a manual of diagnostic criteria for mental health and substance use disorders. The DSM-V does not define set criteria for dual diagnosis, instead providing diagnostic markers of both mental illness and what are defined as “substance related and addictive disorders,” (p. 481). Use of the DSM-V informs most psychiatric practise worldwide, both providing the nomenclature for conditions and discussion of features, development, course of illness and prevalence. The DSM-V also adopts a common set of diagnostic criteria for substance use disorders, further classifying each disorder according to substance used (i.e. Alcohol use disorder). Within each disorder, the diagnostic criteria remain the same:

A problematic pattern of [substance] use leading to clinically significant impairment or distress, as manifested by at least two of the following, occurring within a 12-month period:

1. [The substance] is often taken in larger amounts or over a longer period than was intended.
2. There is a persistent desire or unsuccessful efforts to cut down or control [substance] use.
3. A great deal of time is spent in activities necessary to obtain [the substance], use [the substance], or recover from its effects.

4. Craving, or a strong desire or urge to use [the substance].

5. Recurrent [substance] use resulting in a failure to fulfill major role obligations at work, school or home.

6. Continued [substance] use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of [the substance].

7. Important social, occupational, or recreational activities are given up or reduced because of [substance] use.

8. Recurrent [substance] use in situations where it is physically hazardous.

9. [Substance] use is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by [the substance].

10. Tolerance, as defined by either of the following:
    a. A need for markedly increased amounts of [the substance] to achieve intoxication or desired effect.
    b. A markedly diminished effect with continued use of the same amount of [the substance].

11. Withdrawal, as manifested by either of the following:
    a. The characteristic withdrawal syndrome for [the substance].
    b. [The substance] (or a closely related substance … ) is taken to relieve or avoid withdrawal symptoms.

(p. 491).

“Substance use disorder” is an umbrella term in the DSM-V, used to label a spectrum of use from mild to moderate. The DSM-V also identifies a range of diagnostic criteria for the mental illnesses primarily experienced by consumers of aged psychiatric services, such as schizophrenia, bipolar disorder, depression and personality disorders, however in the interests of brevity the diagnostic criteria for each disorder is not presented in this background chapter. It should be noted that although the DSM-V is specifically developed by the discipline of psychiatry, these definitions are often adopted by alcohol and other drug treatment services (Peer et al., 2013).

Defining substance use - illicit versus licit.

The use of substances in the modern day is difficult to define along the lines of legality. Traditionally, substance use disorders would be qualified by the nature of the substance used, whether licit (alcohol or prescription medications), or illicit (cannabis, amphetamines, heroin, etc.).
However, this issue is becoming significantly more complex. Australia is experiencing a number of individuals who obtain prescription medications through unlawful means, such as theft, prescription diversion or “black market” sales of prescription medication lawfully obtained (Larance, Degenhardt, Lintzeris, Winstock, & Mattick, 2011; Ling, Mooney, & Hillhouse, 2011).

In addition, a rising trend of polysubstance use is occurring in adult (under age 65) mental health settings, whereby an individual using a number of licit and illicit substances in combination complicates both the assessment and treatment of AOD use disorders occurring in tandem with mental illness (Barnett et al., 2007). This diagnostic conundrum is pertinent in older adult mental health settings, where the abuse of psychotropic medications has been noted to be an increasing issue (Simoni-Wastila & Yang, 2006). Sensitive diagnosis of substance use disorders in older adults is made more difficult due to the wide spectrum of both illicit and licit substances that may be used, combined with the lack of clear guidelines determining safe or unsafe usage levels in older adults, as is evidenced by alcohol use guidelines (McLaughlin et al., 2011).

As discussed in the next section, these factors contribute to the notion of the “hidden” epidemic, and demonstrate the need for sensitive, accurate assessment of individuals under the care of older adult mental health services. For example, a common description of use provided to clinicians, as described further in Chapter Five, is “I only have one or two glasses a night.” Quantification of this self-report is necessary, for a glass may be close to 500ml and the consumed alcohol may be a spirit at 40% alcohol by volume (ABV). Similarly, an older adult consuming benzodiazepines provided to them by a friend to “help with nerves” may be less likely to identify this as a substance used, or problematic when considering their overall health.

The distinction between licit and illicit substances is becoming further blurred with the proliferation of “synthetic” substances. Often, these substances can be bought over the counter in
tobacconists, sex shops or over the Internet. These substances are often changed chemically in order to evade regulation, and may have variable effects (Khey, Stogner, & Miller, 2014). Older adults may see no harm or need to identify substances that they have purchased legally, further making accurate diagnosis and assessment challenging. As these challenges emerge in adult psychiatry, the need for clinicians working with older adults to remain aware of the changing landscape of substance use is necessary.

A hidden epidemic?

The title of this thesis is a reflection of a publication by the Royal College of Psychiatrists in England titled *Our Invisible Addicts* (2011). The key premise of this document is that older adults with AOD use disorder are effectively a growing population of individuals with high levels of unmet need and complex psychiatric and medical co-morbidities. In addition, this report identifies the notion that older adults often do not come to the attention of healthcare services until late in the course of their AOD use disorder, when thorough investigation of incidents such as falls or familial pressures often results in referral to mental health or alcohol and other drug services.

AOD use disorders may be longstanding or late onset as a result of psychosocial stressors. Social withdrawal in these circumstances, as explored further in the literature review, adds pressure to administer substance screening tools to older adults during every healthcare encounter (Dawe, Loxton, Hides, Kavanagh, & Mattick, 2003). To date, little policy attention has been paid to older adults, particularly in regard to local research; the Australian Institute of Health and Welfare aggregates all “older adults” to a 40+ age group in its statistical data relating to illicit substance use, making examination of the over age 65 cohort difficult (Australian Institute of Health and Welfare, 2011).
The over 70 age group in Australia remains the most likely group to consume alcohol daily (Australian Institute of Health and Welfare, 2011). The prevalence of the use of other substances in this age group is less defined, however as illustrated in the literature review of this thesis, the potential for a number of distinct sub-cohorts of older adults is relevant based on the primary substance used and treatment modality the individual is engaged with. The most fitting example of this is older adults who are maintained on opiate replacement therapy, primarily methadone. Methadone clients are an ageing population whose interactions with healthcare providers can be goal driven: visiting a general practitioner for a methadone script and a pharmacy for dispensing (Doukas, 2011). Accordingly, this may make meeting their mental and physical health needs difficult.

Research has found that stigma associated with drug use can also make users feel reluctant to seek help (Conner & Rosen, 2008). A fear of incarceration or hospitalisation leading to a separation from substance supply is another factor preventing older individuals from engaging with services; transformation of roles in substance using circles may also occur as friends and acquaintances either cease their use or die as a result of substance or medical complications, leaving dually diagnosed individuals isolated and unlikely to come to the attention of services via report or insistence of their peers, or incidentally through encounters with the law (Levy & Anderson, 2005).

In addition to the difficulties associated with assessing substance use in the older adult population, a high degree of mood disorders is also prevalent. For example, an Australian Institute of Health and Welfare report examining depression in residential aged care facilities found 45% of individuals admitted to permanent aged care for the first time had symptoms of depression (2013). Dementia is commonly referred to older adult mental health services for management and classed as a mental health issue in later life. Dementia, while making treatment and management of co-morbid substance use disorders challenging, raises questions around polypharmacy and dependence
on psychotropic medications such as benzodiazepines (Azermai, Bourgeois, Somers, & Petrovic, 2013; Clay, 2010).

Older adults present a complex array of factors that make assessment, diagnosis, treatment and management of concurrent mental illness and substance use disorders problematic. They are also more likely to seek treatment from primary health providers, indicating the importance of collaborative linkages in management of this population (Bartels et al., 2005). The notion of the hidden epidemic is especially relevant to high prevalence mental illness, such as the mood disorders experienced in the aged population - which is a growing proportion of the population as the baby boomer generation ages (Cangelosi, 2011). Added stressors of later life, such as loss of previous roles, death of partner, friends and family combined with medical comorbidity and cognitive impairment create an elevated risk profile for dual diagnosis in this population (Drugscope and the Recovery Partnership, 2014).

The harm reduction/abstinence dichotomy.

As mentioned in the introduction to this background chapter, a significant contradiction exists between mental health and alcohol and other drug services regarding a dominant paradigm: harm minimisation or abstinence? As inferred in both terms, harm minimisation involves accepting that individuals will continue to use AOD and both educating and implementing strategies to reduce that harm (Roe, 2005). Abstinence, on the other hand, dictates a total cessation of all AOD use. Within the AOD use treatment sphere, organisations adopt one of these dominant positions. For instance, many community and religious organisations operate under a paradigm of abstinence, where operation of a needle exchange or safe injecting facility requires an obvious deviation from this position to one of harm reduction.
Mental health services often fluctuate between their dominant paradigms, often attempting to incorporate harm reduction principles however meeting resistance from staff who believe cessation of drug or alcohol use is mandatory for an individual to truly recover from mental illness (Marlatt & Witkiewitz, 2010). For example, this author has heard psychiatrists inform individuals in an inpatient facility to cease their use, as it is the only way they would not relapse; I have also witnessed a nurse berate a client for possessing clean injecting equipment. Harm reduction would necessitate determining a stage of change for the individual, and if they were not committed to ceasing their drug or alcohol use, working to minimise the harm inherent in substance use and abuse (Australian Injecting & Illicit Drug Users League (AIVL), 2012). In this instance, exploring reduced use, strategies for safer use and encouraging an individual when using clean injecting equipment would be more useful stances than a straightforward, prohibitionist view that anything to do with drugs is bad, dirty or disgusting with abstinence being the only way to achieve recovery from mental ill health.

Prior to the commencement of this research, the author was required to case manage an individual residing in a supported accommodation facility who had a long history of heavy drinking leading to falls. This resident often left the facility before 8:00am to buy scotch whisky from a nearby bottle shop, consuming it to the point of intoxication by 10:30am. Assessment of this individual determined he was termed pre-contemplative about his substance use, meaning that he did not feel a need to change his use at that point in time. The staff suggested sequestering his finances in order to arrest his purchase of alcohol; a locked facility was explored to stop him leaving. Both these options proved unrealistic, and it became necessary for the staff to adopt a harm minimisation approach. Ultimately, the resident was in a supervised facility, close to medical attention if required. The facility was opposite a large park, and there was a likelihood of forcing the resident to consume alcohol in the park by restricting his consumption, which would leave him vulnerable and in danger if falls occurred there. The discussion around allowing him to continue to
drink on the premises was fraught with anxiety, and it took many months to reach a resolution whereby he would limit his consumption to an agreed hourly level, with staff maintaining possession of his alcohol. It wasn’t without a final word from the management of the facility however, who required his family to sign a waiver indicating that he would not take any legal action from injuries incurred whilst intoxicated.

This is not to dismiss abstinence as the ideal goal of any substance use disorder treatment, particularly in the context of mental illness. Research indicates that comorbid substance use leads to greater relapse, severity of symptoms and poorer treatment outcomes (Spencer, Castle, & Michie, 2001). However, it must be recognised that many individuals with dual diagnosis simply are not in a state of readiness to cease their substance use, and to tailor their treatment planning accordingly. Debate continues to occur around strategies to reduce the harm inherent in these behaviours, and while successful systems have been implemented (such as needle exchange programs), the ultimate aim of harm reduction programs is to support an individual into treatment when they are ready to engage with this process (Mancini & Wyrick-Waugh, 2013).

Harm reduction as a concept remains somewhat abstract to mental health services. However, with the focus on recovery, it will become necessary for clinicians to accept an individual’s AOD use and assist in formulating strategies with the individual to minimise the inherent risk in this activity (Rosemary Ford, 2010). Individuals with a dual diagnosis often have added complications, in that their use in tandem with the symptoms of mental illness can result in chaotic, unpredictable behaviour that can leave them vulnerable to exploitation, assault or eviction. The impetus for harm minimisation is a recognition that AOD use is an inevitable activity in certain individuals, with a range of associated harms and equally, a range of approaches to respond to these harms (Caulkins & Reuter, 1997). As a viable adjunct to abstinence, harm reduction needs to be explored and
implemented for those not contemplating abstinence both to ensure safety in AOD use and encourage an eventual acceptance of treatment.

**Policy Directions**

The overarching policy direction in the Victorian mental health system concerning dual diagnosis is the document *Dual diagnosis: Key directions and priorities for service development* (2007). This document recognised the inherent challenges in increasing dual diagnosis presentations to Victorian mental health services, calling for improved practices, greater research and ultimately better outcomes for individuals with co-occurring mental illness and substance use disorder. This document is also primarily the only policy related to dual diagnosis, hence the extensive critique in this thesis. It also recognised systemic barriers that impeded treatment integration across the spectrum, at both policy and service level, as well as a continuing provision of what were labelled “segregated” services: alcohol and other drug treatment services catering for substance use and mental health services caring for mental illness, with both sectors having little tolerance for individuals with dual diagnosis.

In each sector, it was also found that services recorded less prevalence of dual diagnosis than could be expected from population data available at the time, indicative of under-diagnosis and an inability to respond to dual diagnosis effectively. These concerns resulted in the formulation of five service development outcomes, being:

1. Dual diagnosis is systematically identified and responded to in a timely, evidence-based manner as core business in both mental health and alcohol and other drug services.
2. Staff in mental health and alcohol and other drug services are ‘dual diagnosis capable,’ that is, they have the knowledge and skills necessary to identify and provide integrated assessment, treatment and recovery.
3. Specialist mental health and alcohol and other drug services establish effective partnerships and agreed mechanisms that support integrated care and collaborative practice.
4. Outcomes and service quality for dual diagnosis clients are monitored and regularly reviewed.
5. Consumers and carers are involved in the planning and evaluation of service responses (p. 23).

In spite of these service development outcomes, some mental health services still struggle with dual diagnosis and the provision of effective, responsive care to individuals presenting with co-occurring mental illness and AOD use disorders (Kenneth Minkoff & Cline, 2006). The promise of linkages between alcohol and other drug and mental health services often no longer exist in any effective fashion, and the outcomes of clients with dual diagnosis are rarely measured beyond the implementation of rudimentary outcome measures (Browne, 2006). In this author’s experience, dual diagnosis capable staff in mental health services are few and far between, with the notion of the “advanced” practitioner mentioned in the framework very rare indeed. The impetus for undertaking further study is often non-existent, particularly to the Graduate Diploma level and beyond as would be expected of an individual to “… [be] able to assess and effectively treat dual diagnosis clients in an integrated manner within service and practice guidelines,” (p. 18).

The action plan of this report suggested a screening level of 100% of individuals presenting to the service for drug and alcohol use by June, 2008. At the completion of this document, the parent health service in question had completed little training in any assessment tool for its clinicians, leading to a haphazard approach to substance screening. MAPS, the service that is the focus of this thesis, was not using any screening tool, instead relying on clinicians to ask and record as a “yes or no” on an intake risk assessment. The problems of this are obvious, not least the potential for under recognition of co-occurring substance use, leading to individuals having no consideration of their substance use disorder in treatment and recovery planning and day-to-day case management needs. These issues were particularly evident during the primary phase of this research project, the file audit. Examples include an individual being assessed as consuming “5 glasses of wine a night,” yet having a “no” recorded on the substance abuse intake question, even when this level of alcohol consumption is clearly in excess of Australian Government recommended guidelines (National Health and Medical Research Council, 2009).
Another service development outcome of this document was the effective measurement of personal outcomes of clients with dual diagnosis, in addition to regular evaluation of service responsiveness. Outcome measures are a controversial measure of client “progress” through mental health treatment systems, often criticised as solely collecting quantitative data to evidence funding arrangements rather than being of any real measure of an individual’s improvement or decline in health (Mellsop & Wilson, 2006). As mental health services strive to implement a recovery oriented approach to the provision of care, the impetus of an individual’s subjective, qualitative account of their perception of mental health becomes increasingly important (Barker, 2001). To date, the service that is the focus of this study does not attempt to collect outcome measurements in this fashion, instead noting drug and alcohol use on the Health of The Nation Outcome Scale (HONOS), which reduces this to a metric consisting of 0-4 in terms of severity. The simplistic nature of this measure belies the very complexity of dual diagnosis and neglects gains that may be made in functioning in spite of alcohol and other drug use (Boden & Moos, 2009).

In addition to the *Key Directions* document, a recent investigation into inpatient deaths by the Victorian Government Chief Psychiatrist’s office (2012) recognised the need for comprehensive alcohol and other drug treatment to be available for individuals with mental ill health. A number of deaths identified in this study related to overdose of illicit substances, and it was noted by the Panel performing this investigation that “…In spite of increased awareness and documentation of the problem [of dual diagnosis], there was still a lack of consideration of the impact of AOD on the presentation or management of people with severe mental illness during an inpatient episode,” (p. 31). It was felt that the presence of alcohol or other drug use led to a higher potential for individuals to abscond from inpatient care to seek substances, leading to a recommendation that “… Dual diagnosis training for multidisciplinary staff in inpatient services include the recognition and management of alcohol and other drug withdrawal during an admission episode,” including appropriate referral to specialised treatment (p. 31).
The need for recognition and response to dual diagnosis has recently been identified as a mental health principle in the Victorian Mental Health Act (2014), declaring that “… persons receiving mental health services should have their medical and other health needs, including any alcohol and other drug problems, recognised and responded to,” (p. 20). This declaration provides an impetus for mental health services to truly accept dual diagnosis as “core business,” as stated in the Key Directions document. With dual diagnosis becoming enshrined in both recommendations by the Chief Psychiatrist and the Mental Health Act, the next few years propose to be interesting times for mental health services in Victoria in regard to the whether implementation of the changes needed to provide holistic care for individuals with dual diagnosis occurs.

Finally, the Key Directions document indicates a need for consumer and carer involvement in the planning of service delivery. This thesis aims to consider this notion in its second phase, by examining the experiences of consumers regarding previous treatment episodes. Unfortunately, ethical concerns with obtaining consent to interview carers in this process were beyond the scope of this study, as described further in Chapter Four. Ultimately, it is timely to question whether the Key Directions document has achieved its stated aims, particularly given the legislative requirement for dual diagnosis to be recognised in the care of individuals who are consumers of mental health services. Since 2007, this document has heralded a changing landscape in mental health services, where dual diagnosis was truly treated as “core business,” rather than an unexpected complication in the psychiatric treatment of individuals. This thesis intends to examine the effectiveness of this framework throughout its research phases.

The Differences Between the Mental Health and Alcohol and Other Drugs Sector

Substantial differences exist between the mental health and alcohol and other drug sectors. These differences are most pronounced in the overarching treatment modalities, as mentioned earlier in this background chapter. Mental health systems often operate under a custodial nature,
with a high proportion of individuals receiving treatment under the compulsory treatment provisions mandated in the Victorian Mental Health Act (2014). To contrast the alcohol and other drug treatment sector, participation by individuals is largely voluntary; an Act exists to provide mandated treatment, and court orders are often made as part of the judicial system, but engagement with substance treatment services is largely determined by an individual’s motivation to change their drug or alcohol use (Gregoire & Burke, 2004).

Both systems also differ in regards to their oversight. Community and religious groups as well as health services often run drug and alcohol services, however the public mental health system largely operates under the auspices of the State Government. It should be noted that both systems have private providers that operate services in a “for profit” arrangement, however the mainstay of low prevalence mental illness with complex substance use disorder falls to the domain of the public sector (Rischbieth & Goldney, 1999). This is likely due to the substantive costs involved in private treatment, often limiting it to those with the financial means or top-level private health insurance to participate in this system. This situation is true for both mental health and substance use sectors.

Substantial hindrances for individuals seeking treatment also occur due to this segregation of sectors. Many individuals with complex mental health problems either find it difficult to engage in traditional alcohol or drug treatment settings, or the problems implicit in their mental health make treatment in these settings untenable (P K Staiger et al., 2008). For example, dually diagnosed individuals may exhibit social anxieties related to positive symptoms of their mental illness, such as paranoia, making participation in group therapies arduous. The notion of self medication with alcohol or drugs, evident in much of the research concerning dual diagnosis, may also limit the intrinsic drive to make change necessary for participation in the majority of substance treatment settings (Spencer et al., 2001).
The following sections will discuss these differences, which account for contradicting treatment paradigms, service directions and clientele. There is also differentiation in the clinical workforce contained in each service. These variations in systems and culture were a stumbling block to the Victorian Government’s aim to enable cross sectorial collaboration and participation in the Dual diagnosis: Key directions and priorities for service development (Victorian Government Department of Human Services, 2007) document. These differences also make the structure and culture of organisations with differing focus remarkably dissimilar, making interdisciplinary collaboration difficult (Australian Healthcare Associates, 2011).

**Workforce.**

The alcohol and other drug treatment workforce differs substantially from the mental health workforce on a number of levels. Primarily, the level of education required to perform roles in each service is markedly different. Mental health workers are traditionally identified as professionals, requiring at minimum Bachelor’s degree tertiary education to enable initial registration to practice. The predominant workers within the mental health system are nurses, with allied health and medical professionals forming the remainder of the workforce employed in Victoria (Victorian Government Department of Health, 2011). In addition, a small proportion of the workforce are Diploma prepared nurses and allied health assistants supervised by professional staff.

In contrast, the alcohol and other drug sector main workforce largely holds qualifications provided by Registered Training Organisations or the Technical and Further Education (TAFE) system (Department of Health, 2011). These qualifications are predominantly of a Certificate IV or Diploma level, requiring one to two years of study to attain. Criticism of this standard entry requirement to the drug and alcohol treatment field notes that individuals may lack the research understanding provided in the university system, making evidence-based practice difficult to attain (Pidd, Roche, Duraisingam, & Carne, 2012). The advantages of this approach over that of the
mental health sector are largely financial, with average salaries per worker being lower due to this distinction. This makes service overhead costs lower at the expense of allowing practitioners a true, research based preparation (Rose, 2008).

Few Australian comprehensive undergraduate alcohol and other drug treatment degree options exist, with most tertiary offerings at the Graduate Certificate, Graduate Diploma or Masters level. Most admissions to these programs come from diverse undergraduate specialisations, such as nursing or psychology (Department of Health, 2011). While not necessarily making alcohol and other drug workers less competent at their ability to provide therapeutic interactions with their clients, the lack of a cohesive educational preparation hampers the ability to label this group of clinicians as a profession. This is evident in the academic journals of alcohol and other drug societies, where research is often conducted by researchers holding institutional positions, with studies by clinicians forming a small proportion of those published (Polcin, 2004).

Despite this variation, the alcohol and other drug treatment sector has a number of workers who have attained the “lived experience,” having recovered from addiction and now working to help others to achieve this. The efficacy of having clinicians with the lived experience is debated, however clients often report being able to engage and attain greater rapport with a worker who has similar experiences to themselves (White & Evans, 2014). The notion of employing individuals with the lived experience also assists with consumer involvement and empowerment within the service. Despite this, mental health services tend to minimise paid consumer representation, often reducing their requirement of employing individuals with lived experience to a single consumer consultant or peer worker position (McCann, Clark, Baird, & Lu, 2008).

It is apparent that both sectors would benefit from collaborative approaches to their workforce. Mental health presents as “nurse centric,” with nurses making up the bulk of the clinical
workforce. It is apparent that nursing has a substantially lower representation in alcohol and other drug treatment settings (World Health Organisation, 2007). While this finding in itself is not a concern, it does raise the potential dilemma of educational standards for this sector. Additionally, the registration requirements inherent in other professions are not required of clinicians working in the alcohol and other drug sector with Certificate IV or Diploma qualifications.

**Mandated versus voluntary care.**

Despite the launch of a new Victorian Mental Health Act in 2014, the 1986 Mental Health Act is largely credited for the policy of deinstitutionalisation and fragmentation of services seen in Victoria throughout the 1990s (Meadows & Singh, 2003). Now superseded by the 2014 Mental Health Act, the original 1986 Act laid the foundation for a legislative framework that enabled not only involuntary treatment in the hospital, but also involuntary treatment in the community. The legal document allowing this was called a Community Treatment Order. These orders defined criteria that the individual in question must adhere to in order to prevent readmission to an inpatient facility, the most common being adherence to the regular administration of a depot antipsychotic medication or a directive to reside at a specific address.

The 2014 Mental Health Act allows continued use of Community Treatment Orders, albeit under a different title. The pivotal notion of deinstitutionalisation with enhanced community care relies heavily on these orders, in order to effect adherence to treatment. Although community mental health clinics see a large percentage of individuals subject to Community Treatment Orders, the proportion of older adults case managed by older adult community mental health services under these orders is significantly lower (Brophy, Reece, & McDermott, 2006).

This methodology of compulsive treatment does not exist in the alcohol and other drug treatment sector. As mentioned earlier in this thesis, the Severe Substance Dependence Treatment
Act (Parliament of Victoria, 2010) provides the means for individuals with substance use disorders to be treated involuntarily, however it is rarely used. It also provides a short timeframe of two weeks to enable detoxification and medical treatment. After this time, the onus is on the individual to engage with community based alcohol and other drug treatment services to achieve long-term recovery; this may clearly be difficult if an individual has consumed alcohol and other drugs to a point of requiring compulsory treatment for severe illness related to this consumption (Urbanoski, 2010).

The treatment milieu in alcohol and other drug treatment relies on voluntary engagement and participation in treatment programs, which in turn requires a degree of willingness to change. Prochaska and DiClemente describe this stage as “action” in their stages of change model (1992). To reach this stage, an individual has typically had an extended period of “pre-contemplation,” where use continues with little regard for change, moving to “contemplation.” During contemplation, individuals often question their ongoing drug use, considering taking action to reduce or cease their substance use. Often, this process has taken place over a period of time before an individual decides to engage in action to change their alcohol or drug use (Prochaska, DiClemente, & Norcross, 1992).

In contrast, mental health services often apply their legislative means to compel treatment when individuals are at an acute phase of their mental illness. This phase is often hallmarked by psychosis, mania or depression, where concerns about the individual and their behaviour prompt clinicians to enforce involuntary treatment orders to ensure the safety of the individual and others. These orders also allow for rapid treatment and stabilisation, often without the consent of the individual in question (King & Robinson, 2011). Under these circumstances, treatment engagement is often difficult both due to the nature of psychosis and the power imbalance inherent in involuntary treatment in a secure inpatient mental health facility (Floyd, 2013).
It is this jarring contrast between the sectors that is most problematic when applied to individuals with dual diagnosis. Mental illness may often preclude an individual from ever reaching the “action” phase of the stages of change model, making alcohol and other drug treatment services relatively inappropriate or unwilling to utilise their scarce resources on a participant who does not appear to “want” to make change (Martino, Carroll, Kostas, Perkins, & Rounsaville, 2002). In turn, mental health services focus on acute treatment, where the motivation for changing alcohol and other drug use may not necessarily be at the forefront of an individual’s mind. Engaging individuals in substance use treatment during a time of acute mental illness may be difficult, and is a barrier to providing this service to individuals (Holt et al., 2007).

**Older Wiser Lifestyles: A Reflection**

While writing this thesis, I was fortunate to be able to participate in a reciprocal rotation to an AOD treatment service as described earlier in this chapter. This rotation allowed me to work with Peninsula Health’s Older Wiser Lifestyles (OWL) service, a community based AOD treatment service for people aged 60 and over based in the Frankston and Mornington Peninsula area of Melbourne. This service was developed in response to a recognised growing need in this area, which is home to a large number of older adults, a growing population due in part to the popularity of this area as a retirement destination.

During my time working in this program, I was exposed to a number of older adults who had either been referred or were self-referred for alcohol or substance use disorders. Although the OWL service was not pitched as a dual diagnosis service, it quickly became evident through assessing individuals referred to the service that many carried some degree of mental ill health. Attempts to link these individuals with an older adult mental health service were often met with resistance, and it was common to be told that these individuals did not fit mental health service
criteria as AOD use was their primary concern and that they were currently linked with the most appropriate service.

At one point I was asked to accompany an individual to a psychiatric review at the older adult mental health service at his request, to both provide support and advocacy. During this review, I bore witness to a psychiatric registrar advising the individual that his mental health problems would abate if he abstained from consuming alcohol. This experience clearly demonstrated the wide gulf between policy regarding dual diagnosis and the understanding held by clinicians. In my opinion, the individual held a high level of clinical risk and required specialist psychiatric assessment. Unfortunately, these concerns were dismissed.

The time I spent working in the OWL service gave me an appreciation for the difficulties in engaging mental health services to provide care for individuals. During my time there, I was frequently told by community health clinicians of the struggles they had experienced in attempting to obtain mental health assessment for consumers in their care, or even getting referrals accepted, a sentiment that has often been echoed at my time working in other mental health services. Prior to this experience, I felt that mental health services were responsive to referrals and providing care, however I had effectively lived the experience of Croton’s (2004) barriers to service improvement through the practice of gatekeeping and restricting access.

I felt that linkages to the older adult mental health service would be beneficial for both services and recommended that an AOD clinician attend clinical reviews with a view to discuss dual diagnosis in the mental health setting. Again, this suggestion was met with resistance and an overarching attitude that AOD was not the concern of the mental health service; an AOD treatment service existed for a reason, and that should be to address every issue apparent in an older adult with dual diagnosis. As demonstrated later in this thesis and by research, this is a flawed ideology
given the presence of a high number of complex issues and medical conditions inherent in this cohort.

An Overview of the Aged Person's Mental Health System in Victoria

Victoria currently contains 17 aged mental health services, being nine metropolitan and eight regional sites. These services typically contain an inpatient unit and community mental health team. This structure is in marked contrast to the 1990s, where mental health services for older adults were predominantly based in large standalone psychiatric hospitals. The transition to the current arrangement began in the mid 1990s, where a political paradigm of deinstitutionalisation, influenced by the practice of least restrictive care as outlined in Victoria’s former 1986 Mental Health Act, led to a radical transformation of mental health service provision (Meadows & Singh, 2003).

These changes, guided by the Australian National Mental Health Strategy (2003), primarily involved decommissioning institutionalised care, with a subsequent development of integrated community and inpatient services in a number of geographically defined catchment areas (Meadows & Singh, 2003). In describing the transition to a new model of care, Loi and Hassett (2011) report the formulation of mobile community teams as following the early work of Tom Arie, a British psychiatrist who advocated for at home assessment of older adults and an ability to provide community outreach services to those least mobile. Despite this being a noble aim, the likely motivation of a shift to this model was financial: for example, a comparison of intensive community treatment to inpatient care by George and Giri (2011) notes that, for the 2007/2008 period, an average inpatient admission cost $15,771. In contrast, intensive community treatment, involving up to three visits daily in the community, averaged $5563.
These figures illustrate a strong economic impetus for deinstitutionalisation. Meadows and Singh note that prior to the decommissioning of the Larundel Psychiatric Hospital, Victoria’s largest, the facility consumed approximately 45% of the State health budget (2003). Today’s model sees Alfred Health, the parent health service of the Caulfield Hospital MAPS team have 15 inpatient aged psychiatry beds, a far cry from the days prior to mental health reform in Victoria where entire “back wards” at Willsmere and Plenty hospitals were dedicated to the psychogeriatric patient cohort (Loi & Hassett, 2011).

Despite the financial benefits of the movement to a predominately community based mental healthcare model, randomised control trials have demonstrated high degrees of treatment success in comparison to interactions with a general practitioner alone (Draper, 2000). In spite of this finding, Draper notes that models of community psychiatric nursing “vary considerably and are often based on historical resource allocation without evidence of what is most appropriate or effective,” which is an interesting conclusion given the relentless push to move to this model of care in the wake of deinstitutionalisation (2000, p. 697).

Clinicians employed to the MAPS service at the time indicated that the promise of suitable allocation of funds from the sale of Willsmere, a psychiatric hospital based in Kew and sold by the State government of the time for housing development, did not eventuate. Caseloads were reported to be unrealistically large, with the bulk of nursing work being the management of older adults displaced from long-term institutionalised care into a number of local rooming houses in the area (G. Sumsion & D. Lee (registered nurses), personal communication, January 15, 2014).

In spite of these shortcomings, community treatment of mental illness in older adults has a number of significant benefits. This modality allows close post-discharge follow up, community integration and linkage to a number of other services (George & Giri, 2011). It also allows a cost
effective method for providing case management and crisis assessment for a large number of individuals at any one time. The multidisciplinary arrangement of community mental health teams allows a wide variety of specialist clinicians to be involved in the care of an individual, and care planning is often based around this multidisciplinary approach. Being a mobile service, MAPS is able to provide an outreach service to older adults in nursing homes, hostels and rooming houses who may not otherwise be able to access care.

Summary

Dual diagnosis is a complex phenomenon influenced by a number of factors at both a clinical and policy level. It is also an issue that straddles two treatment camps with distinctly different workforce cultures, theoretical paradigms and therapeutic goals. Dual diagnosis remains a challenge to mental health and alcohol and other drug treatment services due to the number of issues it raises in treatment: greater psychiatric symptomatology, higher relapse profile in both mental health and substance use, poor treatment engagement and overall less satisfactory treatment outcomes (Todd, Sellman, & Robertson, 2002). The following chapter provides a cohesive review of the literature related to dual diagnosis in older adults.
Chapter Three  

Literature Review  

Introduction  

This chapter will examine current literature concerning dual diagnosis in older adults, and identify deficits in the associated literature. This review uncovered a small number of studies exploring the criteria of this research project, being dual diagnosis in older adults, however these studies mostly comprised quantitative population studies, demonstrating a clear lack of qualitative research exploring individual experiences of older adults with dual diagnosis. Two randomised control trials were located during literature searches, however these related to treatment interventions for dual diagnosis in adult (under age 65) populations (Hunt, Siegfried, Morley, Sitharthan, & Cleary, 2013; James et al., 2004).

This chapter will provide a critical review of published research concerning dual diagnosis in older adults. The selected literature comprises research studies published in either nursing, allied health or medical disciplines and also includes grey literature such as government and policy documents.

Search Strategy  

The primary search strategy for this review involved electronic searches of the Scopus, ProQuest and CINAHL journal databases. Additionally, a number of articles were identified by manually searching reference lists of seminal articles, and selected from the author’s own reference library. Searches were initially conducted during late 2013/early 2014 and literature updated during the life of the project using the same search terms. Conducting an early literature review at the commencement of the study informed the researcher of contemporary work and identified a clear
gap in knowledge. The initial search strategy was repeated at the closure of the study prior to writing the discussion chapter and concluding statements. Research articles were initially sought rather than opinion or literature review pieces. However, it became apparent during this process that a number of policy, government and not-for-profit organisational documents contributed to the discourse of dual diagnosis, and therefore these articles have been included where appropriate.

Key words used in the search included “dual diagnosis,” alone and in combination with the terms “aged,” “elderly,” and “older person.” Additionally, the phrase “concurrent substance abuse and mental illness” was included with dual diagnosis using the OR function, as early scanning of the literature indicated that this is an alternative description of dual diagnosis. This phrase is also frequently used in research studies and government policy documents. Other key words used in the search included “substance use/abuse,” “mental illness,” “drug dependence,” “drug abuse,” “prescription drugs,” “alcohol,” “illicit substances,” “baby boomers,” and “older adults,” were used in a variety of combinations (see Figure 1 for an illustration of search term combination results).

Despite a large initial number of search results, as indicated in Figure 1, after removing duplicates and articles not relevant to the topic (such as those using dual diagnosis to describe a combination of medical conditions), only five articles addressed both mental illness and substance use disorders (dual diagnosis) in older adults. Two of these articles drew their sample populations from Veteran’s Affairs data, with the remaining three exploring inpatient and community dwelling individuals who had been discharged from psychiatric hospitals. This small number of eligible studies, including the notable absence of any Australian based research, which further emphasised the need for a Victorian based study exploring the issue at hand.

Although literature concerning both mental illness and substance use disorders in older adults was scant, a number of studies were identified to inform the background of the study. Studies
were located that researched substance use disorders as a sole factor in older adults, as well as historical studies that aid in the understanding of the development of dual diagnosis as policy and treatment concern. Additionally, appraisal of references revealed a number of frequently cited pieces of literature that were also critically appraised in the context of this study.

Figure 1. The literature search process.

Limitations Arising from the Literature

Qualitative and quantitative articles that explored the phenomenon of dual diagnosis in older adults were identified from the search strategy and selected for inclusion. The term “older adults,” varied widely in the literature, with most considering the age of 50 and older as “aged,” and some literature lowering the minimum age for older adults to 45 and over. As the health service that is the focus of this study considers individuals 65 and over as aged, it became necessary to apply a degree
of caution to those studies considering “older,” particularly given societal conventions and mental health services structures would describe these individuals 45 and over as middle-aged.

As previously discussed, it was necessary to expand the search strategy due to the relative dearth of literature exploring strictly older persons with dual diagnosis. A number of studies completed with adult populations have been included in order to provide a more comprehensive investigation of the problem of dual diagnosis. Although these populations are quite different in respect of substances used, morphology of mental illness and social dynamics (for example work versus retirement), some screening and treatment approaches have been investigated in adult cohorts only. These treatment approaches sometimes show promising results, making them worthy of critical examination in this literature review with the caveat that further research in older adults is required.

The following sections explore themes that have emerged from a comprehensive review of the literature. These articles were critically appraised for their peer-reviewed status, research methodology, and their pertinence to the research questions posed in the early stages of this thesis. Government and organisational papers and studies are also included to define the reference of the study and demonstrate policy positions that have been adopted in regard to concurrent substance abuse and mental illness in ageing populations. These studies were located using the Google and Google Scholar search engines and downloaded directly from the website of the organisation itself.

**Conceptualising Dual Diagnosis**

This section aims to explore contemporary research identified in the literature search concerning dual diagnosis in older adults. In addition, it seeks to provide background to the emergence of the growing concern of dual diagnosis in the field of psychiatry. It also aims to explore two theoretical models prevalent within the substance treatment research arena, being the
concepts of “maturing out,” and “addiction careers”. As discussed, these models arguably contribute to the dearth of research concerning older adults with both dual diagnosis and AOD use disorders.

Current research.

Research regarding dual diagnosis in older adults is scant, with limited data regarding models of treatment available (Bartels et al., 2006). Much of the research on the prevalence of dual diagnosis in older adults has focused on Veteran’s Affairs population data, which may not be applicable to the general population. The majority of published studies are conducted at a population level, leaving a knowledge gap regarding qualitative experiences of older adults with dual diagnosis. Additionally, no studies concerning Australian older adults with co-occurring substance use disorders and mental illness were located during the literature search.

Blixen, McDougall and Suen (1997) conducted a retrospective file audit of 101 community dwelling adults aged 65 and over, discharged from three psychiatric hospitals in the Southern United States of America. The authors found 37.6% of the sample had both a mental illness and substance abuse disorder. In real terms, this figure was 38 individuals, clearly indicating that dual diagnosis in older adults is a substantial problem for the service in question. Of these individuals, 71% abused alcohol only, and 29% abused both alcohol and other substances. Potentially indicative of pending challenges with the ageing baby boomer cohort given their advancing age, almost all of those with alcohol abuse had been consuming alcohol for a period longer than 15 years.

Aside from the finding that individuals with dual diagnosis comprised a sizeable proportion of the sample, the authors found that the prevalence of depression as a primary diagnosis was by far highest (71%), with psychosis second (10%). Additionally, it was found that considerably more individuals with a dual diagnosis were admitted after a failed suicide attempt compared to
individuals with a mental illness diagnosis only. Females also comprised a higher number of those dually diagnosed (63.2%), and those with a mixed substance use disorder tended to abuse prescription drugs such as sedatives and anxiolytics. This is in contrast to an adult psychiatric population who choose to consume illicit substances predominantly, as discussed later in this chapter.

The researchers recognise the limitations of using file audit as a data source, particularly as the under-reporting of substance abuse in this population may not be reflected by this methodology (Badrakalimuthu et al., 2010). Thus, there may actually be a higher number of dually diagnosed individuals than this research indicates. Kerfoot, Petrakis and Rosenheck (2011) also recognised in their research that under diagnosis may be a problem due to a reluctance to attach a diagnosis to older individuals that is viewed as “pejorative.” To further compound this problem, visible consequences of substance abuse such as falls or confusion are often attributed to medical comorbidities, and there is an apparent false assumption among clinicians that substance use disorders rarely occur late in life.

Kerfoot et al.’s research also used a file audit of a national registry of Veteran’s Affairs clients in the United States of America who were being treated in mental health programs or accessing inpatient psychiatric services (N=911,725). Despite providing a large sample, the limitations extend beyond the use of file audit to the use of a veteran’s population, which the authors describe as predominately male (92.1%). Blixen, McDougall and Suen (1997) previously found that a large number of dually diagnosed individuals were female, suggesting veteran’s populations do not accurately reflect the general community.

The authors found a declining dual diagnosis cohort as age progressed. Despite the percentages appearing to be relatively insignificant, these individuals represented 13,837 of 94,878
in the 65-74 age group (14.6%), 3,923 of 66,449 in the 75-84 age group (5.9%), and 561 of 20,608 in the 85-94 age group (2.7%). These statistics represent considerable numbers of individuals who are described as heavy users of psychiatric services. Curiously, these statistics fall well short of the prevalence of dual diagnosis ascertained in Blixen, McDougall and Suen’s study. Perhaps this is also a function of the veteran’s population or potentially another concern with using file audit as a means to discern population data; The authors did also speculate underreporting may be a factor in their discussion of the results.

Prigerson, Desai and Rosenheck (2001) presented a “cross-sectional survey of a representative national sample of … mental health program patients,” treated in Veteran’s Affairs mental health clinics over a two-week period (p. 1). The sample comprised 91,752 United States nationals. The data collected included clinician reports on outpatient clinical encounters, review of the patient treatment file and review of inpatient and outpatient care files for all hospital services provided by Veteran’s Affairs. The authors do not provide a rationale for limiting their data collection to a two-week period, and indicate that individuals were only considered dually diagnosed if the clinician reported concurrent diagnoses. This methodology of relying on clinicians to diagnose individuals as having concurrent substance use disorders and mental illness may also be flawed, particularly when considering the potential underreporting described in the Kerfoot et al. (2011) study.

Prigerson et al.’s found that substance use tended to decline as age advanced; Lower rates of dually diagnosed individuals were found than in Kerfoot et al.’s work, with only 6.9% of individuals over 65 found to have co-occurring substance use and mental illness. Despite this finding, dually diagnosed individuals represented an increasing proportion of public mental health patients, and are shown to be high frequency, long-term users of these services. Additionally, in the USA, those aged 65 and over are the fastest growing age group, with high rates of chronic illness
and higher costs of care. Again, although 6.9% seems to be a statistically small number in this sample, it represents a large number of individuals with complex needs, high fiscal costs of care and heavy consumption of finite mental health services.

Mears and Spice (1993) specifically chose to explore alcohol use in a cohort of patients admitted to an elderly acute mental illness unit over a four month period. Seventy-eight patients were asked to complete a questionnaire within three days of admission. This questionnaire collected basic demographic and diagnostic data, units of alcohol consumption, evidence of recent stressors and consequences of heavy drinking, such as falls and blackouts. Medical case notes were also audited to determine if alcohol history had been explored during the admission process. They found 13% of the population were defined as problem drinkers, with another 6% found to be previously undiagnosed problem drinkers. In several of the patients there were discrepancies between the patient’s self-report of alcohol consumption and information from other sources, such as clinical notes. This finding further supports the notion of under diagnosis in aged populations. Additionally, the problem drinkers identified in the study were significantly more likely to have changed accommodation or had been bereaved in the past year, indicating that life stressors may lead to a late onset of problematic substance abuse in this cohort.

Holroyd and Duryee (1997) used formal diagnostic interviews and the DSM-III-R criteria for substance abuse to determine prevalence rates of dual diagnosis in 140 patients, aged 60 years and over, who presented to the University of Virginia Geriatric Psychiatry Outpatient Clinic from August 1992 to February 1996. The authors postulated that using this method of detection was a truer determinant of substance abuse than retrospective file audit. Of this cohort, the overall prevalence of AOD abuse was 20%, with benzodiazepines 11.4%, alcohol 8.6% and narcotics 1.4%. The level of benzodiazepine dependence demonstrates the complexities of the older adult mental health cohort in respect to prescription drug abuse, and further reinforces the findings of Levy and
Andersons’s (2005) qualitative study, where it was found that as substance abusers aged, they tended to switch to alcohol and tranquillisers as they were both easier to obtain and better tolerated by ageing bodies.

It is clear that a number of population studies have demonstrated rates of concurrent mental illness and substance abuse that although statistically speaking are small, in absolute numbers represent a definite challenge to aged psychiatric services. Given the complex nature of older mentally ill individuals who abuse alcohol and other drugs, 10 or 20 clients in a service managing 150 individuals at a time represents a real challenge to resources, and may prove costly and time-consuming to manage and treat effectively (Ringen et al., 2008; Speer, 1990). Given the potential for under diagnosis of substance abuse in older adults, it is prudent to explore the prevalence of substance abuse in older adults regardless of mental illness. Studies that attempt to define the prevalence of AOD use in this population will be discussed further in this chapter.

**The evolution of dual diagnosis as treatment concern.**

Clinician interest in dual diagnosis as a concept can be traced to the late 1980s, when several seminal studies from the United States began to explore dual diagnosis as a holistic entity. Prior to this, mental illness and alcohol or substance use were considered separate concerns. Lehman, Myers and Corty (1989), in their review and discussion of literature pertaining to the assessment and classification of individuals with concurrent mental health and substance abuse syndromes, identified that “The literature seems to support the hypothesis that mental illness and substance abuse occur together more frequently than chance would predict,” (p. 1119). The authors then identified the difficulties in categorising and defining dual diagnosis, and the problems with assessment failing to consider dual diagnosis as a treatment concern in failing to consider the possibility that individuals are using substances, or misattributing the signs and symptoms of AOD use to psychiatric sequelae. Given the clinician attention the dual diagnosis consumer cohort was
experiencing at the time, a call for greater recognition and assessment of dual diagnosis was indeed a pioneering moment in the evolution of dual diagnosis as treatment concern.

Kofoed, Friedman and Peck (1993) specifically investigated post traumatic stress disorder and alcoholism in their review of the literature, recognising few published dual diagnosis studies at the time. During this period, the authors identified a growing amount of literature exploring dual diagnosis, suggesting that a new approach to treatment was required. This approach required that clear diagnosis be made, concurrent treatment of both mental ill health and AOD use and control of symptoms of mental illness. The authors had discovered literature that raised questions regarding the validity of making psychiatric diagnosis in the setting of concurrent drug or alcohol abuse, requiring distinct periods of sobriety before diagnosis could be made. Inevitably, this methodology served to delay treatment of psychiatric symptomatology. The call of the authors for concurrent assessment and treatment was pioneering at the time given the debate of diagnostics, aetiology and assessment of dual diagnosis.

Minkoff (1991) argued that an opposing focus existed in mental health and AOD treatment models in his attempt to outline a comprehensive integrated care system for those with dual diagnosis. Minkoff recognised the difficulties in integrated treatment, including strain on clinicians providing services to maintain a level of continuity through multiple treatment episodes in diverse treatment environments. This point is underscored by the marked differences in aims between addiction and mental health services, operating under different legislative frameworks and governing bodies. To confound this issue, both service genres operate under disparate theoretical frameworks, with mental health services often assertively providing care for individuals, and addiction services “… [Emphasising] individual responsibility and motivation rather than disability,” (p. 16). Additionally, there is a distinct dichotomy between abstinence as mandated aim or ideal goal. Often, psychiatric services demand sobriety, viewing this as a prerequisite to
medication adherence and prevention of relapse of mental illness, whereas addiction services take a
more dynamic view of relapse, often viewing it as an expected setback for individuals overcoming
substance use disorders (Ashton, 2008; Petra K Staiger et al., 2011).

The Australian catalyst for increasing awareness of dual diagnosis was a report titled Not
Welcome Anywhere (McDermott & Pyett, 1993). The aim of this report was to explore the needs of
individuals in the community with a concomitant serious mental illness and substance abuse
disorder and stemmed from a Victorian Community Managed Mental Health Service (VICSERV)
research initiative commenced in 1988. This was in response to concerns from community mental
health workers about the service's lack of skilled workforce and resources to meet the needs of
individuals with dual diagnosis. The project used a mixed methods design, incorporating qualitative
data from individuals identified as having a dual diagnosis, their carers and community agencies. A
quantitative questionnaire was distributed to over 600 mental health, AOD treatment and
homelessness services in Victoria, specifically enquiring as to clinician experiences of co-occurring
mental illness and substance use.

This research found that there were up to 880 individuals with concurrent mental health and
substance abuse problems contacting 300 agencies in Victoria weekly for assistance, with two to
three hundred of these individuals receiving no service whatsoever. The report also found that
clinicians and service providers often felt afraid, overwhelmed, inadequately resourced and
unsupported when confronting clients with dual diagnosis. A number of services were unable to
provide assistance to those with concurrent psychiatric and substance use issues. Numerous reports
of referral to other services predominate, with dually diagnosed individuals frequently referred on
to other service providers, who in turn advised them that they were unable to assist. The report calls
for a more effective response, and the development of a "no wrong door" policy, whereby services
assessed and treated substance use or assisted clients to access services more appropriate to their situation, regardless of the presence of co-occurring mental illness (Roberts, 2012).

Roberts (2013) interviewed 19 purposefully sampled “key informants,” being senior bureaucrats, service providers and consumer researchers with expert knowledge of developments in dual diagnosis in Victoria during recent decades. Roberts identified four key themes supporting dual diagnosis as treatment concern. Firstly, individuals with dual diagnosis were more visible. As discovered in McDermott and Pyett's Not Welcome Anywhere study, this perceived increase was due to various health departments’ response to complaints about exclusion from services and poor integration of care and treatment. Additionally, local Victorian research at the time indicated that almost half the residents in homeless shelters and inexpensive, single room accommodation (rooming houses) had a current mental disorder and that 10-12% of these individuals had concurrent substance abuse issues (Hermann et al., 1989, cited in Roberts, 2013, p.328).

Secondly, deinstitutionalisation and a subsequent shift to community care, was a driver for growth in concern about dual diagnosis. It was speculated by many informants in Roberts’ study that community services were inadequate to meet the corresponding increase in care requirements following the closure of state psychiatric hospitals. Roberts describes this as “trans-institutionalisation,” whereby individuals bypassed treatment and support and instead began appearing in prisons and homeless accommodation services. Third, there was a greater differentiation between service treatment philosophies. Similar to McDermott and Pyett’s findings, fragmentation of services caused a reduction in funding in the early 1990s and the subsequent adoption of corporate management principles led to narrow funding criteria that encouraged a separation of treatment responsibilities between AOD treatment and mental health services. The informants also noted that prior to the 1986 Mental Health Act, mental health facilities were more
willing to accept clients with dual diagnosis, suggesting AOD use was historically seen as a frequently expected comorbidity in individuals with mental health problems.

Finally, it was identified that practitioners were drawing attention to increasing AOD consumption by those with mental ill health. Roberts recognises that the publication of the Diagnostic and Statistical Manual, 3rd edition (DSM III), provided a "more forensic" screening and assessment matrix, where comorbidities were more readily identified. The report found that some informants believed this was an attempt for psychiatric services to "take over" the alcohol and drug treatment system, however it became apparent that a resistance to enhanced multidisciplinary work between addictions and mental health clinicians failed, with the Roberts (2013) speculating that this was a challenge to the psychiatrist's authority and desire to remain the “gatekeepers” of acute bed access.

Although deinstitutionalisation did not solely cause dual diagnosis to arise as a treatment concern, it is clear that a number of factors in Victoria's health service history at this time increased interest in the problem amongst clinicians. The fiscal circumstances of the time resulted in a significant reduction of funds available to services. Additionally, mental health services were relocated within general hospitals. These factors led to a number of individuals being displaced into the community. This group, often living in apparent poverty and lodged in supported accommodation or rooming houses, would become a ready market for those selling illicit substances (Goodman et al., 2013; Office of the Public Advocate, 2013). It is reasonable to conclude that, without the relative isolation of psychiatric hospitals and the nature of their constant staffing, individuals with mental ill health simply could not access services when required and instead used a variety of substances to cope.
When considering services for older adults, it becomes readily apparent that a process of concern regarding dual diagnosis has not yet occurred, at least not to the extent evident in individuals under 65 years of age. Whether this lack of concern is related to a notion that older adults simply do not use or abuse alcohol or other drugs, or a reluctance to ascribe substance use to older individuals, it is clear that a shift in awareness is required (Crome, Crome, & Rao, 2011). A theory commonly explored in alcohol and other drug treatment research is that of “maturing out,” whereby it is assumed that individuals cease substance use when social circumstances become supportive to this cessation. This theory is discussed in detail in the next section of this literature review.

The apparent failure of the maturing out hypothesis.

In 1962, Winick hypothesised that addiction “… may be a self-limiting process for perhaps two-thirds of addicts,” (p.7). Winick’s concept of “maturing out” was based on the notion that individuals became addicted in their teens or early twenties in order to avoid or postpone the problems of adulthood. Winick then went on to suppose that substance use ceased as these “vocational decisions and social pressures,” became less pressing (p. 6). Thus, the concept of maturing out of substance addiction has been widely adapted amongst drug and alcohol treatment services and academics alike, often forming a basis for the modern natural recovery movement, despite limited studies testing this hypothesis (Anderson & Levy, 2003; Granfield & Cloud, 1996; Waldorf, 1983).

In relation to individuals with dual diagnosis, Winick’s hypothesis becomes less applicable. The original study of 7,234 individuals did not assess the effects of mental ill health on substance use. Additionally, the sample was based on Federal Bureau of Narcotics data. Winick justified this sampling methodology by stating “Experience has shown that it is almost impossible for a regular user of narcotics to avoid coming to the attention of the authorities within a period of about two
years, so that addicts known to the Federal Bureau of Narcotics represent as complete a picture of the addict population as it is possible to obtain at this time,” (p. 1). Arguably, Winick had performed a study of criminal substance abusers, thus ignoring the notion of the ageing “invisible addict,” as postulated by Crome, Dar, Janikiewicz, Rao and Trbuck (2011).

Despite being a statistically small number (3.8% of the total sample), the Bureau of Narcotics figures used by Winick included 273 individuals becoming “inactive” users in the 60 plus age bracket, with inactivity being described as no contact with the Bureau for a period of five years. This finding itself tends to raise the question of whether the individuals really did cease substance use, or as found by Levy and Anderson during qualitative interviews, “older [drug] injectors tended to substitute alcohol and barbiturates for illicit drugs when the latter were unavailable … or the physical effects … were too harsh for an aging body to handle,” (2005, p. 250).

Winick’s work failed to recognise this phenomenon, with sampling excluding those using prescribed drugs, including barbiturates and opiates, under medical supervision. Hence, it is reasonable to conclude maturing out may not have occurred, with individuals switching to substances that are more convenient to obtain. This may go some way to explain the statistically smaller number of older substance users. Admittedly, Winick’s research sought to discover usage “careers” in illicit drug users, which at the time and due to the geographic locale of the study represented primarily opiate addiction. The maturing out hypothesis has been explored in regard to alcohol consumption but has not been supported in multinational studies (Wilsnack, Wilsnack, Kristjanson, Vogeltanz-Holm, & Gmel, 2009).

In response to Winick’s research, Ball and Snarr (1969) sought to test the maturation hypothesis using a follow-up study of 242 former addict patients from the Lexington Hospital, Puerto Rico, during 1962-1964. Ball and Snarr used a wide range of data sources, including
hospital, police and prison records in both Puerto Rico and the United States, Federal Bureau of Investigations arrest records, Bureau of Narcotics records, interviews with relatives and friends, interviews of the individual, analysis of urine drug specimens and other sources, examples of which identified included newspaper accounts and death certificates.

The wide range of sources the authors used to explore the trajectory of addiction careers would allow a more thorough investigation, rather than relying on the notion that drug addiction leads to criminal conviction that Winick used to underpin his work. Consequently, Ball and Snarr found no evidence “… to support the interpretation that abstinence increases either with years of drug use or the ageing process itself,” (p. 2). Interestingly, however, several authors contend that this study lends support to the maturation hypothesis (Anglin, Brecht, Woodward, & Bonett, 1986; Sobell, Ellingstad, & Sobell, 2000). This is a curious finding, given the research found 67% of those studied were either continuing to use heroin or incarcerated at the time of follow-up, indicating a substantial deviation from Winick’s proposition that “two-thirds” of users matured out of substance use. It would appear that the wide range of data used to produce this result describes a more thorough account of substance use throughout the lifespan.

Ball and Snarr supported Winick’s hypothesis of addiction partnering with criminal behaviour. The authors found that addiction increased the probability of arrest fivefold in their sample. Despite finding that 90% of those “cured” did not come into contact with the authorities during abstinence, Ball and Snarr could not confirm Winick’s supposition that opiate users mature out of criminal lifestyles, with the trend towards greater “social disability” as the years progressed. Ultimately, the authors identified two patterns in the careers of opiate addiction, with the first being increasing immersion in a criminal lifestyle as opiate dependence progressed throughout adult years, and the second being a termination of a drug-centred lifestyle and re-establishment of a
“legitimate role” in society. Ball and Snarr found one-third of their sample assuming the second pattern, as opposed to Winick’s two-thirds.

In 1973, Snow also sought to replicate and extend Winick’s maturing out hypothesis. Snow recruited all addicts reported to a central register in New York City. A total sample of 3655 individuals was obtained. Snow considered this sample to be a closer approximation of Winick’s study than others. Snow separated “inactive” cases, who became this way through death, incarceration, lack of information, or “questionable evidence of addiction,” (p. 923). Of interest to the study of dual diagnosis is the finding that 102 of a total of 741 inactive cases in the sample were found to be this way through confinement in psychiatric institutions, from a period of nine days to three years, underscoring a definite cohort with co-occurring substance abuse and mental illness even in this early work.

Snow found an appreciably smaller percentage of individuals who had matured out of substance abuse at 23%, considerably less than Winick’s 65%. Although Snow pondered explanations for this discrepancy such as a differing situation in New York City due to a later time period being studied and the elimination of deceased individuals from the sample, it was concluded that the complexities of maturing out as a phenomenon were generally more complex than Winick had regarded them to be. This point was demonstrated by the large number of subgroups discovered in the sample, with widely varying addiction and cessation rates. Snow attributed this to differing socioeconomic circumstances providing more opportunity for individuals to cease substance use, and conversely, poverty leading to ongoing addiction. As Snow concluded, “… it may be that only some of these inactive persons have in reality matured out… or that none have. But it is undeniably true that they have all achieved a state of anonymity that needs to be accounted for,” (p. 936). This statement seems to echo the notion of the “invisible addict,” (Crome et al., 2011).
Capel and Peppers (1978) sought to explore the concept of “the ageing addict.” At the time, the general consensus in addiction medicine was that opiate use decreased sharply after the age of 45. This notion was fostered by Winick’s maturing out hypothesis. The authors noted that opiate addiction was previously an affliction of middle and upper class women, with an average age in the forties. The demographic in the 1960s appeared to change, with opiate addicts tending to be predominately young, male and black. According to Capel and Peppers, this resulted in concern being directed at younger members of society, neglecting drug abuse among older individuals.

Capel and Peppers study utilised 1969 data obtained from substance abusers enrolled in methadone maintenance clinics in New Orleans, focussing on the change of age distribution since 1969, and what the authors describe as the “staying power” of individuals enrolled in the program since that time. They found that although opiate addiction occurred most commonly in people under 37, there was a virtual doubling of the 45-59 group and 60 plus groups, indicating an overall ageing trend. As predicted by Capel and Peppers, individuals in these older age groups were expected to be in their late fifties or sixties by the mid 1980s, demonstrating a definite aged cohort undergoing methadone maintenance treatment. The authors, in their conclusion, stated “To a greater extent than younger age groups, we find some evidence of what Winick called the “maturing out process” that occurs naturally, but it is equally clear that this is not the case for the majority of those now addicted and in the older age brackets,” (p. 399).

The work of Beynon, McVeigh and Roe (2007) explored the English National Drug Treatment Monitoring System, consisting of the records of 26,415 individuals who contacted treatment services between 1997 and 2005. The researchers found that although the majority of drug users in treatment were aged 49 years or younger, there was a significant increase in the 50-74 age bracket. A median age increase of eight years in average ages of individuals in treatment was also noted during this time, as well as and increase in drug users in contact with syringe exchange
programs in the 50-74 age group, from four in 1992 to seventy-four in 2004. These findings lend contemporary support to Capel and Peppers prediction of an ageing cohort of individuals with substance use disorders.

Levy and Anderson’s (2005) qualitative study used a convenience sample of 40 older (between the ages of 50 and 68) intravenous drug users to explore the concept of a drug using “career” throughout the lifespan. These individuals all began drug use in their teens or twenties and continued to use drugs spanning prolonged periods of 25 or more years, further raising doubt about the maturing out hypothesis. A distinct feature of the research was the indication that older substance users tended to substitute other substances, namely alcohol and prescription medications, for illicit drugs when availability or tolerance for an ageing body became problematic. This finding cast further doubt on Winick’s maturing out hypothesis by adding a variable that was not explored in Winick’s initial study. Rather than stopping illicit drug use, older substance users may simply switch to more convenient substances when circumstances force the choice to be made.

To summarise, although a proportion of substance users may mature out per Winick’s hypothesis, there is a significant cohort that appear to continue their substance use unabated. As indicated by subsequent research, there appears to be a trend whereby older age groups of those dependent on substances have increased, either not maturing out of their substance abuse or commencing addiction careers later in life. The maturing out hypothesis may have been a convenient demonstration for the perceived insignificance of an aged substance abusing cohort, however upon further investigation it becomes clear that a number of variables that were omitted from Winick’s work may contribute to a growing number of older adults dependent on substances.
The "lifetime" user.

Defining addiction as a career is common within injecting drug use research, with the notion of the “lifetime” user expressed as an individual who commences injecting substances at a young age and modifies their use throughout the lifespan (Lay, King, & Rangel, 2008). According to the Australian Injecting and Illicit Drug Users League, “There is also recognition, that people’s engagement in drug use is often fluid, and that people frequently move in and out of active drug use over long periods of time even if their ultimate goal is to quit using,” (2012 p. 6). This notion of the lifetime drug user is at odds with the maturing out hypothesis described by Winick, indicating that a group of those initiating drug use in their youth will continue using substances up until older age. Although the research surrounding addiction careers does not consider dual diagnosis, it is pertinent to explore as it provides a potential explanation for the rejection of the maturing out hypothesis, and allows exploration of the social, health and legal costs of the maintenance of a long-term substance use disorder.

The concept of users adapting to enable ongoing use was recognised by Capel, Goldsmith, Waddell and Stewart (1972), causing the authors to announce that “[the] maturational hypothesis has become suspect,” (p. 102). By interviewing 38 individuals identified to the researchers through leads participating in a New Orleans methadone maintenance program, the research was able to explore active users, in contrast to typical research of the time which recruited through law enforcement or treatment program registers. The 38 individuals sampled were all male, with a mean age of 58.9 and a mean drug use career of 35.4 years. The majority of the group were using pharmaceutical hydromorphone, with a number using heroin, morphine or codeine. Participants noted their primary reasons for using hydromorphone as cost, being cheaper than heroin, and purity of dose.
Challenging the notion of the narcotic addict as hopeless, criminal and antisocial, 19 of the subjects were employed in full time employment, and five part time. However, it was noted that the vast majority of males were isolated and living alone, with only one married and living with his spouse. The authors also found that the modality of treating addiction as a legal problem, replete with long jail sentences at the time encouraged “… self-protective camouflage by the addict who therefore becomes hidden and shut off from influences that might lead to his maturing-out of the addiction,” (p. 105). It was also noted that the only options for treatment were either methadone maintenance or total abstinence, which appeared to be of little interest to this age group. This situation, with the addition a limited number of alternatives to methadone, stands largely to this day (Garcia-Portilla, Bobes-Bascaran, Bascaran, Saiz, & Bobes, 2014).

Although concerning adults with a lower mean age (43) than most other studies exploring this group, Williams Boeri, Sterk and Elifson’s (2008) qualitative analysis of 29 heroin users sought to explore the differences between what are termed “maturing in” users (those commencing heroin use before the age of 30), and late-onset users (who commenced use in their 30s or older). A number of core differences are described between these categorisations, particularly regarding adaptive behaviours of the maturing in users. These behaviours tended to develop in order to allow individuals to continue substance use while attempting to maintain mainstream life roles, including the ability to manage withdrawal by titrating their use in order to remain a sense of control over their drug use. In contrast, the late-onset users surveyed frequently described their use spiralling out of control, causing detrimental impact to their familial relationships and subsequent role functioning.

Despite this notion of controlled use allowing maturing in individuals to attempt to maintain normalcy within dual roles, Darke et al (2009) found that harms associated with injecting heroin use were strongly correlated to length of career. This longitudinal cohort study recruited 619 individuals
from 19 AOD treatment services in Sydney, along with a number of active users from needle and syringe programs as controls. Baseline interviews were conducted, combined with data from the Australian Treatment Outcomes Study, with interviews repeated at 3, 12, 24 and 36 months.

Despite this study being conducted with a younger cohort (mean age 29.3 years, with an age range of 18-56 years), it surveyed a number of individuals with heroin careers over 15 years. Of this group, it was discerned that cumulative exposure to overdose caused a number of health problems, including cognitive damage. In addition, the older users surveyed in the study showed no evidence of reducing their use, with no reduction in risk taking behaviour observed. The authors postulate that this may be an explanation as to older users being the chief age profile represented in heroin fatalities.

A similar study conducted by Grella and Lovinger (2011) in California interviewed 914 individuals participating in methadone maintenance programs during 1978-1981. Follow up interviews were conducted from 2005 to 2009 with 428 subjects, with 414 original subjects deceased and the remainder being either incarcerated or lost to follow up. The average age at follow up was 58.3 years for males (SD ± 4.9), and 55.0 years for females (SD ± 4.1). A model for trajectories of use over time was developed, finding that two-fifths of the sample had ceased using heroin 10-20 years after initial age of first use, with a quarter (25.5%) continuing their use at follow-up. The authors also found that half of those noted to cease heroin use most rapidly increased their use of other drugs, particularly amphetamine, over this time.

Anderson and Levy’s (2003) qualitative study of 40 intravenous drug users between the ages of 50 and 68 found participants reporting a number of chronic health conditions they attributed to long careers of drug use. The participants, drawn from 1066 participating in a wider project exploring HIV and drug use in Chicago, were selected by convenience sampling to discuss the
impact of drug use as they aged. Participants reported wide ranging health issues, from complications of blood borne viruses such as hepatitis and HIV, to problems associated with injecting, such as collapsed veins, ulcers and scarring, in addition to health complications arising from the hazards associated with drug use, such as complications arising from previous gunshot wounds. A number also identified mental health problems as a result of participating in long term substance use.

Echoing other authors presented in this section, Anderson and Levy also found participants reporting competing dual roles throughout the term of their substance use, with a common theme being a belief that drug use occurred outside family life. Considered necessary to enable continued use, this notion of operating in two worlds further marginalised participants in the study. Participants reported often losing family support in the process of becoming marginalised in conventional roles as well as ageing in a drug scene that was noted to be transforming, with violence and predatory behaviour becoming commonplace. As the authors note, “Rather than having ‘matured out’ of the life, these older survivors of an earlier era remained active but hidden,” with their ability to operate within drug trading circles reported to be curbed by their advancing age, and chronicity of their medical and psychological conditions (p. 98).

Follow up research by Levy and Anderson (2005) used the same pool of participants, with the findings underpinning those mentioned in the beginning of this section: many had used illicit drugs since their teens or early adulthood, with addiction careers spanning 25 or more years, with brief periods of quitting substance use over this time reported. Throughout their substance use careers, the participants noted that they still spent much of their time seeking illicit substances, however competition for this time came from the necessity to manage the symptoms of chronic conditions attained as a result of drug use.
Participants described a fear of hospitalisation that often discouraged them from seeking medical help, as it effectively separated them from their drug supply. This finding in itself is concerning, particularly if a similar attitude existed among individuals with dual diagnosis, forcing a reluctance to seek help when psychiatric conditions exacerbated. It was also found to prevent older adults seeking help from substance use treatment services. Social isolation, found in older substance users as their drug using friends either cease use or succumb to their medical conditions or overdose, was also noted in the participant’s responses. Combined with the possibility of losing connection with families, and a reluctance to seek help, social isolation may contribute not only further risk to complex situations but make adequate assessment in older adults difficult.

The notion of addiction careers is in direct contrast to the maturing out hypothesis and provides an opportunity to account for those who were outside the bulk of those ceasing substances in Winick’s research (1962). No study of substance use careers in older adults with co-occurring mental illness was located in the process of this literature review, however the concept of a career provides rich, individual data that may help to explain the course that an older adult’s life has taken when presenting to mental health services with dual diagnosis. As evidenced by the literature presented here, long-term substance use has significant effects on the health and social welfare of individuals. The lack of studies concerning lifetime trajectories of mental illness and substance abuse in older adults provides further impetus for the research methodologies of this thesis, in order to adequately illustrate the phenomenon of dual diagnosis in older adults.

The Extent of the Problem

This section seeks to define the prevalence of substance abuse in older adults. A large proportion of the literature concerning older adults’ views substance abuse in isolation, with passing consideration to mental illness. Given the definite lack of dual diagnosis research in older adults, examining this research was considered pivotal in defining the extent of the issue. This section will
also identify costs of care of dual diagnosis in older adults and compare the adult mental health cohort with older adult mental health consumers. It will also examine the potential consequences of untreated dual diagnosis in older adults.

**Prevalence of AOD use in the aged cohort.**

A number of studies exist exploring the prevalence and issues of substance abuse in a generalised older population (Blazer & Wu, 2009a, 2009b; Han, Gfroerer, Colliver, & Penne, 2009; Simoni-Wastila & Yang, 2006). These studies do not specifically explore dually diagnosed individuals, in that they do not seek a population with a comorbid mental illness diagnosis to draw their sample from. Given the potential of under diagnosis of both substance abuse and mental illness in older adults, and the difficulties of involving individuals with severe psychosis in population studies due to both study recruitment and ethical considerations, a review of the literature pertaining to substance abuse alone is warranted in order to determine a true prevalence of substance abuse disorders in older adults (Hartz et al., 2014; Salmon & Forester, 2012).

Moos, Schutte, Brennan and Moos (2009) conducted a 20-year longitudinal study on a sample of 1884 community residents 55-65 years old at baseline from Western USA to determine alcohol consumption and drinking trajectory in later life. The individuals comprising the sample were born between 1921 and 1933, had consumed alcohol within the past year and had outpatient contact with a healthcare facility in the past three years at baseline. They were then contacted at 10 and 20-year time points. Of the 915 individuals still living, 719 completed the twenty-year follow up, with the remainder being unable to participate due to ill health or refusal to participate.

The authors used a combination of mail and telephone survey to determine alcohol consumption and problem drinking patterns. The 12 item Drinking Problems Index was used, an instrument with high internal consistency and predictive validity (Cronbach’s alpha 0.94). At the
twenty-year follow up, when participants ages ranged from 75-85, a total of 15% of women and 30% of men reported their alcohol consumption as 3 or more drinks per day or 14 or more drinks per week. Additionally, 8% of women and 22% of men reported consuming more than two drinks per day or seven per week and subjectively reported this consumption as being problematic.

Although the authors found a decline in alcohol consumption as age advanced, more than half of the older adults surveyed consumed alcohol in excess of recommended guidelines. Accordingly, 21% of women and 34% of men in the sample described problems related to their alcohol consumption. This highlights a sizeable cohort of older adults who consume problematic quantities of alcohol, despite longitudinal findings that consumption decreased within the population as age advanced.

Blazer and Wu (2009a) further explored levels of problematic alcohol consumption in older adults. They examined the public files of the 2005-2006 US National Survey on Drug Use and Health to determine the prevalence of “at-risk” (more four drinks per day or 14 per week) and binge (more than five drinks on the one occasion) drinking among middle aged and elderly adults. Of this data, the sample was limited to 10,953 respondents who were 50 years of age or older. Of note is that individuals excluded from the sample comprised those in prisons, nursing homes, mental institutions and homeless individuals, excluding a large number of individuals with mental ill health as discussed previously in this literature review.

In terms of binge drinking, men showed a higher prevalence (20%) compared to women (6%), and at-risk drinking (17% versus 11%). The study found that binge and at-risk drinking is associated with illicit drug use in males and non-medical use of prescription drugs in females. Additionally, binge drinking was found to be associated with higher income and separation, divorce or being widowed in men. The implications for a treatment service that operates within a diverse catchment area (as described in Chapter 2) are numerous, particularly given a large proportion of individuals case managed by MAPS live alone, and a substantial geographic area of the MAPS
catchment is in the higher income suburbs of Melbourne. Blazer and Wu also highlight the poor value of brief screening tools such as the CAGE in identifying binge drinking. Given the variable nature of self-report as many authors have noted, accurate assessment of binge and at-risk drinking may prove difficult.

Seeking to explore trends in admission patterns of older adults to publicly funded substance abuse treatment services, Ardnt, Clayton and Schultz (2011) audited yearly data sets from 1998 to 2008 of all admissions to treatment facilities in the United States. Treatment service staff also identified, via interview on admission, basic demographic information and the primary substance leading to admission. Of a total sample of 7,446,785 for all years of the data set, 258,542 were aged 55 years or older. The authors chose to use adults aged 30-54 as a comparison group (n=3,547,733). In contrast to other studies in this review, Arndt, Clayton and Schultz found a “steadily growing proportion of older adult admissions … among all first admissions [to AOD treatment services],” (p. 706). In 1998, 2.86% of admissions were older adults, increasing to 4.42% in 2008. Confirming the findings of other researchers, the authors found alcohol to be by and large the primary substance of choice among this cohort. However, they also found a dramatic increase in admissions for heroin use, and, as would be expected in a study completed in the United States, an increase in cocaine use, which was also the second most abused substance after alcohol.

This study also found the number of older adults entering substance abuse treatment is increasing. The authors postulate that their findings are at odds with the notion that a relatively insignificant percentage of heroin users live to old age. Additionally, the older adults included in the sample demonstrated a prolonged exposure to substances during their lifetime, in what the authors term “successful” users, who represent an unknown population in terms of size, cognition, and medical and psychiatric comorbidities.
Further supporting the notion of growth of substance use in older adults, Fahmy, Hatch, Hotopf and Stewart (2012) analysed data from two surveys in England: the 2007 National Survey of Psychiatric Morbidity and the 2008-2010 South East London Community Health survey. This analysis found a tenfold increase in recent cannabis use in the 50-64 cohort from 1993 to 2007, and a twofold increase in individuals 65-74 from 2000 to 2007. The growth of cannabis use in this population is illuminating, as many other studies mention cannabis in passing rather than as a problematic substance (Patterson & Jeste, 1999; Shah & Fountain, 2008). Although the authors advise that the prevalence, in percentage terms, is low, they do concede that this translates to high numbers of substance users at a service level and call for research into treatment frameworks that are sensitive to the needs of older adults.

Although not investigating the general population, Cummings, Cooper and Johnson’s (2013) examination of older adults residing in public housing and alcohol use provides a sample more relevant to a cohort specific to the MAPS service, as identified in the background chapter. The authors administered health surveys to residents of two public housing buildings (n=338), with 187 completing the survey. Almost two thirds (60.1%) of the sample were aged 65 and over, with 30.5% of the older resident cohort reporting substance abuse problems. Measuring problem drinking using defined guidelines, a high percentage of binge drinkers (21% of all residents) was discovered. The authors suggest two potential reasons for this finding: binge drinking being used as a coping mechanism during periods of acute stress and restricted income limiting regular access to alcohol. The implications of this finding are clear, as the study also found that public housing residents rarely disclosed their problematic substance abuse to health professionals, and none of the sample classified as problem drinkers receiving specific substance abuse treatment in the 30 days prior to their interview.
Although the aforementioned literature does not specifically seek to describe populations where individuals experience co-occurring mental illness and substance abuse, it provides illumination of the prevalence of substance use in an ageing population. As found by Cummings, Cooper and Johnson (2013), individuals do not necessarily disclose their substance use to health professionals, making a true population prevalence difficult to accurately identify. In addition, a number of the reviewed studies deduce an increase in substance use in older adults. Combined with the notion of the “successful user,” (Arndt et al., 2011) these factors indicate potentially a large number of undiagnosed substance use disorders within the older adult community.

**Costs of care.**

The costs of care for older people with dual diagnosis are difficult to quantify. Primarily, Australian data collected regarding costs of dual diagnosis to health services and systems does not attribute costs specifically to the 65 and over age group, who comprising older adult mental health service users in Victoria. Additionally, no research was found during literature searches exploring financial costs of treating older adults with dual diagnosis in Australia. Despite this, Government spending on mental health services nationwide during 2010-11 was reported at $6.9 billion, and represented an average annual increase of 6.3% from the previous measurement conducted in 2006-2007 (Australian Institute of Health and Welfare, 2012).

According to a Medibank Health Solutions report (2013), as a total proportion of health expenditure, mental health ranks highly. This report estimated direct spending on mental health services at $28.6 billion per year, a markedly higher figure than provided by the Australian Institute of Health and Welfare. This may be explained by the inclusion of what are termed as “non-health” expenditures, such as housing, carer and justice services, and income support payments. To determine these costs on an individual level, Fitzgerald et al. (2007) examined the records of payment and activity systems in medical records for 347 individuals with a diagnosis of
schizophrenia treated at a metropolitan Melbourne mental health service. Analysis of the fiscal data discerned a societal cost of $32,160 in the first year of treatment, $27,190 and $29,181 in the second and third years respectively. The research also noted that 39% of individuals included in the study consumed the vast majority of health service resources, which further serves to indicate the intensive nature of both chronicity and complexity in respect of finite resources.

As this study did not explore an aged population, it assumes lost taxation revenue in its calculations. Although a substantive figure, a similar figure could be achieved by substituting the cost of Government subsidised aged care services, both residential and community, provided to a number of individuals over the age of 65 (Australian Government Department of Health and Ageing, 2011). This study did not assume costs related to individuals with co-occurring substance abuse, with studies finding that costs of care for dual diagnosis being higher due to medical comorbidities, suicide attempts and poorer role functioning and emotional health, as well as an increase in psychiatric symptomatology (Benaiges, Prat, & Adan, 2012; Ringen et al., 2008).

Early research into the cost of treating individuals with dual diagnosis conducted by Hoff and Rosenheck (1999) found the mean yearly individual cost 31% higher than treating individuals without comorbid substance use disorders. To arrive at this conclusion, the authors compared two groups of patients from a Veteran’s Affairs substance abuse treatment program (n=12,607), comprising 3,069 dual diagnosed and 9,538 non-dually diagnosed. Four sources of data were scrutinised, being clinician completed data sheets for each patient’s clinical encounter, patient treatment files for inpatients (4,845 of the total sample), longitudinal files that spanned both inpatient and outpatient settings, and Veteran’s Affairs cost accounts used to estimate costs for Veteran’s Affairs health service program delivery. Individuals were followed for six years to determine patterns and costs of health service utilisation over time.
Two patterns were discerned from investigation of the data, the first being that the dual diagnosis patients in the sample had persistently and substantially higher costs of care, chiefly due to a higher utilisation of outpatient medical and surgical care in the first three years of follow up, and higher costs of substance abuse treatment in the final three years of follow up. Additionally, both groups showed decreased costs of care over time, with the dual diagnosis group’s costs decreasing more rapidly. However, despite these costs decreasing, they remained substantially higher than the cost of care for those without dual diagnosis at the end of the six year follow up period.

McCrone et al. (2000) also sought to determine the service use and costs of dually diagnosed individuals in London, using multiple regression analysis of two groups of individuals 18 to 65 years old who had contact with a mental health service over a six month period. Prospective patients were then interviewed using screening questionnaires in order to identify cases of dual diagnosis. The number of cases interviewed for inclusion in the study was 101, of which 29% had a dual diagnosis. The mean cost for dual diagnosis patients was found to be significantly greater, and during the six month period, was averaged to a financial value of 1362 Pounds Sterling greater than non-dual diagnosis patients. The authors note that a limitation of their study was the exclusion of both personal and family financial cost, which, they argue, would add an even greater burden.

At a service level, the notion of individuals with dual diagnosis being heavy users of finite resources is illustrated in Minassian, Vilke and Wilson’s (2013) study of frequent users of emergency departments. By conducting a retrospective review of all ED visit medical records during 2008 (39,249 patients), the authors found that “Patients with both a psychiatric history and alcohol abuse history had, on average, the highest number of visits per year,” (p. 521). Of all visits made to the emergency department, 28% were made by those termed frequent visitors, presenting
four or more times in a twelve-month period. Frequent visitors were also found to be older in age than non-frequent visitors to the emergency department.

The authors make mention of dual diagnosis individuals in their discussion, noting that their study was the first to report that psychiatric complaints combined with alcohol use were heavy users of emergency departments, averaging six visits per individual. A comparison is made to individuals with either a psychiatric condition or alcohol use disorder alone averaging two visits. This sentiment is echoed in Hendrie et al’s (2013) comparative study of 339 older (65 years and over) individuals with a mental illness diagnosis attending a major health service in Indiana, USA. Medical records were reviewed and results compared with a comparison group of 533 individuals without a diagnosis of mental illness or dementia, using descriptive statistics (t-test and chi square).

This analysis discerned that the cohort of patients with mental illness had significantly higher rates of falls, more visits to the emergency department and longer hospitalisations than the non-mentally ill group. It was also found in the mentally ill group that substance and alcohol use disorders occurred more frequently. Although not reflected in the research, with similar levels of medical comorbidity found between the control and mentally ill groups, the authors speculated that this may be a function of under identification by hospital physicians. This, according to the authors, may be occurring due to poor information being available from the individual and caregivers, and “… these patients are difficult to evaluate,” (p. 1273).

Despite the availability of specific research to confirm the cost of treating older adults with dual diagnosis, it is apparent that the findings of the studies explored here demonstrate the complexity of these presentations and the potential for older adults with dual diagnosis to compete heavily for finite resources within health services. Although difficult to quantify, this added expense appears to take the form of extensive emergency department presentations and increased length of
stay, both factors that have been identified was contributing to the overall cost of providing healthcare (Department of Health, 2013a). It is clear that the provision of a comprehensive community treatment program for older adults with dual diagnosis is imperative to providing the level of support these complex individuals require, with the potential for reducing the demand for services from these individuals.

Contrasting the aged cohort with the adult psychiatric population.

A large number of studies have been conducted on the Australian adult (age 18-64) cohort in regard to dual diagnosis (Croton, 2005; Ogloff et al., 2004; P K Staiger et al., 2008). However, a number of differences between the adult and aged psychiatric populations make it difficult to apply this research to those aged 65 and over. This problem was identified by Speer (1990), who noted that the differences between substances consumed, the level of polysubstance abuse and antisocial behaviour between the two cohorts was notable.

Speer identified three further issues limiting the ability to compare these two populations. The first concerned diagnostic criteria applied to aged psychiatry, with the author arguing that using generalised criteria often resulted in lower rates of psychiatric disorders among older adults. Secondly, Speer identified the high prevalence of chronic physical ailments among older adults. Finally, Speer recognised cognitive impairment as an added complexity of many aged individuals. Aged psychiatry itself tends to recognise this, with dementia being identified in the Diagnostic and Statistical Manual of Mental Disorders, 5th Edition (2013). Therefore, those individuals with a diagnosis of dementia and substance use disorder may also be considered dual diagnosis, as discussed in the background chapter of this thesis. As Speer goes on to discuss, this difference in itself has far reaching effects on assessment and treatment of substance use in older adults.
These findings are reflected in Seitz et al’s (2012) study of adults admitted to psychiatric beds in Ontario, Canada from April 1, 2008 to March 31, 2010. This information comprised 79,352 contacts, 6952 (8.8%) of which were 66 years or older. The authors then divided these individuals into two cohorts, being 18-65 and 66 and over. By comparing these two groups using summary statistics, the authors found that older adults were more likely to be living alone with significant medical comorbidities. Similarly to Speer (1990), Seitz et al noted that 66.7% of the older adult population were cognitively impaired when tested on a standardised instrument, and 19.5% had a primary diagnosis of dementia. The authors concede “Older adults in APUs (acute psychiatric units) are a socially, medically and functionally complex group, with significant care needs that may be distinct from those of younger adults,” (p. 562).

The authors define this statement by describing their findings of the older adult cohort, including “social vulnerabilities” such as social isolation. Almost one half of the sample were noted to be separated, widowed or divorced. Further, the authors note a frequent occurrence of polypharmacy and cognitive and functional impairment as distinct from younger individuals, with older adults in the sample often requiring intensive follow up by allied health services, such as physiotherapy and occupational therapy. Additionally, individuals in the sample often had a high number of medical comorbidities to be managed simultaneously with their psychiatric illness, further adding complexity to the management of older adults.

Moos, Mertens and Brennan’s (1995) study of 33,323 individuals discharged from 88 United States Veteran’s Affairs substance abuse treatment programs in 1991 found a number of differences between older adults and middle aged and younger adult patients. The total sample was divided into three cohorts, being those aged 18-34 (n=6,798), 35-54 (20,904) and 55 years of age and over (n=5,621). Data was drawn from inpatient files and subsequent outpatient care episodes from Veteran’s Affairs. Despite the large sample size of this study, the authors note a limitation in
that 97% of the sample was male, and therefore may not be representative of community treatment services.

Despite this limitation, the research reveals a number of comparisons between the young, middle aged and older adult cohorts that provide an ability to compare these populations and also, demonstrate the need for further research specific to the older adult population. The authors found that “Older patients had more complex and chronic substance abuse problems than did their younger counterparts,” (p. 335). Older adults were also more likely to have an alcohol or drug psychosis diagnosis, less likely to obtain mental health aftercare post inpatient admissions, less likely to solely have an alcohol or drug dependence diagnosis (instead often having a comorbid psychiatric or medical condition), and had higher readmission rates. Older people also had a heavier prior use of inpatient substance abuse, mental health and medical services compared to younger adults, and showed somewhat poorer outcomes after treatment. According to the authors, “… confirming the idea that standard treatment approaches do not work well for older patients, more than 60% of these patients had had recent prior inpatient care for their substance abuse disorders,” (p. 340).

To further underscore the differences between the two populations, it was noted that dementia was a primary diagnosis in 19.5% of the older adults, compared to 0.5% of those aged 18 to 66. The authors go on to conclude that the older adults “were a medically complex population, with a high degree of both cognitive and functional impairment in addition to having significant psychiatric needs,” (p. 561). Social isolation, often noted in those living alone, compounded the care needs of the older adult population, which the authors conclude may increase risk for suicide, and medical or psychiatric rehospitalisation, therefore requiring higher levels of social support and community care.
Chaput, Beaulieu, Paradis and Labonte’s (2011) study of data obtained from all adults visiting a Canadian psychiatric emergency service in Montreal also sought to compare the 1349 patients 65 years or older to those aged 18 to 64 (n=14,230). The study found that those over 65 were often frequent repeat visitors. It was also found 7.5% of the older adult cohort had substance use disorders as a primary diagnosis, and 19% as a secondary diagnosis to a primary mental illness. Despite the authors reporting a “relative absence of substance use,” they do conclude that their diagnosis coding methodology may have underestimated the true prevalence of substance abuse (p. 7). This compares to the finding that 18.5% and 28% of patients under 65 had primary and secondary substance use disorders respectively.

Of the older adults that did have substance use disorders, it was found that 93% used alcohol, 1% cannabis, 4% multiple substances and 1% benzodiazepines. This is a distinct contrast to the 18-64 population, of whom 42% used alcohol, 18% cannabis and 32% multiple substances. The authors go on to describe a “… constellation of core findings typical of the [psychiatric emergency service] patient,” being underrepresentation in epidemiological data, a higher proportion of affective disorders (chiefly depression), higher admission rates, gender being predominantly female, few self-referrals and more frequent (prescribed) benzodiazepine use (p. 7).

In summary, significant differences exist between the older adult population and those under the age of 65. In lieu of Australian research investigating the contrast between local adult and aged dual diagnosis populations, it becomes difficult to apply the results of the large number of studies exploring dual diagnosis in those under 65 to older adults. As the research here indicates, a number of dissimilarities make it very difficult to apply these findings with any degree of reliability to older adults. In itself, this notion justifies the need to conduct research into older Australian adults experiencing co-occurring mental illness and substance use disorders.
Neuropsychological effects of substance abuse.

The neuropsychological effects of mental illness are clearly documented, with research documenting complex neurobiological interactions as causing marked cognitive decline in both schizophrenia and bipolar affective disorder (Braff, 1993; Quraishi & Frangou, 2002; Ross, Margolis, Reading, Pletnikov, & Coyle, 2006). Similarly, although more contentious, the effects of alcohol on the ageing brain have also been reported, with the widespread acceptance of a number of neuropsychological syndromes related to the excessive consumption of alcohol, however the mechanism of these syndromes is debated widely (Carlen et al., 1994; Ridley, Draper, & Withall, 2013). What is not clear is the neuropsychological effects of comorbid mental illness and substance use disorders in older adults, or with substances rather than alcohol. A shortage of research examining older adults and both the pathological and behavioural changes as a result of alcohol or other drug use is evident.

Mohamed, Bondi, Kasckow, Golshan and Jeste (2006) sought to describe neurocognitive functioning in a sample of individuals 44 years and older, diagnosed with either schizophrenia or schizoaffective disorder, who were outpatients at a Veteran’s Affairs Healthcare Service in San Diego. These individuals were divided in to two groups according to the presence of a DSM-IV diagnosis of alcohol dependence or abuse (n=52) or no diagnosis indicative of alcoholism (n=220). A structured clinical cognitive assessment was performed with each individual, including a number of tests of memory and verbal learning. It was found that older individuals with dual diagnosis had lower scores relating to their cognition compared to those of the same age without a diagnosis of alcohol dependence or abuse.

Similar results were found in Manning et al’s (2007) research into the cognitive function of 120 individuals from two community health services and one alcohol treatment service in London. The sample comprised three groups, being 40 individuals with schizophrenia alone, 40 with alcohol
dependence alone and 40 with a dual diagnosis of schizophrenia and alcohol dependence. Cognitive functioning was assessed using the Mini Mental State Examination (MMSE), with two instruments used to determine severity of mental illness and two used to determine frequency and currency of alcohol use. This testing methodology is not as comprehensive as the neuropsychological test battery described in other studies mentioned here, with the MMSE originally being conceived as a brief screening instrument for detecting the presence of cognitive deficits for further investigation (Tombaugh & McIntyre, 1992).

Although this study encompassed a wider age range that of Mohamed, Bondi, Kasckow, Goldshan and Jeste, the results again demonstrated cognitive deficits in the dual diagnosis group, recording lower MMSE scores, and recording the highest percentage (68%) of individuals meeting the criteria for global cognitive impairment using recognised criteria. This group also had lower scores in the domains of language, naming, memory and visual construction. Perhaps a more interesting incidental finding of this study is that within the alcohol dependence group, 39 out of 40 participants screened positive on the mental health screening tool for problems such as depression, anxiety or phobias, indicating a significant number of individuals with high prevalence psychiatric disorders within this cohort.

Benaiges, Prat and Adan’s (2012) review of published studies concerning the neuropsychological aspects of dual diagnosis found across younger ages contradictions in many studies, with some reporting improved neuropsychological function relative to those with a diagnosis of schizophrenia alone. Many authors hypothesised that this improvement in executive function was likely due to two factors: a protective effect of younger age, and the need for fairly advanced social and problem solving skills in order to maintain the networks necessary to procure illicit substances.
Despite this finding in younger subjects, Benaiges, Prat and Adan’s review of studies concerning older adults found a marked neuropsychological deficit in individuals with a diagnosis of schizophrenia compared to individuals without schizophrenia of the same age. Additionally, this deficit was amplified in those who consumed alcohol, with worse abstraction, verbal perception, word recall and long-term memory characterising what the authors describe as “… a general cognitive deficit … with a significant increase of the deficit in [subjects] 40s and 50s,” (p. 180). To explain this finding, the authors postulate that a prolonged, chronic period of substance abuse allows neurotoxic effects to become more evident in older individuals.

Herman’s (2004) comparison of 46 dually diagnosed individuals and 43 non-substance abusing individuals with schizophrenia echoed the findings of Benaiges, Prat and Adan’s work. The hypothesis of this research was that “… because of the neurotoxic, physical and medical effects of substance and polysubstance abuse, the dually diagnosed will show greater neurocognitive impairment and report a poorer quality of life compared to non-substance-abusing patients with schizophrenia,” (p. 283). The results of the study failed to validate this hypothesis, instead showing better performance on tasks involving domains such as executive function, planning and reasoning. Additionally, those with dual diagnosis expressed a higher satisfaction with their quality of life compared to those non-substance using individuals.

As this study relied on review of neuropsychological testing conducted on subjects whilst inpatients in a metropolitan Sydney hospital, it is difficult to ensure inter-rater reliability. The author also concedes that those without a comorbid substance abuse diagnosis scored significantly worse on measures of psychiatric disability, as well as being younger (mean age 30.86 versus 42.17). The research does not provide insight into older adults, however demonstrates the variable findings of the effect of substance use on mental health found in contemporary research.
Herman offers a potential explanation for this unexpected finding, being that individuals with dual diagnosis face a reduction of the stresses associated with substance use when admitted to an inpatient unit, namely being a cessation in exposure to violence, criminality, concerns for housing as well as food are abated, and the need to participate in activities such as sex work to finance substance use. Although some of these elements may not be applicable to an aged psychiatric population, Herman’s work is of interest to this study as it offers a potential argument that the deleterious cognitive effects of substance use may appear over time, thus necessitating differing approaches to those termed “lifetime” users as opposed to older adults who commence substance abuse late in their lives.

To demonstrate these cumulative effects, Munro, Saxton and Butters (2000) employed a cross sectional design to explore the potential ongoing neuropsychological effects of alcohol despite abstinence in 36 individuals recruited from a Veteran’s Affairs substance abuse treatment program and one private clinic in Pittsburgh, USA. All subjects met the DSM-IV criteria for alcohol dependence, had been drinking for 10 years and over, and were aged between 55 and 83 years. The individuals were split into two groups, being those abstinent for less than six months (n=18) and those abstinent for over six months (n=18). These groups were compared to 17 control subjects, with no diagnosis of alcohol abuse or dependence.

A neuropsychological test battery was performed with all participants of the research project. The results determined that those with less than six months of abstinence performed significantly worse than the control group, with the greater than six months abstinence group performing equally with the control group in a number of tests. However, there was a trend of poor performance in memory related tasks such as delayed recall and word list learning. The authors concluded that “Scores for memory of a word list and for simple and complex figures indicated that
memory functions are vulnerable to the long-term effects of alcohol use among older people, even with abstinence,” (p. 1514).

Potvin et al.’s (2008) cross sectional Canadian study of 53 patients of a Montreal health service who met the DSM-IV criteria for schizophrenia, directly contradicted the results found by Harman, finding poorer strategy and greater depressive episodes in individuals with a dual diagnosis. The subjects were split into two groups, being dual diagnosis (n=30), and those with schizophrenia with no substance use comorbidity (n=23). Mean ages for both groups were similar to Harmin’s study, however closer between the two groups (32.9 versus 36.4). A comprehensive neuropsychological assessment was performed, with performance on this task demonstrating deficiencies with working memory. The authors go on to state that studies examining cognitive performance in dual diagnosis patients have produced contradictory results, which is ascribed to a number of factors. These factors include type of testing performed, level of substance or polysubstance abuse and the types of medications used to treat the mental illness.

Despite some ambiguity in neurocognitive findings in younger patients, the research indicates that substance use in the setting of dual diagnosis is deleterious to cognition in older adults. The research literature focuses on alcohol use, thus leaving a substantial knowledge gap in the effects of other substances in older dually diagnosed individuals. Additionally, the literature identifies that a number of confounding variables, such as differences in testing regimes and psychotropic medications, make accurate assessment of cognition difficult in dually diagnosed individuals (Benaiges et al., 2012). Notwithstanding this, deleterious cognitive effects in older, dually diagnosed adults add marked complexity to the management and treatment of these individuals, therefore indicating a need for further research in this population.
Suicide and risky behaviours.

Suicide is a well-documented phenomenon among both psychiatric and substance using populations (Bailey et al., 2011). Risky behaviours, including criminal behaviours, risks to health and harm related to substance use and mental illness are also well described in adult dual diagnosis populations (Ogloff et al., 2004; David, 2012; Phillips, 2000). Unfortunately, literature describing these issues in an older adult population is scant, mostly referring to the role of alcohol dependence on suicide, or the long-term health consequences of intravenous opioid use, such as hepatitis and HIV (Richard, Bell, & Montoya, 2000). Despite organisational policy documents indicating potential harms as a consequence of risky behaviours in older dually diagnosed individuals, research remains scant (Drugscope and the Recovery Partnership, 2014).

Wadd, Lapworth, Sullivan, Forrester and Galvani’s (2011) exploration of older drinkers used a qualitative methodology, using a combination of one-to-one interviews and focus groups with 15 alcohol and other drug practitioners, and 26 older adults aged 50 and over to attempt to develop strategies to treat older adults presenting to five treatment services in the United Kingdom. Despite criminal behaviour being identified by clinicians in older adults, a number of the client participants in the research described instances where they had assaulted spouse or family members, or damaged or stolen property.

A number of other risky behaviours were identified in the discourse, with a practitioner describing an older couple who were targeted by local drug users offering to buy them alcohol and taking financial advantage of them in the process, and an older adult identified by another practitioner identifying a range of abuses in clients using alcohol, specifically identifying a client with a friend assisting with managing the client’s finances, also taking financial advantage of the client in the process.
Abuse is further documented in Friedman, Avila, Tanouye and Joseph’s (2011) case-control study. Data was generated from two trauma units in Chicago, identifying 41 cases of elder abuse. These cases were compared to 123 controls. Retrospective audit of the trauma registry data was performed, with cases being identified through a set of diagnostic codes entered into the registry for each clinical occasion. Friedman et al (2011) found that 29.3% of these individuals tested positive for alcohol on admission, with further narrative review noting that both the victim and perpetrator had consumed alcohol prior to the assault. The authors note that “Victims of severe traumatic elder abuse were more likely to be female, have a neurological or mental disorder, and abuse drugs or alcohol,” (p. 420) which resonates strongly with this study given the authors are describing, in part, a victim who fits the criteria for dual diagnosis.

Sorock, Chen, Gonzalgo and Baker’s (2006) population-based case-control study of 1,735 deaths from falls, motor vehicle accidents or suicides from the 1993 US National Mortality Study versus 13,381 controls from the 1992 US National Longitudinal Alcohol Epidemiological Survey found a number of associations between drinking and serious or fatal injury in older adults. The authors noted drinking to be associated with a higher risk of motor vehicle accidents and falls, with consumption of 12 or more drinks a year indicating a 50-70% increase in risk for both, as well as suicide. Deaths from falls were noted to be associated with moderate to heavy drinking in men. The study did note, however, that the percentage of heavy drinking tended to decrease as age advanced.

Kurtzhaler et al’s (2005) study of 615 individuals admitted to an Austrian emergency department sought to investigate the role alcohol and benzodiazepines play in falls. The study analysed blood samples which were obtained over a one-year period, with the mean age of individuals experiencing a fall being 64.8 (SD ± 20.8). In concordance with Sorock, Chen, Gonzalgo and Baker’s study, it was found that alcohol consumption was higher in males, and, supporting the finding that heavy alcohol consumption declined with age, the lowest consumption
was found in individuals 70 years and over. In individuals up to 70 years old, it was noted that alcohol consumption was higher in individuals injured due to a fall than in injuries due to other causes, indicating that falling is a serious concern in adults who consume alcohol.

In regard to benzodiazepine consumption, 8.5% of male and 3.2% of female blood samples contained benzodiazepine. It was noted that 3% of males and 0.3% of females had consumed both alcohol and benzodiazepines prior to falling. Plasma concentrations of all individuals testing positive to benzodiazepines were noted to be all within the therapeutic range or lower, perhaps indicating that the individuals included in the study were taking benzodiazepines as prescribed by a treating medical practitioner.

Carter and Reymann (2014) explored the use of emergency departments by older adults attempting suicide in their research. Data from 22,444 visits by individuals 65 years and over was extracted from the 2006 Nationwide Emergency Department Sample, which covers 20% of all hospital-based emergency departments in the United States. Descriptive and multivariate statistical analysis of the sample was performed, finding that approximately 46% of all visits made by adults 75 and over were made for suicide related injuries, with 49.2% of all older adult suicide related visits involving some form of substance use. The authors describe trends in the literature regarding rising suicide rates and drug use amongst the middle-aged adult cohort, speculating that this trend will likely result in higher figures recorded as this population ages. Clearly, this is concerning regarding the population under examination in this study and may indicate future demand for older adult mental health services growing exponentially.

From an Australian perspective, De Leo, Draper, Snowdon and Kõlves (2013) case-control study sought to identify the psychiatric and psychological factors contributing to suicide in older adults in two Australian states, Queensland and New South Wales. Cases were identified from both
middle aged (35-59, n=188) and older adults (60 and over, n=73) using Coronial data, with clinical interviews then being conducted with the next of kin of the deceased. These cases were compared with “sudden death” controls (middle aged n=103, older adults n=79). Despite a poor response rate in the next of kin group (46.6% for suicide cases and 36.5% of controls), semi-structured interviews were conducted to determine the presence or absence of a number of predictive factors for suicide.

The results of the study found 61.6% of older adults had at least one psychiatric disorder at the time of death, with mood disorders being the most prevalent. It was also found that psychotic disorders and substance use were higher in the middle-aged cohort, however it should be noted that 13.7% of older adults had an alcohol use disorder, amounting to 10 individuals of the group of 73. Despite this, the authors caution in their discussion that alcohol abuse remains an extremely variable risk factor, being important in a number of countries yet less so in others according to other published research. The most significant independent predictor, as noted in other studies in this literature review, is living alone.

Although research regarding suicide and risky behaviours in dually diagnosed older adults is scant, important learnings are found within the literature. Elder abuse, particularly in the financial realm, is a topic that has generated much research. However, this research rarely includes specific mental illness or substance using older adults. Likewise, criminal behaviour in older, dually diagnosed adults is seldom a function of research interest, perhaps due to the notion of criminal desistance theory, in which older adults are assumed to have ceased their criminal behaviours earlier in life, much like the maturing out hypothesis discussed earlier in this literature review (Paternoster & Bushway, 2009; Warr, 1998).

However, perhaps the most concerning reason for a lack of research exploring these issues in older dually diagnosed individuals is a simple lack of identification and under diagnosis. With
studies citing alcohol and other substance use being frequently missed in assessment of older adults, it may simply be a case of false assumptions that substance use disorders do not exist in older individuals at a prevalence level justifying research effort (Clay, 2010; Loukissa, 2007).

**Contemporary Treatment**

This section explores contemporary assessment and screening tools applicable to the older adult cohort. The section also examines the attitude of clinicians towards dually diagnosed individuals, which many commentators in the dual diagnosis field have identified as a barrier to effective treatment (Kenneth Minkoff & Cline, 2006).

**Screening tools specific to the aged cohort.**

Screening for alcohol and other drug use, although pivotal to a comprehensive psychiatric assessment, is often neglected when assessing older adults. Badrakalimuthu, Rumball and Wagle hypothesise that this may be due to a reluctance to enquire as to drug and alcohol use in older adults, a lack of training or that addiction processes may be incorrectly attributed to delirium or dementia (2010). When combined with a trend towards under diagnosis in older adults, the need for formalised screening in all older adults becomes necessary in order to detect the presence of alcohol or other substance use disorders (Crome et al., 2011). During the course of this literature review, few studies were found assessing contemporary screening tools in older adult populations.

As identified in a Turning Point Alcohol and Drug Centre investigation into treatment needs of older adults, screening tools need to be specific to older adult populations (Hunter et al., 2010). Standard screens often incorporate social, legal and employment related domains of questioning that may not apply to the older person, thus affecting the results of screening. The report also contained a qualitative data phase, where a number of alcohol and other drug, community health and general practice key informants expressed concern that contemporary screening tools were “…
not sufficient for understanding the full complexity and potential harms for older people,” (p. 40). The key informants (n=17) felt that these tools needed to be expanded to explore additional domains, such as life events that cause stress and grief, medical conditions, cognitive function, legal problems, mood, and social concerns.

Several screening tools for alcohol and other drugs have been developed with the aim to provide a formalised testing mechanism that is efficient, simple to administer and reliable when used by a number of clinicians. The AUDIT, developed by the World Health Organisation, is one such tool (see appendix H for the AUDIT). Babor, Higgins-Biddle, Saunders and Monteiro (2001), in their manual describing the AUDIT, consider its utility in a number of situations, with the development and evaluation of the tool taking place over two decades. Success with the AUDIT led to the development of the DUDIT, a screening tool assessing specifically for illicit substances.

Despite the AUDIT being standardised cross-nationally, through a 1982 validation project spanning six counties, formal validation with older adults has not been performed to date. Notwithstanding this, the AUDIT remains the screening tool of choice for many health providers in both the mental health and alcohol and other drugs fields. Philpot et al (2003) sought to evaluate the AUDIT in older people by correlating the AUDIT with a clinical interview of 128 patients of a community old age psychiatry service over a 7-month period during 1998-1999. The AUDIT was compared with an older alcohol screening tool, the CAGE, which at the time was noted as the predominant screening tool in use (see appendix H for the CAGE). It was noted that the AUDIT was superior in detecting problematic alcohol consumption compared to the CAGE when statistical analysis for sensitivity, specificity and positive predictive value was applied.

Another variant of alcohol screening test, the MAST-G (see appendix H for the MAST-G), has been developed and validated on elderly populations. Hirata, Almeida, Funari and Klein (2001)
explored a random sample of 304 male patients of a geriatric outpatient service, aged 60 or over, in a public teaching hospital in Brazil. Two geriatricians administered the standard MAST, with the 64 patients scoring 4 or greater assessed by a psychiatrist to determine the presence of alcohol abuse or dependence in accordance with DSM-III-R criteria. As a comparison, 59 patients were selected with a score lower than 4 for assessment by the psychiatrist. Compared to the “gold standard” of DSM diagnostic criteria, the MAST fared well, with sensitivity and specificity values when applied to the MAST score of 4 or more being 91.4% and 83.9% respectively. As the authors note, Morton, Jones and Manganaro (1996) achieved similar results with the MAST-G in a study of 120 male veterans aged 65 and older, although the intent of the development of the MAST-G, being greater sensitivity and specificity on older populations, does not appear to have been realised in this study.

Johnson-Greene, McCaul and Roger (2009) also sought to validate the MAST-G in a population of 100 individuals admitted to a US inpatient unit after acute stroke. Included participants were noted to have “mild” cognitive impairment, however those with a severe sensory impairment were excluded from the sample. A trained researcher administered the MAST-G, with linear regression being applied in order to produce a short version (SMAST-G) with comparable reliability and validity. The authors found a similar sensitivity at the 4-item level, being 89%, however displayed a lower specificity at 42%. The authors describe this phenomena as being possibly due to wording of many of the MAST-G questions, some of which imply recent events and others that attempt to discern lifetime behaviours. The authors also caution that the MAST-G may not perform well when attempting to detect current hazardous alcohol use, which is a fundamental prerequisite for any screening tool used in a mental health setting.

Schonfield et al’s (2010) development of a pilot program of screening and brief intervention in Florida, USA demonstrates the need for integration of effective screening tools as a key element of successful, cost-effective treatment. Between May, 2004 and May, 2007, the project completed
3,497 full screenings of individuals referred to four agencies. A brief pre-screening interview was utilised to determine potential substance use disorders, with those recording positive results invited to participate in the full project interview. This interview screened for alcohol, illicit substances and prescription medication misuse, as well as depression and suicide risk. The authors noted that the screening protocol was useful for determining “hidden” cases often overlooked by more traditional service methodologies, further highlighting the importance of effective screening tools in detecting both alcohol and substance use disorders.

Returning to Hunter et al’s (2010) Turning Point Alcohol and Drug Centre study, the key informants interviewed discussed screening and treatment implementation in a number of situations. They noted that urgent care centres in the USA screen between 200 and 300 older adults monthly, using brief interventions for positive screens (brief interventions are discussed in the “contemporary treatment approaches” section of this literature review). Additionally, screening and assessment takes place on an outreach model, in the individual’s home, incorporating a complete, conversational style of health assessment where alcohol and other drug assessment is combined with other questions regarding health status. Clearly, both the AUDIT, DUDIT and MAST-G tools do not achieve this aim, rather providing a structured framework for clinicians to perform rapid assessment of an individual’s substance use and its impact on their functioning. It is also of note that the Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) is used in many clinical settings with good reported validity, however the verification of this tool specifically in older adults has not occurred to date (Humeniuk et al, 2008; Tiet, Leyva, Moos and Smith, 2016).

**Contemporary treatment approaches.**

Contemporary treatment for substance use disorders involves two broad categories of therapeutic approach: psychosocial and pharmacological. Pharmacological treatments, including methadone maintenance therapy for opiate dependence and novel medications such as acamprosate
and naltrexone to abate cravings related to alcohol have received varying reports regarding degrees of success (Anton, O’Malley, Ciraulo, & et al., 2006; Fischer, Rehm, Kim, & Kirst, 2005). Applying the complexities of comorbid mental illness to substance use requires the use of various pharmacotherapy, including antipsychotic medications, and brings new challenges in respect of adherence to regimens designed to promote either reduction of, or abstinence from, substance use (Sreenath, Reddy, Tacchi, & Scott, 2010).

Moy, Crome, Crome and Fisher (2011) found in a systematic review of 16 studies concerning treatment of substance use disorders in adults aged 50 or over that poor information on the type of pharmacotherapy, dose, and criteria for prescription provided little support for medications that could be considered safe and effective in older adult populations. Additionally, the authors noted that follow-up periods for the majority of studies reviewed were less than a year, making it difficult to draw conclusions about long-term outcomes, particularly when considering the possibility of relapse over time. As these studies concerned mainly substance use treatment, it is evident that the dearth of literature concerning older adults with dual diagnosis extends to treatment modalities. As such, the following studies do not relate to older adults, however demonstrate the approaches to treatment predominating the contemporary literature.

Outlaw et al. (2012) sought to determine the effectiveness of a treatment program in a specialised community health centre in the USA, by completing a baseline and 6-month follow up interview of 199 individuals who completed the program between January 2005 and October 2007. The manualised program, based on cognitive behavioural techniques and relapse prevention strategies, had participants meet weekly for 18 sessions. Additionally, case management services, individual therapy sessions and medication supervision were provided. Program completers were defined as those attending 14 or more sessions.
Comparing completers of the program (n=84) and noncompleters (n=115), completers showed cognitive improvement, including a reduction in the number of days they had trouble understanding, remembering and concentrating, and a reduction in the use of non-medical prescription drugs. Additionally, decreases in binge drinking and general alcohol use were recorded from intake to the follow-up interview. Subjectively, participants also reported a reduction in stress and improved emotional wellbeing, including feeling less depression and anxiety. Although this study was not specific to an aged dual diagnosis population, it does indicate the potential for integrated, intensive treatment for substance use disorders.

Boden and Moos (2009) examined dual diagnosis patient responses to standard substance use treatment, finding that although reduction of substance use did occur, worse psychiatric outcomes were experienced. The sample comprised 3,048 alcohol dependent male Veteran’s Affairs patients, with one year and five year follow up completed with 80.4% of the initial sample. During follow-up, it was found that patients with dual diagnosis were less satisfied, and felt less supported with substance use treatment than those without a co-occurring mental illness. As the authors comment, these findings tend to indicate the need for integrated treatment that focuses both on the psychiatric disability as well as substance use disorders, rather than attempting to treat each comorbidity in isolation.

The concept of integrated, specific treatment is addressed in a study performed by James et al. (2004). The authors conducted a randomised control trial to determine the efficacy of a dual diagnosis specific group therapy comprising weekly 90-minute sessions over six weeks. Participants (n=58) were recruited from three community health centres in Western Australia and randomised to an intervention group (n=32) that received the manualised weekly sessions tailored to their stage of change, as well as mental health interventions, with the control group (n=31) receiving a single educational session.
Follow up was performed at three months, comprising three measures of substance dependence and polydrug use, being psychopathology, quantity and level of AOD use. Paired $t$ tests showed a significantly greater improvement within the intervention group, with improvement in psychopathology, drug abuse and need for antipsychotic medications. Reductions in cannabis, alcohol and polysubstance use were also indicated when compared to the control group. Noted by the authors were the limitations of the small sample size and inability to perform blinding procedures regarding intervention status. The authors did note that retention in the study was better than previous attempts at randomised control trials in this population, perhaps indicating a higher motivation to change in the study participants, which is not necessary a common factor in dual diagnosis populations (Martino et al., 2002).

Mangrum, Spence and Lopez (2006) attained similar results with integrated psychiatric and substance use treatment in their research comprising 216 clients of three Texas dual diagnosis pilot programs. The participants were randomised to either an integrated treatment program ($n=123$), or a parallel treatment program ($n=93$), whereby mental illness and substance use disorder were treated separately. Mean age of the participants was 36.5 years. The integrated treatment model operated under a number of principles including assistance with medication management, housing, skills training, community linkage and treatment tailored to the client’s stage of change.

Analysis involved baseline measurement of psychiatric hospitalisation and arrest rates, with follow up being performed at one year. Logistic regression was employed to compare the two outcome variables. This data analysis determined that the incidence of hospitalisation in the integrated treatment group decreased, while the parallel treatment group had an increased incidence of hospitalisation for psychiatric purposes. Similarly, arrest rates fell in both groups, however the integrated group recorded a greater reduction whilst the parallel group arrest reduction was
marginal. As the authors note, several studies examining integrated treatment found similar reductions in incidence of psychiatric hospitalisation and a decrease in days in hospital.

While there may be grounds for a fiscal argument that integrated treatment initially results in long, expensive hospital stays, Timko, Chen, Sempel and Barnett (2006) found that significant cost savings could be made by “… shifting the locus of acute treatment from hospital to community care,” (p. 163). The research examined 7 Veteran’s Affairs substance use and psychiatric treatment services in the USA. The services admitted a minimum of three dual diagnosis patients per month, and were all attached to a community residential facility. A total of 230 participants were recruited to the study, and as noted earlier, a common caveat to Veteran’s Affairs studies is that samples often comprise a high number of males. In this case, 96.5% of the sample were men.

Mean age of the sample was 45.4 years old, with 173 assigned to hospital care and 57 undergoing treatment in a community residential facility. Bed access was identified as the primary reason for the uneven distribution of the sample to hospital or community care. This limitation aside, the study found that dually diagnosed individuals had better substance use outcomes when assigned to community care, with assessment being made using an adapted Assessment of Severity Index applied on admission and at one year. It was also found that individuals assigned to hospital care had a higher number of mental health admissions, with longer stays from baseline to follow up. The authors hypothesise that community care allows integration towards “normal” roles, such as independence and illness management, along with avoiding the isolation and stigma associated with hospital care.

In summary, the literature indicates that treatment for dual diagnosis is most successful when occurring concurrently with any psychiatric treatment that may be taking place. To achieve this treatment modality, it is apparent that health services must reconsider the way they deliver and
provide mental health services. Furnishing an argument that treating dual diagnosis effectively is “too expensive” due to longer index admissions and the need for greater training among healthcare providers may result in individuals effectively being committed to a high number of psychiatric admissions throughout their lives. In respect of older adults, failing to manage dual diagnosis effectively may lead to deleterious neuropsychological effects, risky behaviour and carer burnout. The impetus to find cost effective, deliverable treatment interventions is imperative to tackle the problems associated with co-occurring mental illness and substance use disorders.

Clinician attitudes to dual diagnosis.

As discussed in the Background chapter of this thesis, one of Croton’s (2005) commonly identified barriers to system improvement for individuals with dual diagnosis involves the judgemental attitudes of some clinicians, and a general attitude that substance use disorders are not the “business” of mental health services. Accordingly, a number of researchers have sought to investigate the attitudes of mental health clinicians working with individuals with co-occurring substance use disorders, both to identify any impact on service delivery and explore the experiences of consumers seeking treatment by services (Szirom, King, & Desmond, 2004).

Todd, Sellman and Robertson (2002) aimed to identify the barriers to optimal care for dually diagnosed individuals in New Zealand by conducting a series of 12 focus groups involving 261 clinicians, consumers and family members. Focus group size ranged from 4 to 63 participants, bringing into question the ability of participants to share their answers freely in the larger groups (Zuckerman-Parker & Shank, 2008). The authors rationalised the necessity of using large groups in order to sample geographic service regions across New Zealand. The key theme arising from analysis of the responses was that of attitude issues, with it being noted that “… judgemental attitudes about substance use often coloured the care that … patients received, especially from
mental health services,” (p. 794). A number of examples were cited by service users describing individuals being denied mental health treatment due to a concurrent alcohol or drug problem.

Further, participants identified an “insistence on abstinence and confrontation,” with individuals often pressured to stop using substances (p. 795). Little regard was given to attempting to encourage individuals to reduce their use, or implement harm reduction strategies. This notion seemed to stem from responses indicating that consumers of mental health services often believed that clinicians implied that substance use was a matter of choice. This attitude, when combined with the knowledge deficit identified by clinicians, led to a prevailing attitude that alcohol and other drugs were “not the business of mental health services,” (p. 794).

The notion of inadequate preparation to care adequately for dually diagnosed individuals was further explored in Deans and Soar’s (2005) qualitative study of 13 mental health professionals working in a Victorian regional community mental health service. In depth interviews were conducted with a convenience sample being employed to recruit 10 nurses, one social worker, one psychiatrist and one psychologist. Participants described feelings of anxiety, nervousness and being overwhelmed when caring for complex dual diagnosis consumers, often related to the perception that they were not adequately prepared during their university education. This knowledge deficit led to a number of negative emotions being experienced toward dual diagnosis consumers, which the authors describe as influencing both professional judgement and coping responses.

Van Boekel, Brouwers, Weeghel and Garretson (2014) conducted a questionnaire of 180 general practitioners (GPs), 89 healthcare professionals working in general psychiatry and 78 addiction specialists in the Netherlands in order to determine attitudes towards working with individuals with substance use disorders. The findings, echoing that of Deans and Soar, indicate that the addiction specialists had the highest regard for working with substance using individuals,
followed by GPs and mental health professionals. The questionnaire instrument also sought to examine attitudinal and emotional beliefs towards individuals with substance use disorders, finding that the differences in regard were not related to emotional or attitudinal beliefs of health professionals. Rather, higher regard was a result of greater exposure to working with individuals with substance use disorders, knowledge of treatment systems, and a belief that successful addiction treatment was possible.

Coombes and Wratten (2007) used a purposive sample of seven mental health nurses working with dual diagnosis in a community setting in England. Data collection took place through semi-structured interviews. Again, poor preparation for working with this consumer group was identified, with participants all identifying that dual diagnosis was not covered in their initial education. Despite this, participants often felt that they were soothing the anxieties of colleagues encountering substance using clients, with descriptions of other healthcare workers having a great deal of reluctance to work with substance using individuals. One participant described health care professionals going to great lengths to avoid seeing dual diagnosis clients, with the general notion that these clients were “someone else’s problem” due in part to a fear of being held responsible for their actions. These prevailing attitudes often led to other services, such as GPs, excluding difficult cases.

One participant stated “The old school of thinking is that there is nothing that can be done for these people. They are seen as a waste of space - a waste of resources,” (p. 384). This was often expressed in the research, with other healthcare professionals expressing this sentiment by treating individuals with a dual diagnosis as a lower priority, and a waste of time. The participants described this as a source of frustration, often having to deal with prejudices, assumptions and negative attitudes expressed by colleagues. This was confounded by the perception that members of the participant’s own mental health team often viewed dual diagnosis strictly in line with the medical
model, with consultant psychiatrists often demanding abstinence from clients while neglecting to explore the social and economic issues inextricably linked with dual diagnosis.

To balance this perspective, Staiger et al (2011) used a purposive sample to recruit 44 individuals with a high prevalence mental illness and concurrent alcohol or other drug disorder to participate in semi-structured interviews that sought to explore their experiences of mental health services, with thematic analysis being conducted to discern prominent themes. Two overarching themes, barriers to treatment and improving services, were identified. Participants described structural barriers, including delays in response during times of crisis as a result of feeling dismissed, unheard or judged when presenting at service entry points seeking help. These entry points included emergency departments and mental health triage services.

The authors note a number of participants indicated a need for healthcare workers to undertake further training and education in order to reduce judgemental attitudes experienced by individuals seeking assistance from mental health services. Again, staff at entry points featured in the narrative, often demonstrating a clear lack of compassion and empathy, and implying through their communication with individuals that they felt them to be an imposition. Participants also went on to describe positively a local integrated mental health and alcohol and other drug service, where they felt healthcare workers provided a friendly, respectful, non-judgemental and practical service, indicating the difference clinician attitudes make in the positive experience of service users.

Although the aforementioned studies did not explore attitudes of clinicians towards older adults with dual diagnosis, they indicate the problem Croton identified as a barrier to improving system responses accurately (2005). During this literature review, no studies specifically exploring the attitudes of clinicians towards dually diagnosed older adults were located. However, it is of note that a number of authors exploring the topic attribute attitudinal issues to a lack of training and
educational preparedness. This finding in itself provides justification for the third phase of the current study, which seeks to explore both the attitudes towards dual diagnosis and perceptions of educational preparation to manage this cohort within the MAPS team of clinicians.

**Future Challenges**

Aged psychiatry faces a number of potential challenges in respect to dual diagnosis in the future. Some of these challenges are explored in this section. These challenges by no means represent the entire spectrum of issues into the future, particularly with the emergence of new and novel drugs (Khey et al., 2014). Despite this caveat, the following section presents three emerging challenges to aged psychiatry services.

**Methamphetamine.**

At present, methamphetamine presents a significant future challenge to aged psychiatry services. In the Australian context, methamphetamine began to gain traction in the drug market in the last two decades, pushing aside heroin as the abused illicit substance of choice for many due to its lower cost and constant availability. Methamphetamine is also becoming a genuine alternative for drug smugglers, dealers and manufacturers due to the ability to make the drug with a number of easily obtained precursor chemicals in clandestine laboratories, thus avoiding the need for elaborate importation concealment (McKetin & McLaren, 2004).

In respect of older adult mental health services, methamphetamine presents a number of unknown factors that will likely be faced in the coming decade as users age. According to the Australian Crime Commission (2014), seizures of amphetamine-type stimulants (methamphetamine and 3,4-methylenedioxymethamphetamine [MDMA]) for the year 2012-2013 are the highest on record. This report indicates that worldwide, methamphetamine is the second most used illicit drug
after cannabis, and demonstrates a steadily increasing trend of detections of amphetamine-type stimulants since the 2003-04 reporting period. Domestically, the majority of the 757 clandestine drug laboratories detected during 2012-13 were manufacturing amphetamine-type substances, and a large proportion of surveyed drug users (88%) reported crystal methamphetamine (“ice”) as easy or very easy to obtain.

Irvine et al. (2011) performed a wastewater analysis in South Australia to determine a true prevalence of methamphetamine use in Adelaide and regional South Australian towns. The analysis, conducted from April 2009 to October 2009, involved taking sewage samples from inlet pipes of a number of treatment plants. The samples were then analysed for metabolic markers of a number of illicit substances. Results from the analysis demonstrated methamphetamine and MDMA prevalence at rates 10-40 times higher than European countries. This finding demonstrates the significant differences between Australia and both the United States and Europe regarding substance morphology, showing a clear preference for methamphetamine use in Australia.

Lowfall, Schuster and Strain (2008) explored a United States treatment episode database for the years 1992-2005 to determine whether the profile of older adults entering substance use treatment had changed. Admissions per year were from 1.55 million in 1992 to 1.85 million in 2005, with 75,899 of these individuals being 55 years or older. During this period, data obtained from the treatment database indicates a rise in methamphetamine as a primary substance used in adults 55 years and over from virtually none in 1992 to 1.4% of the sample in 2005. Adults 50-54 years old rose from the same position to 2.6%. Although statistically small in respect of percentages, this figure accounts for nearly 7,500 older adults using methamphetamine as a primary substance. Unfortunately, comparison to an Australian sample is impossible due to a dearth of local data concerning older adults.
As these studies demonstrate a definite cohort of methamphetamine users, with increasing numbers in the older adult cohort, it is timely to question the lasting effect of the use of amphetamine-type substances on cognition over time. Given that aged psychiatric services often manage cognitive decline, both as a result of organic processes and chemical insults (such as alcohol and other drugs), ageing methamphetamine users may pose a substantial challenge to the clinical capabilities of services. As Barr et al. (2006) note, “[Methamphetamine] is a psychostimulant drug that acts on the central nervous system … causing the release of monoamine neurotransmitters, including dopamine, [noradrenaline] and serotonin,” (p. 302).

Barr et al. reviewed contemporary research concerning the neuropsychological effects of methamphetamine use, with animal studies indicating that neurotoxic effects tend to last for months or years. These neurotoxic effects include the loss of dopamine terminals in the brain. In human subjects, research discussed by the authors has found a reduction of dopamine levels in the brains of long term methamphetamine users in the vicinity of 50-60%. These changes in cerebral tissue tend to manifest as “… profound neuropsychological effects,” (p. 306), including attention, working memory and executive function deficits. These structural neurotoxic defects are reported in a number of other studies (Cadet, Krasnova, Jayanthi, & Lyles, 2007; Jeong et al., 2013), including a twin study where the neuropsychological deficits of stimulant abuse persist for at least one year from abstinence (Toomey et al., 2003). However, perhaps the most challenging aspect of methamphetamine use in dual diagnosis is that of psychosis precipitated by use of the drug.

In a multi-site study of methamphetamine-induced psychosis spanning four countries, Ali et al. (2006) found 98% of Australian users of the drug had experienced persecutory delusions, 68% auditory hallucinations and 88% delusional ideas. The study, conducted simultaneously across Australia, the Philippines, Thailand and Japan, involved structured interviews and questionnaires to a total of 193 participants. The participants were adults 18-59 years old who had been admitted to
hospital for methamphetamine-induced psychosis. Non-drug induced psychotic disorders, such as schizophrenia, were excluded from the study.

In addition to the psychotic symptoms mentioned, 30% of the Australian sample experienced disorganised behaviour. Differences in the morphology of the psychosis was noted between the four countries, however Australian methamphetamine users tended to suffer a higher number of positive symptoms (such as hallucinations and delusional thinking), of a more severe nature than the other countries included in the study. As noted in the level of drug use across the four samples, Australian participants recorded higher levels of dependence or abuse; they also self-reported higher cravings for methamphetamine.

Another significant concern in methamphetamine use is the harm associated with injecting the drug. The majority of methamphetamine users in Australia inject the drug, which is a shift from earlier use that noted smoking or snorting as the preferred routes of administration (Australian Crime Commission, 2014). Accordingly, users open themselves to a number of harms associated with injecting drug use. Fairbairn et al. (2007) found in a study of 1587 Canadian injecting drug users a similar shift to injection of methamphetamine, with a high degree of syringe sharing noted with use of the drug. Participants were followed between May 1996 and December 2004, providing blood samples and participating in clinical interviews at baseline and twice yearly. The sharing of injecting equipment brings substantial risk of blood borne viruses, including hepatitis and human immunodeficiency virus (HIV).

Similar results were found by Nyamathi et al. (2008) in a study of 664 homeless individuals in Los Angeles. Recruitment was via a number of homeless shelters participating in the research and involved a number of questionnaire instruments administered to participants between September 2003 and June 2006. The mean age of participants was 42. Approximately one quarter of
participants reported lifetime methamphetamine use, with 27% reporting injecting. Again, the risk of blood borne viruses via syringe sharing was noted as a significant risk of this behaviour.

Iudicello et al. (2014) examined the combined neuropsychological effects of methamphetamine and HIV in a study of 210 individuals recruited as part of an HIV and ageing program in San Diego. Among the participants were 116 adults aged over 50, who were compared to adults 40 years or younger (n=94). The study found detrimental effects of prior methamphetamine dependence on the cognitive performance of individuals with HIV. Of relevance to a MAPS cohort is the notion of the authors, supported by prior studies in this area, that deficits accelerate after age 50. Also noted was an association between earlier age methamphetamine dependence diagnosis and poorer overall cognitive performance.

Although of concern to researchers in the present age, methamphetamine looks to present a number of serious challenges to aged psychiatry services in the future. As the research examined in this section indicates, neurocognitive performance may be seriously compromised in long-term methamphetamine use, potentially leading to a cohort of individuals displaying dementia-like symptoms akin to those displayed through long-term alcohol abuse. The burden of psychotic illness associated with the use of this drug, combined with the potential complications from HIV infection associated with syringe sharing behaviours, may prove to be a huge challenge to services despite competency with individuals with dual diagnosis. As is observed in contemporary adult mental health settings, methamphetamine may well become the greatest challenge faced by aged psychiatry in years to come (Gonsalves, Sapp, & Huss, 2007).

An ageing methadone population.

Long hailed as the answer to opiate addiction, methadone is an orally administered opioid with a long half-life. Described by supporters as reducing illicit drug use, criminal behaviour and
bloodborne infections while increasing social participation, methadone programs in Australia have undergone significant increase in capacity since their introduction (Bammer, Battisson, Ward, & Wilson, 2000). As of October 2012, 14,085 individuals in Victoria were enrolled in methadone programs (Department of Health, 2013c). However, methadone poses a number of challenges to an ageing population of drug users. These challenges, as indicated in the literature below, primarily relate to a high degree of co-morbid mental illness, ongoing substance use and neuropsychological consequences of long-term exposure to opiates.

Rosen, Hunsaker, Albert, Cornelius and Reynolds (2011) conducted a systematic literature review of studies related to heroin addiction in adults 50 years of age and over. A number of these studies recruited their sample from methadone maintenance programs in the United States. These studies indicated that older adults experience significant societal challenges and stigma related to their drug addiction, ageing, HIV status, mental health and participation in the methadone program itself that caused definite problems with both accession and retention in substance abuse treatment programs. Additionally, despite these individuals being enrolled in a program designed to treat their substance abuse, high rates of mental illness (primarily depression) were reported.

Rosen, Smith and Reynolds (2008) recruited participants from a methadone clinic in the United States to examine the extent of co-occurring mental illness. Participants were 50 years of age and over. One hundred and forty adults were interviewed and a comprehensive mental and physical health testing battery was applied. Additionally, urine drug screens were conducted regularly as part of the clinic’s procedures, with participants giving consent for these to be monitored as part of the study. Of this sample, 57.1% were identified as having a co-occurring mental health diagnosis, with major depressive disorder being most prevalent. Additionally, 47.1% of the sample were taking psychotropic medication for a mental health problem.
In addition to the complexity of what is effectively a dual diagnosis population being managed by substance treatment services, general practitioners and pharmacies, methadone does not guarantee abstinence from illicit substances. 61.9% of the sample had returned a positive urine screen in at least one month during monitoring. Additionally, the prevalence of alcohol use was high, with 21% of the sample reporting consuming four or more alcoholic beverages in one day in the twelve months prior to interview. These findings are supported by those of Rowe (2003), who found in qualitative interviews of individuals in St Kilda, Melbourne, that a large number of heroin users believe that methadone is ineffective, with most of their acquaintances using illicit substances in addition to their methadone dose.

Lofwall, Brooner, Bigelow, Kindbom and Strain (2005) reported similar findings in a comparative study of 41 older (50-66 years of age) and 26 younger (25-34 years of age) opioid maintenance patients in the United States. Sixty-five individuals in the sample were maintained on methadone. Assessment by trained interviewers focussed on administration of a number of tools for mental and physical health, in addition to addiction severity. Statistical comparison found that older participants were likely to be in treatment for longer and be less likely to be receiving medical assistance, partially echoing the findings of Rosen et al.’s aforementioned literature review.

Major depressive disorder was again found to be the most common co-occurring mental illness in both the older age and younger group. The authors also noted that “… study participants had high rates of many lifetime and current psychiatric diagnoses compared to general-population samples,” (p. 270). Urine drug screens in this sample showed a smaller percentage of illicit substance use, however cocaine, cannabis and benzodiazepines were found in the older adults. This smaller percentage may be due to the shorter timeframe for examination of urine drug screens compared with Rosen et al., being 16 weeks rather than 24 months.
Rosen (2004) used a review of administrative data at a methadone clinic in the United States involving clients over the age of 50 (N=143) to explore illegal drug use. Analysis of the dataset focussed on demographic variables, life stressors, exposure to drug use and illegal drug use in the past month. Illustrating a trend in the literature, 30.1% of the sample returned a positive urine drug screen in the last month. Statistical analysis discerned that exposure to illicit substances in social networks and neighbourhood settings was strongly associated with the use of illegal drugs in the past month.

In addition to co-occurring mental illness and ongoing illicit substance use, Baldacchino, Balfour, Passetti, Humphris and Matthews (2012) meta-analysis of published studies regarding the neuropsychological consequences of chronic opioid use indicates that impulsivity, verbal fluency and verbal working memory dysfunction are the consequences of ongoing use. As opiate substitution with methadone means continued exposure to opiates rather than cessation, it must be assumed that this neuropsychological dysfunction will continue. Twenty studies were included in the meta-analysis, with samples comprising adults 18 years and over with opiate use or dependence lasting at least six months. When potentially combined with the deleterious effects of other substances, prolonged mental illness and poor health, the cumulative burden of these deficits may amount to considerably difficult behaviours in older age.

The findings of Baldacchino et al.'s meta analysis are supported by Yücel et al.'s (2007) study of 30 opiate dependent subjects recruited from community drug and alcohol services and opiate prescribing general practitioners. These individuals were compared with 30 healthy volunteers matched to intelligence, age and gender of the opiate dependent group. All subjects were required to complete a functional task designed to examine neural behavioural regulation networks whilst undergoing magnetic resonance imaging (MRI) scanning. The findings indicated abnormalities of behavioural regulation, with a number of compensatory mechanisms begin
engaged within the brain to account for these abnormalities. The authors note that these compensatory mechanisms, although allowing normative performance in testing, are prone to fail in real-life situations due to a number of emotional and motivational influences, such as craving, stress and withdrawal, indicating promise for further research explaining the role of these deficits in opiate addiction.

Methadone, although often hailed as the solution to the complexities of opiate addiction presents a number of significant challenges to aged psychiatric services. As indicated by research conducted with individuals enrolled in methadone clinics in the United States, this population may represent a large population of individuals with dual diagnosis being managed by drug and alcohol services. As indicated by studies demonstrating structural and neuropsychological abnormalities of chronic opioid use, these individuals may require enhanced support as they age and these cognitive deficits become more difficult to manage in the primary health sector. With the added complexities of ongoing illicit substance use, it is reasonable to conclude that these individuals will come to the attention of aged psychiatric services in the future.
The baby boomer generation.

Baby boomers, defined as individuals born between the years 1946 and 1964 are a generation posing a number of challenges to public policy makers. This substantial group are the result of an increase in birth rates worldwide after the second World War. As well as enjoying greater fiscal freedom, the baby boomer generation has been shown to live longer and is currently moving into “old age” (Biggs, Phillipson, Leach, & Money, 2007). Due to their sheer numbers, baby boomers herald the notion of an ageing population, experienced not only locally but worldwide. Australian Government projections recognise this demographic shift, predicting that the proportion of the population aged over 65 years will double to around 25 percent of the entire population over the next 40 years (Australian Government, 2004).

The implications of an ageing population for health services are clear. Greater demands for healthcare will result in greater competition for finite resources. Treasury modelling has indicated that population growth in the 15 to 64 age bracket over the next 40 years is expected to slow to almost zero, resulting in reduced taxation to pay for the greater demand for services (Australian Government, 2004). In respect of MAPS, a service that manages adults 65 and over, demand could be expected to grow at an unprecedented rate without commensurate budget increases, requiring novel solutions to deliver mental health care within a tight fiscal framework.

In respect of dual diagnosis, several authors have postulated that an increase in older adults will result in greater substance use disorders, especially given most baby boomers have aged with a differing perspective or experience on drug use compared to current aged adults. Duncan, Nicholson, White, Bradley and Bonaguro (2010) describe America’s baby boomers as having “… greater racial and ethnic diversity, higher levels of education, lower levels of poverty, fewer children, higher divorce rates, and more openness regarding their sexual orientation than any other previous cohort of American older adults,” (p. 238). Additionally, their research sought to
determine whether the notion of ageing substance users as being mainly alcoholics is correct in the face of the significant differences of the baby boom generation.

The research examined 918,955 admissions of adults 55 and over to national substance treatment services via a treatment episode database from 1992 to 2006. During this time period, it was found that the proportion of admissions for alcohol abuse had declined from 81.7% in 1992 to 51.6%, and that admissions for other drug use had climbed from 10.3% to 32.5%. These statistics demonstrate the changing morphology of substance use, with the research also finding support for the hypothesis that the ageing baby boom generation would result in increased treatment admissions for substance use disorders.

A similar study was conducted by Lay, King and Rangel (2008), who examined two cohorts of adults aged 55 and over who were admitted to a United States inpatient addiction treatment facility from 1992 and 2002. Retrospective chart audit was the methodology employed, resulting in an overall sample of 116 individuals - 49 in 1992 and 67 in 2002. In the 1992 cohort, none of the individuals reported use of cocaine, heroin or marijuana. By 2002, 10 individuals (16% of the total cohort) were diagnosed with either dependence or use disorders of these substances.

More relevant to the study of dual diagnosis in this thesis, the total rate of prior psychiatric treatment in both cohorts was 27%. However, more individuals in the 2002 cohort (34%) were diagnosed with mental health problems during their treatment episode than the 1992 cohort (10%). The authors do attempt to explain that this variance may be due to enhanced psychiatric screening and treatment rather than a growth in mental illness diagnoses between the cohorts, however this proportion of the sample does represent a significant number of individuals with a potential dual diagnosis. Additionally, these results demonstrate the diversity of older adults presenting for
substance abuse treatment as the baby boomer cohort ages, being “... no longer a homogenous population of alcohol-addicted individuals,” (p. 122).

The incidence of substance using baby boomers with co-occurring psychiatric disorders is addressed in DiNitto and Choi’s (2010) study of cannabis use among older adults in the United States. The study examined data from the 2008 National Survey of Drug Use and Health, comprising 5,325 respondents 50 years and older. This data was obtained from a greater questionnaire, administered using computer assisted personal interviews, with a component of the survey exploring past, non recent and current use of cannabis, demographic data, psychological distress and alcohol or other substance use or prior treatment. Bivariate statistical analysis was conducted, finding that past-year users reported significantly more psychological distress, an increase in older adults using cannabis and a substantial proportion of long-term users. The study also found that past-year users were less likely to receive mental health treatment, raising the question of whether cannabis use poses a barrier to seeking treatment or becomes a form of coping with the symptoms of mental illness or psychological distress.

Colliver, Compton, Gfroerer and Condon’s (2006) work sought to project current drug users 50 years and older in 2020 by using data from the 1999, 2000 and 2001 United States National Household Surveys on Drug Abuse. Logistic regression analysis was performed on the data to describe the relationship between independent variables and current drug use in 2000, and a predictive model developed in order to predict the prevalence of use in 2020. This analysis indicated that drug users 50 years and older would increase due to a predicted population increase of 52% in the over 50 age group by 2020, in line with Treasury modelling of the Australian population described earlier.
Additionally, the projected increase in marijuana users 50 and older was 355%, from 719,000 to 3.3 million. Use of any other illicit drug was projected to increase from 1.6 million users to 3.5 million users, and non-medical psychotherapeutic drug use from 911,000 to 2.4 million. These figures demonstrate a substantial increase, with the authors providing a caveat that the effects of retirement had not been factored into this modelling and may alter predictions, either through resumption of previous patterns of drug use from earlier years or decrease or cessation of use due to the relief of the pressures of a working role.

The concept of retirement having an effect on substance use was explored by Bacharach, Bamberger, Sonnenstuhl and Vashdi (2008) in their research exploring the conditioning role of retirement on drug abuse. Telephone interviews were conducted with 978 blue collar, retirement eligible employees, querying drug use through the application of a validated screening instrument and collecting demographic data. The mean age bracket of the participants was 54-58 years. The findings indicated that 26% of the sample “… reported having at least one problem relating to drug abuse, and over 2% reported a level of addiction high enough to justify formal, clinical assessment,” (p. 1613). It was also noted that younger retirees reported more drug related problems than older retirees, however younger retirees who continued work reported fewer drug related issues than older retirees.

The demographic shift of baby boomers poses a number of challenges to contemporary healthcare, and aged psychiatry services are in no way immune from these challenges. The research critiqued in this section indicates a burgeoning over 65 population with an increasing number of substance using individuals amongst them. This literature also demonstrates the potential for a “hidden” dual diagnosis population whose need for mental health treatment may only become apparent as they become older, more reliant on physical health treatment or cognitively impaired. Accordingly, planning for baby boomers should be essential for aged psychiatry services,
particularly when considering the potential impact of reduced health spending due to a smaller pool of taxpayers.

Summary

This chapter has sought to examine the literature concerning dual diagnosis. During this process, it was apparent that a number of other works influenced both the contemporary state of play concerning dual diagnosis, heeding the potential consequences of co-occurring drug use and mental illness. This chapter has also illustrated a number of challenges that may prove to test the ability of older adult mental health services to deliver efficient, timely and cost-effective mental healthcare to older adults as they age.

It is clear that a number of obstacles exist in providing the model of care envisioned by the Victorian State Government in their policy document Dual diagnosis: Key directions and priorities for service development (Victorian Government Department of Human Services, 2007). Despite being recognised in this document as posing increased risks to health and wellbeing, and poorer treatment outcomes, dual diagnosis still struggles to be the “core business” that the document predicted. Surveillance of the literature tends to indicate that older adult mental health services may be the least prepared of all mental health services in respect of responding to dual diagnosis.

This chapter has cohesively demonstrated an impetus for Australian based research concerning dual diagnosis in older adults. Service based research, such as that conducted in this thesis, enables both consumer and clinician involvement in formulating treatment improvements to address the current service deficit existing in mental health services. The next chapter will describe the process employed to conduct the research that forms the basis of the transformation of service delivery to be more responsive to the needs of older adults with co-occurring mental illness and substance use disorders.
Chapter Four

The Research Process

Introduction

This chapter will provide an overview of the research methods used to achieve the aims of this study. The study took place as a three phase, mixed methods process in order to answer the research questions posed in the introductory chapter of this thesis. These research questions sought to determine the prevalence of dual diagnosis in the MAPS consumer population, identify the experiences of consumers with dual diagnosis and seek the input of MAPS clinicians caring for this cohort. This chapter will provide an overview of the data collection process, steps of data analysis, process utilised to achieve rigour and validity and finally, an overview of the relevant ethical issues considered when undertaking this study.

An Overview of the Research Process

In order to address the research questions posed in the introductory chapter, a three-phase explanatory sequential research process was undertaken. The initial phase of the process sought to determine an approximate prevalence of dual diagnosis presentations to MAPS. Phase one used a file audit to determine the prevalence of alcohol or other drug use (Moss, Gorrell, & Cornish, 2006). In the context of this limitation, the file audit also had a benefit as a quantitative data collection tool: analysis of the quality of assessment for alcohol or other drug use in the computerised record not only determined prevalence, but also assisted with determining the responsiveness of the current mental health system to older adults with dual diagnosis.

The second phase of the study used semi-structured interviews with current clients of MAPS (n=6) who were confirmed users of alcohol and other drugs. This qualitative process attempted to
explore the experiences of drug and alcohol use, service interaction, individual complexity and the interplay between the use of substances and mental health. Brief participant medical and psychiatric history formulations are presented in this phase of the research in order to provide context to the experiences and opinions of the participants themselves. The decision to present this information is recognition that individuals who consented to participate in this phase of the research either had long medical, psychiatric and substance use histories, or complex factors that led to a late onset of drug or alcohol use.

The third phase of the project used a semi-structured interview to ascertain the experiences of clinicians in caring for older adults with dual diagnosis. This phase also sought service improvement recommendations from clinicians who are involved in direct care with this patient cohort, as well as indicating potential attitudes and service barriers that may impinge on service delivery to older adults with dual diagnosis (Croton, 2005). The interview questions for this phase of the project were guided not only by the literature concerning the topic, but by the experiences of consumer interactions with mental health services and suggestions for service improvement.

Setting of the Study

The setting of this study was the geographical Victorian Government inner south east aged person’s mental health service catchment area. Alfred Health, the parent health organisation of both Caulfield Hospital and MAPS, is contracted by the Victorian State Government to provide mental health services for this area, comprising the local government areas of Port Phillip and Stonnington and the Glen Eira-Caulfield statistical local area (a graphical representation of this catchment area is presented in Figure 2). The 2011 census accounted population for this catchment area was 265,142 individuals, with 34,113 being age 65 or over (Australian Bureau of Statistics, 2011a, 2011b, 2011c).
The catchment area is highly diverse, comprising a wide variation of income levels. Areas of considerable disadvantage co-exist alongside some of the most expensive real estate in Melbourne. Areas within the catchment area contain a high proportion of single room and boarding house accommodation in the State of Victoria, along with a number of public housing estates and individual properties (Birrell, Healy, Rapson, & Smith, 2012). The disadvantaged population, particularly around the suburb of St Kilda in the Port Phillip local government area, is highly transient and a number of health, outreach and social services are situated in this suburb catering to this population (City of Port Phillip, 2014).

The Port Phillip local government area comprises an area of 11km of foreshore fronting Port Phillip Bay, with a number of entertainment and leisure precincts, office and industrial, warehousing and manufacturing areas. Substantial increases in residential development have
occurred in this area, with a concomitant increase in property prices occurring and a gradual process of gentrification changing the demographic substantially. The Stonnington local government area is mainly encompassing residential and commercial areas, with a large proportion of retailing, with tightly held pockets that are known as some of Melbourne’s most expensive housing stock. The Glen Eira-Caulfield statistical local area is comprised of mainly residential areas with associated retail. All three areas comprising the MAPS catchment are culturally diverse, with more than 28 different languages spoken and approximately 37% of the population born overseas (Australian Bureau of Statistics, 2011a, 2011b, 2011c).

The population within the MAPS catchment area is noted to be ageing, with growth in the 65-70 age group predicted to grow an average of 31% to 2022. Currently, the largest age group within the MAPS catchment is the 20-39 age group, which is conversely predicted to fall by 15% to 2022 (Australian Bureau of Statistics, 2011a, 2011b, 2011c). These predictions indicate the changing demographic characteristics of the catchment area and the future challenges highlighted in this thesis.

The Mixed Methods Design

As mentioned in the introduction of this chapter, a mixed methods design was selected for this study as it was deemed the most appropriate approach to answer the research questions posed in the introductory chapter. This section defines the concept of mixed methods research in addition to providing a rationale for the use of a mixed methods framework in this study.

Defining mixed methods.

Mixed methods research is an approach to study design that combines both quantitative and qualitative methodologies (Abbas Tashakkori & Teddlie, 1998). The intention of combining these
approaches to research is primarily to address the strengths and weaknesses of either method being utilised alone. The framework underpinning the application of mixed methods relies on the contention that researchers select the most appropriate method, or methods, to answer questions posed by the research (Hadi, Alldred, Closs, & Briggs, 2013). Mixed methods research allows the collection and interpretation of both quantitative and qualitative forms of data, allowing both to inform the results of the study (Creswell, 2014).

Wisdom, Cavaleri, Onwiegbuzie and Green (2012) describe mixed methods as “… a better approach to research than either quantitative-only or qualitative-only methods when a single data source is not sufficient to understand the topic, when results need additional explanation … or when the complexity of research objectives are best addressed with multiple phases or types of data,” (p. 722). Mason (2006) expands on this explanation by describing mixed methods as a means to encourage “outside the box” thinking, allowing research questions to be framed according to the problem at hand rather than constrained by research questions. Due to the nature of existing studies in dual diagnosis relying extensively on population data and prevalence rates, or being qualitatively focussed on substance use, this definition of mixed methods has immense significance to the design of this study.

Tashakkori and Teddlie (2010) describe a number of core characteristics specific to mixed methods research. The first of these characteristics, methodological eclecticism, considers a diverse number of methodological tools available in mixed methods research to solve everyday problems. Another core characteristic, the emphasis on a continuum rather than dichotomies, extends the initial core characteristic by proposing that research should not be limited to an “either or,” being quantitative or qualitative, instead “… being replaced by a continua of options that stretch across both methodological and philosophical dimensions,” (p. 274). The sentiment of recognising the utility of a number of research tools is echoed in the third core characteristic, paradigm pluralism,
whereby the acceptance of the existence of multiple paradigms is pivotal to mixed methods research. Again, the characteristic of emphasis on diversity at all levels of the research enterprise accedes to the notion of multiple paradigms, by recognising the variety of research methods available and through another characteristic, focus on the research question in determining methodological choice, indicating that all research designs should be considered in respect of the problem at hand.

**A brief history of mixed methods.**

The introduction of the concept of mixed methods research is credited to Jick, who described this methodology in 1979 as a means to seek convergence across quantitative and qualitative research in the social sciences (Östlund, Kidd, Wengström, & Rowa-Dewar, 2011). In terms of healthcare research, mixed methods research also served to exploit the strengths of both quantitative research (generalisability and the ability to address a wide range of clinical issues) and qualitative (the subjective experience and recognition of consumer centred healthcare) (Hadi et al., 2013). The twenty years following the initial description of mixed methods saw philosophical debate and refinement of the approach, as well as expansion into a number of varied disciplines (Creswell, 2014). The key philosophy of mixed methods research throughout this time was that the “… underlying logic of mixing [methods] is that neither quantitative nor qualitative methods are sufficient in themselves to capture the trends and details of the situation,” (Creswell, 2004, p. 7).

The subsequent expansion and interest in mixed methods studies is attributed to a shift away from theoretically driven research to studies that are cost-effective and tailored to the needs of both practitioners and policymakers (Östlund et al., 2011). Mixed methods designs have gained traction in the contemporary research arena due to key advantages, such as providing narrative voice to quantitative exploration and experimentation, bringing clinical research from the realm of pure statistical enquiry to a more humanistic and consumer centred approach (Bilinski, Duggleby, &
Rennie, 2013). These attributes have resulted in an increase in popularity in the use of mixed methodology designs in mental health research studies (Kettles, Creswell, & Zhang, 2011).

The explanatory sequential design.

A number of contemporary approaches to mixed methods research are identified in the literature to date (Hadi et al., 2013). The approach utilised in this study is the explanatory sequential design and is illustrated graphically in Figure 3. This design is a non-experimental approach to exploring the research topic through a number of methodological phases and is characterised by the initial collection of quantitative data, followed with qualitative data. The rationale behind this method is to use the qualitative findings to give meaning to the initial quantitative data (Carr, 2009). In terms of this study, the explanatory sequential design provides a prevalence rate for consumers of MAPS in the initial quantitative phase, then following with qualitative exploration of the experiences of consumers with dual diagnosis and clinicians who care for them allows the study to comprehensively explore the issue of dual diagnosis in older adults.

Traditionally, the explanatory sequential design is a two-phase model. However, during literature searches around the topic of dual diagnosis in older adults, it became apparent that clinicians played a substantive role in the care and management of these individuals. Therefore, a decision was made to include a third phase of qualitative enquiry. This decision was also guided by the results of the quantitative phase, which indicated a distinct possibility of under-diagnosis of
AOD use disorders in the MAPS population. This decision follows one of the fundamental concepts of the explanatory sequential design, which is to build the qualitative phase from the quantitative results (Creswell, 2014).

**Rationale for the use of a Mixed Methods Design.**

The rationale for the use of a mixed methods design in this study related to the need to find a research methodology appropriate to address the research questions. As mentioned in the literature review chapter of this thesis, a number of studies regarding dual diagnosis, or substance use disorders alone, in older adults are focused on population prevalence. To replicate a quantitative study locally to determine population prevalence of dual diagnosis in those over 65 was felt to have little benefit to MAPS. Likewise, employing qualitative methodology alone would illuminate the experiences of consumers with dual diagnosis and the clinicians who care for them, however the question of just how many individuals with substance use disorders were presenting to MAPS would remain.

Kettles, Cresswell and Zhang (2011) state that mixed methods is preferred to explain quantitative results with the words of research participants. Further, they indicate that mixed methods are preferred when one research method is inadequate by itself, as demonstrated above. In the context of this research study, a percentile figure of prevalence of dual diagnosis defines the existence of a problem, however it does not further explore the problem. Therefore, the decision was made to include the perspectives of individuals with dual diagnosis to illuminate the situation at hand. As the literature review progressed, it also became apparent that clinicians played a substantive role in both the care of individuals with dual diagnosis, and as a barrier to service provision (Croton, 2005; Staiger et al., 2011). Hence, a third phase of the research was added to explore this issue.
Using a purely quantitative or qualitative methodology alone failed to provide a comprehensive approach to answering the research questions posed in the introductory chapter of this thesis. Individuals with dual diagnosis present as a diverse population, and while a number of quantitative studies have provided valuable insights into the problem of dual diagnosis, qualitative research is the only methodology that allows the nuances of dual diagnosis to be explored fully, even when the limitations regarding an inability to generalise results to a wider population are considered. Perhaps one of the greatest examples of studies that have informed drug and alcohol research include Faupel’s (1991) *Shooting Dope: Career Patterns of Hard-Core Heroin Users*, which documented interviews with heroin users in the United States, and identified the notion of dynamic usage careers, which are difficult to measure using quantitative methods. Similarly, Preble and Casey’s (1969) early qualitative work demonstrated the nuances of the New York City heroin market of the time, informed by interviews with inpatients at a Drug Addiction Unit.

A mixed methods approach was also favoured to involve active participants in MAPS, being consumers and clinicians, as agents of change. Through involving both parties in a research process it was envisaged that both camps would “own” the recommendations they made. Consumer participants were provided with an opportunity to anonymously identify service deficiencies, while clinicians were able to explore the nuances of caring for one of the most complex and difficult subsets of clients in the mental health system today. Quantitative survey data, while allowing generalisation of these findings, would sacrifice the depth required to bring this level of detail to the findings and recommendations presented in the penultimate chapter of this thesis (Mason, 2006).

The advantages of using a qualitative approach to investigate this population does not dismiss the utility of quantitative data. The initial stage of the project uses a quantitative file audit to demonstrate the prevalence of dual diagnosis within MAPS. By performing this as the initial data collection stage, the research ascribes to the explanatory sequential approach (Hadi et al., 2013).
This method is described as prioritising quantitative research, then using subsequent qualitative approaches to explain the findings of the initial quantitative stage (Creswell, 2004).

A final rationale for the use of a mixed methods design is that of data triangulation. Patton (2002) describes data triangulation as a process whereby a number of approaches to investigation are employed to strengthen a study. Triangulation recognises that each method has advantages and disadvantages, and by combining methods with these strengths and limitations in mind, a more thorough exploration of the topic at hand is achieved. In this study, data has been examined from three distinct sources, providing divergent perspectives to the phenomenon of dual diagnosis in older adults.

Phase One

The first study phase sought to determine the prevalence of dual diagnosis in older adults assessed and case managed by the Caulfield Hospital MAPS. This phase of the research, in line with the principles of the explanatory sequential design, was the initial data collection activity of this study, conducted June 2014.

Description.

The initial phase of this research sought to answer the first research question, being: Does the Caulfield Hospital Mobile Aged Psychiatry Service care for a significant dual diagnosis population? To answer this question, a file audit was conducted, examining admission and assessment data from June 2012-June 2014. Files were identified spanning a two-year period immediately prior to the commencement of the file audit. Open cases (n=93) from the commencement date were included in order to include clients with open episodes prior to June 2012. These clients were included as they were actively being case managed at the time of the file
audit, and specific details of their assessment date are discussed in Chapter Five. In total, the number of records meeting the criteria for audit was 593.

The population for the initial phase of the project was individuals admitted to MAPS, with a hospital identification number and electronic file created, residing in the geographical area described earlier in this chapter. In essence, this indicated that a MAPS clinician had performed an intake assessment on the individual, comprising a number of risk screening and history questions, including the presence or absence of alcohol and other drug use. The majority of cases included in the audit were over 65, however a small number of cases were aged in their early 60s, or in extreme cases their 50s. These outliers were included as they were assessed or case managed in line with MAPS policy of accepting referrals for early onset dementia or taking client care over from the adult community care teams as they neared the qualifying age of 65 in times of low referral rates.

**Inclusion and exclusion criteria.**

The inclusion criteria for the initial phase of the study were clients assessed, case managed or admitted to MAPS within the specified timeframe (June 2012-June 2014). There were no specific exclusion criteria.

**Method.**

A list of admissions from the statewide Client Management Interface (CMI) computer program was generated for the June 2012-June 2014 period, with individual electronic assessment documents examined in the PowerChart medical records system. Files were first screened to identify the type of data available. MAPS clinicians complete an initial assessment document when first assessing referred individuals, that captures a range of information, including medical and psychiatric history, medications, mental state examination, cognition and risk assessment. The
assessment document also contains a section on alcohol and other drug use, however this was limited to describing risk in relation to current use, history and access to substances or substance using networks in addition to a simple yes or no question for current AOD use. A text box is provided for clinicians to enter narrative notes regarding current or historical patterns of consumption.

Data was recorded manually onto the paper file audit tool. Narrative on assessments was examined to determine whether alcohol or other drug use had been recorded. Brief notes were recorded in the section provided on the file audit tool. Once the manual audit process was completed, data was entered into SPSS version 21 for analysis.

**Development of the audit tool.**

A file audit tool was developed in order to allow data to be collected in a systematic fashion. This tool was guided by the principles of clinical audit. Clinical audit is reported to have been used historically as a tool to monitor morbidity and mortality, however is best defined as a quality improvement methodology that seeks to improve outcomes in the care provided by individuals by systematically reviewing care against a predefined set of criteria (Travaglia & Debono, 2009). Although a recent Cochrane systematic review identified marginal benefit of using clinical audit as a feedback tool, it was indicated that “… audit is commonly used in the context of governance and essential to measure practice [and] to know when efforts to change practice are needed,” (Ivers et al., 2012, p. 13). This statement provided strong justification for using a file audit methodology to answer the initial research question of this study.

The audit tool was adapted from a tool used by the Department of Human Services, Victoria, to audit client files. Modifications were made to attain the correct data to be measured. These tools were developed for use by independent auditors, and as such, have been subject to
rigorous review and utilisation in a legislated setting (Department of Human Services, 2011). The resultant tool was developed to gather basic demographic data (age, sex, suburb of residence, date of assessment), and health data (mental health diagnosis, diagnosed medical conditions). An additional section of the tool sought to determine whether a “yes” response was recorded in the electronic assessment document in the alcohol and other drug use section. A section was added to record a substance (if identified), and to record examination of narrative provided in the electronic assessment document.

**Reliability and validity.**

Quantitative research relies heavily on the concept of rigour to achieve results that are both reliable and valid. Reliability is defined as the ability of an instrument to be interpreted consistently across situations, and validity as the ability of the instrument to measure what is proposed (Field, 2012). In order for the initial phase of this research project to be rigorous, the developed file audit tool was required to meet the criteria of validity. Determining what the file audit tool was required to collect and incorporating these requirements into the framework of an established file audit tool accomplished this. The established tool used to base this instrument on was one devised by the Department of Human Services for external auditing of disability services (Department of Human Services, 2011).

Items measured by the audit tool included simple demographic information, such as age, sex and suburb of residence, along with the presence of alcohol or other drug use, a primary mental health diagnosis and concurrent medical conditions. Recording of co-occurring alcohol or other drug use was limited to recording yes or no, as the computerised file auditing system only allows a yes or no entry by clinicians. The electronic system also provides the ability for clinicians to enter narrative notes for assessments. To ensure reliability, only the result of the yes or no entry was recorded. No inference of alcohol or other drug use was used to record a positive result on the file-
auditing tool. During the process of auditing it became apparent that a number of assessments were recorded as ‘false’ negatives, with narrative indicating that problematic alcohol or other drug use was present. These instances were recorded as negative to preserve reliability, with written narrative collected for later qualitative analysis. All file auditing was conducted by one researcher, ensuring consistency in data collection techniques.

Data analysis.

As previously mentioned, data was entered into the SPSS version 21 computer program for statistical analysis. Notes recorded from the analysis of recorded assessment narrative were recorded in NVivo qualitative data analysis software for assessment. Quantitative analysis included descriptive and inferential statistics and comparisons of the dual diagnosis and non dual diagnosis group. The results of this analysis are detailed in the next chapter of this thesis.

Clinicians were able to enter text regarding the assessment as notes on the electronic record. A qualitative analysis of these notes was conducted to determine documented alcohol or other drug use, particularly where a “no” was recorded in the checkbox. The decision to analyse these narratives in this fashion was made as they were considered to illustrate a number of failings in the assessment process. The results of this analysis are also discussed further in Chapter Five.

Phase Two

The second study phase interviewed consumers of MAPS with dual diagnosis to explore their experiences and thoughts on both their care and living with comorbid substance use disorder. The recruitment and interviews for this phase took place July 2014 - October 2014.
**Description.**

This phase of the study employed semi-structured interviews with existing clients of MAPS who have been identified by their case manager as having co-occurring substance use disorder. This phase was considered important in order to add a qualitative “voice” to the data obtained through the initial file audit process (Jack, 2010); accordingly, a diverse spectrum of individuals were interviewed, particularly in respect of the substances they used. The need to add qualitative data was primarily required to address a substantive gap in contemporary literature, as studies interviewing older adults with dual diagnosis simply do not exist in the Australian context.

**Sampling process.**

Patton’s (2002) deviant, or extreme case sampling was selected as the sampling methodology for this phase of the study. Deviant sampling is described by Patton as a “… strategy [involving] selecting cases that are information rich because they are unusual or special in some way,” (p. 231). Seawright and Gerring (2008) argue that this sampling methodology is more appropriate than randomised sampling in small population studies, allowing the selection of cases that are representative of the population characteristics to be studied. Teddlie and Yu (2007) explain that “… deviant cases provide interesting contrasts with other cases, thereby allowing for comparability across those cases,” (p. 81). Teddlie and Yu describe the process of deviant sampling as determining a dimension of interest and then locating extreme cases in that distribution. In respect of this study, extreme cases were identified by case managers of MAPS, who were asked to identify dual diagnosis consumers of the service that they found to be complex or challenging in their presentation.

The rationale for asking case managers to effectively identify a sample to approach for interviewing follows the principles of deviant case sampling, in that “extreme” cases are identified
as examined in order to provide insights into the population (Draucker, Martzolf, Ross, & Rusk, 2007). Individuals identified by case managers to participate in the second phase of the research typically had long substance use histories, severe mental illness and a history of involvement with mental health services. Most continued to use substances, however a small number had adapted their substance use as they grew older.

Potential participants were discussed at a weekly clinical review meeting, where all members of the MAPS multidisciplinary team were present, including the consultant psychiatrist and psychologist. The decision to discuss participants at the weekly clinical review meeting allowed any concerns regarding the ability to participate to be aired, as well as providing the means to discuss contingency regarding any adverse outcomes if they were to arise.

**Inclusion/exclusion criteria.**

Inclusion criteria for this phase of the study was as follows:

a. Clients currently managed by MAPS;

b. With an identified co-occurring substance use disorder;

c. And, willing to voluntarily participate in a recorded interview.

Exclusion criteria was designed to exclude those who may be unable to provide valid consent due to cognitive impairment:

a. Mini Mental State Examinination (MMSE) score lower than 24 on last assessment by a MAPS or Alfred Health staff member;

b. Individuals with a DSM-V diagnosis solely in the family of tobacco-related disorders as their only substance use disorder (American Psychiatric Association, 2013);
c. And, those individuals currently on a Guardianship Order through the Victorian Civil Appeals Tribunal (VCAT) or any other court.

Method.

For the interviews conducted for this phase, 11 potential participants were approached with an invitation to participate in the study. This involved the provision of a flyer through their case manager, and if the participant expressed interest in participating in the research project, was approached by the researcher to provide a plain language statement for the study. The researcher, if requested by the potential participant, provided verbal explanation of the plain language statement.

Interviews took place in the participant's home; each participant was given the option of the interview taking place at the MAPS clinic or at their residence, with all expressing a preference to be interviewed at home. Interviews lasted from approximately 55 minutes to 1 hour 30 minutes. Participants were reminded they could terminate the interview at any time and specific consent was sought to record each interview using a Philips portable digital voice recorder. All participants consented to recording using the Philips portable voice recorder; upon completion of the interview, audio files were transferred to computer, loaded into ExpressScribe software and transcribed by the researcher into Microsoft Word. Participants were reimbursed $25 cash for their participation in accordance with the approving health service policy.

Development of the semi-structured interview questions.

The semi-structured interview tool used in the second phase of the study was guided by the literature review and initial phase of the study. The literature review indicated that older adults with substance use disorders often had long “careers” of fluid use, moving in and out of substance use as well as adapting their use as they aged (Best et al., 2010; Darke et al., 2009; Levy & Anderson,
2005). Therefore, a number of questions were devised to explore histories of alcohol and other drug use, in addition to determining involvement with mental health and substance use treatment services. The initial phase of the research identified a distinct lack of treatment planning or intention to refer to specialist drug and alcohol services in the assessment documentation. Questions were included in the semi-structured interview tool to determine prior substance use treatment and responsiveness to alcohol and other drug use by the service.

Although a number of questions did attempt to obtain specific information, the interview was conducted to allow the participant to tell their story of living with dual diagnosis as best as possible. To achieve this aim, basic counselling principles were applied, such as open ended questioning, reflective and summarising statements in order to allow conversation to develop and provide rich information (Martino et al., 2002).

**Rigour.**

Rigour is defined as a means of establishing competence and integrity in the research process, and as mentioned in the previous section, relies on a number of factors to ensure research meets accepted standards. As opposed to positivist methodologies, such as quantitative approaches, reliability and validity are argued to be poor measures of rigour in naturalistic, qualitative studies (Tobin & Begley, 2004). Four criteria are noted to be more suited to this type of enquiry, namely credibility, dependability and conformability (Houghton, Casey, Shaw, & Murphy, 2013). Referring to the value and believability of qualitative findings, credibility is enhanced by three factors: prolonged observation, triangulation and peer debriefing (Polit & Beck, 2008).

In the context of this study, prolonged observation has taken place prior to the creation of the research questions, through the researcher’s clinical work and reflection. Triangulation, being a “merging” of data sources, is a natural element of mixed methods studies. This study involved...
triangulation through expanding the quantitative findings with qualitative analysis, with each phase building on the results of the last (E. C. Carr, 2009). Peer debriefing, although a contentious topic in qualitative paradigm discussion, involves examination of research findings by colleagues or external experts, and was carried out both via the supervisory relationship inherent in higher degrees by research studies, and through exposing the findings of the research to robust peer review through conference presentations and journal articles (Taylor, 2013). This process occurred concurrently while the research was conducted and is evidenced in the front matter of this thesis.

Houghton (2013) also discusses the use of an audit trail and reflexivity to achieve dependability and conformability. Dependability is akin to reliability in quantitative research, indicating “stability” of data, whereby conformability refers to the accuracy of the data (Rolfe, 2006). An audit trail was kept while conducting this research, allowing verification of the research process. This audit trail includes raw research data, such as audio recordings, database files used in the first phase of the research, and coding summaries created with the NVivo computer program. These materials were stored for the time period specified in the Australian Code for Responsible Research (National Health and Medical Research Council, 2007). Reflexivity refers to the identification of the influence a researcher exerts over research findings and is aided by making decisions transparent through keeping a log of decisions made when analysing findings and robust coding strategies (Fereday & Muir-Cochrane, 2008). In the context of this study, notes relating to coding decisions were kept within the NVivo computer program, with a thematic approach employed while coding qualitative data (Polit & Beck, 2008).

**Data analysis.**

Once transcription was complete, written transcripts were loaded into NVivo qualitative analysis software. Thematic analysis was conducted to determine the salient themes emerging from the interview process. Thematic analysis is defined as the process of identifying and reporting
themes in data (Fereday & Muir-Cochrane, 2008). Key themes in the transcripts of the second phase were identified using the process outlined by Braun and Clarke (2006):

Phase 1: familiarising yourself with your data

Phase 2: generating initial codes

Phase 3: searching for themes

Phase 4: reviewing themes

Phase 5: defining and naming themes

Phase 6: producing the report (pp. 87-93)

Aside from the aid of this step-by-step approach to data coding, concept mapping of themes was also utilised in order to allow a comprehensive examination of the concepts emerging from the data. The overarching content analysis process for the second and third phases of the study is shown in Figure 4.
Challenges of the second phase.

Rosen (2014) has conducted a number of studies with older adults who are enrolled in methadone programs and describes this population as high risk due to illegal drug use and vulnerability. In addition, access is often difficult with populations who use illicit substances due to the fact that many drugs remain illegal under Australian law, and as a result, participating honestly in a research study examining this very topic renders the possibility of prosecution (Faugier & Sargeant, 1997). This was also a complexity for this study, with five participants who refused to participate in the first and second rounds of the consumer interviews citing reasons such as not wanting to relieve the trauma of long involvement with mental health services, not wishing to disclose illicit substance use or believing they did not fit the participant profile of the plain language statement as they did not consider their alcohol or drug use problematic.

Sandberg and Copes (2013) illustrate a number of issues in approaching participants who use alcohol and other drugs, including assurances of confidentiality, and an ability to complete interviews “on the spot” to avoid the risk of losing participants due to change of mind or a change of circumstances. Ethics approval necessitated a lengthy plain language statement (see Appendix 2) that, although comprehensive, provided a substantial barrier to participation. The plain language statement required verbal explanation in all interviews, and often resulted in participants questioning sections that mandated disclosure of illegal activities if required by law. The wording of the plain language statement was taken from a Victorian Government Department of Health document required as part of the ethics approval process. This section of the plain language statement frequently unsettled consumers who used illicit substances, often requiring explanation and reassurance by the researcher that data would be kept secure and not disclosed to the authorities unless mandated by a court order.
Interviewing “on the spot” was made difficult by the recruitment strategy approved by the ethics committee, whereby an introduction with an individual’s case manager was performed prior to them being approached for consent as a potential participant. This process often meant delays between the initial provision of a plain language statement, a follow up telephone call by the researcher, and a visit to further clarify the plain language statement and commence a recorded interview.

Additionally, there was a danger of a dependent relationship between the researcher and consumers previously case managed or assessed in the service. Fortunately, only one consumer had a previous case management relationship with the researcher. In this case, the consent and interview process were conducted by the senior supervisor of the research project. Transcription and coding was discussed with the senior supervisor to ensure accuracy.

During the formulation of this research project, the initial proposal sought to interview family, carers, significant others or residential facility staff as well as the consumer. Naturally, these interviews would only take place if the consumer consented. This approach was intended to provide a multidimensional view of dual diagnosis in older adults, particularly when living in residential care facilities, where staff often feel challenged and unsure about the care they provide to this cohort (Klein & Jess, 2002). Advice received prior to submission to the health service ethics committee was that a separate consent process would be required, and would likely be rejected, meaning the perspective of carers and family of many consumers was unable to be gathered during this process.
Phase Three

The third phase of the project utilised semi-structured interviews with clinicians from MAPS in order to describe the experiences, attitudes and suggestions for service improvement in the care provided to consumers with dual diagnosis.

Description.

As indicated in the literature review presented in Chapter Three, this phase was considered essential to the project in order to determine the prevailing attitudes that clinicians held, and the challenges encountered in caring for older individuals with dual diagnosis (Deans & Soar, 2005). Croton’s (2005) identification of clinician and service attributes as barriers to service also justified a qualitative exploration of clinicians providing care to older adults with dual diagnosis. In order to explore these attributes, semi-structured interviews were considered the optimum method to both allow clinicians to answer questions and examples posed to them, and to generate robust discussion of the research problems at hand (Redmond & Curtis, 2009).

Sampling Process.

Sampling in this phase was limited to clinicians working within MAPS. At the time of sampling (July 2015), clinicians in the case management stream of the service consisted of five disciplines: six registered nurses, two occupational therapists, two social workers, one carer consultant and one psychologist. Email invitations to participate were sent to a predetermined MAPS staff list held by the parent health service. Attached to this email was a plain language statement. Participants were encouraged to approach the researcher to discuss any questions around participation and were asked to agree to participate via return email. Ten clinicians were approached to participate in this phase of the research project, with all agreeing to take part in the
interview process. Four were unable to be approached due to unplanned and extended leave from MAPS at the time of the interview process (August 2015-September 2015).

**Method.**

Clinicians participating in the third phase of this research project were interviewed in the MAPS office at a time that was convenient in terms of their workload. These interviews were conducted in a semi-structured fashion. The semi-structured interview provided a number of prompts exploring experiences of providing care to older adults with dual diagnosis, service responses to dual diagnosis and suggestions for further improvement. The intention of the semi-structured interview guide was to stimulate discussion around the topics being investigated during the interview. The semi-structured interview guide in outlined in Appendix D.

A plain language statement was left with clinicians to peruse after initial verbal explanation of the research process; further explanation of the plain language statement was offered if required. The interview process mirrored that of the second phase, with all interviews recorded to a digital voice recorder, transcribed and coded using the NVivo software program. All interviews were approximately 30 minutes duration, following the semi-structured questionnaire document and providing opportunity for clinicians to add their comments, experiences and thoughts on the management of older adults with dual diagnosis in MAPS.

**Development of the semi-structured interview questions.**

The semi-structured interview tool was developed in order to raise concerns addressed by consumers during the second phase of the study. Additionally, it sought to stimulate discussion around the potential barriers to service provision (Croton, 2005) and explore any recommendations for service improvement that clinicians had. To this end, this phase of the research sought to make
clinicians active participants in the research process, to share recommendations that contributed to Chapter Nine of this thesis. In accordance with the second phase of this study, the semi-structured tool sought to merely stimulate discussion rather than provide a rigid, prescriptive framework for direct answers.

**Rigour.**

Processes to achieve rigour for the third phase of the research were identical to those employed in phase two and are outlined in detail in the previous section.

**Data Analysis.**

Data analysis for this phase followed the framework outlined in phase two, including transcription and analysis in NVivo qualitative software. The results of this process are presented in Chapter Seven.

**Ethical Considerations**

Ethical approval for this project was sought from the Alfred Health Human Research Ethics Committee. A number of concerns were raised during this process, including the aforementioned issues with interviewing consumers, data security and the legal implications of discussing illicit drug use with participants. After revisions to the satisfaction of the ethics committee, approval was granted. The RMIT University College Human Ethics Advisory Network endorsed this approval. Approval and endorsement documentation for this study is presented in Appendix A. This section discusses the ethical considerations present in this research study and the measures taken to address these issues.
Vulnerable populations.

The participants of the second phase of this research are typically described as a “vulnerable population.” Alexander (2010) discusses vulnerability as participation in research that involves a sensitive topic, including participation by stigmatised individuals, involvement in illegal or deviant activities and discussion of areas of life considered private or intimate. Further, Moore and Miller (1999) propose the notion of “doubly vulnerable” populations, where a number of indicators of vulnerability are combined. These indicators include mental illness, substance use, homelessness and ageing. The second phase of this research involves research with individuals who, by this definition, are doubly vulnerable.

Issues when considering a vulnerable research population include increased ethics scrutiny, challenges in recruitment and obtaining informed consent. Additionally, accessing numbers suitable to create an adequate research sample is a predominant concern, particularly given the challenges confronting recruitment strategies (DiBartolo & McCrone, 2003). This research was by no means immune from these challenges. Although the process to obtain ethics approval for this research project was relatively uncomplicated, the contemporary literature indicates a “gatekeeping” role of ethics committees, particularly where there is a perceived need to “…[shelter] from research that might be insensitive, intrusive, or distressing,” (Walker & Read, 2011, p. 14). Conversely, Walker and Read also propose that gatekeepers can be employed to help obtain a sample large enough to complete the research study. This is evident in those with significant relationships with potential participants, such as relatives or healthcare workers. In terms of this study, case managers from MAPS were engaged to assist with recruitment, identifying consumers they felt were particularly “tricky” in terms of their dual diagnosis.

Feedback from the ethics committee concerned, in part, the potential distress of participants undertaking research in the form of interviews. This critique concerned asking participants about
their drug use and mental health service histories. A reasonable concern of this process was the risk of creating emotional distress, and a comprehensive plan was developed for referral and additional support if this occurred. However, research by Biddle et al (2013) indicates that individuals are more likely to derive benefit from research participation than experience harm. Certainly, this was reflected in the interviews conducted during the second phase, where no emotional distress was experienced by any participant during this process.

Another concern raised by Zanjani and Rowles (2012) when researching sensitive topics is that of instrumentation. Zanjani and Rowles indicate, “… individuals can be hesitant to provide accurate and comprehensive detail about an issue they consider sensitive,” (p. 400). Certainly, this was considered during the process of interviewing participants, both during the second and third phases. Clinicians in the third phase may feel pressured to discuss an ideal of their practice rather than the reality. Additionally, assessments conducted during the first phase rely heavily on self-report of alcohol and other drug use. Measures to address this issue are discussed in each results chapter.

Informed consent.

Booth (1999) describes issues in working with difficult to access populations, including “Obtaining informed and conscious consent from people who are intoxicated or under the influence of medication or other drugs. Consensual issues may be further complicated if the person… has a mental illness,” (p. 78). As discussed in the previous section of this chapter, the participants in this research study had a number of vulnerabilities: mental health problems, AOD use, ageing, chronic medical conditions and often, poverty and marginalisation. McCrady and Bux (1999) interviewed researchers examining substance users and found that issues arose when obtaining consent from vulnerable populations, namely in the comprehension of consent. In this study, this issue was addressed by the use of specific exclusion criteria to exclude potential participants who may have capacity issues due to cognitive impairment, or subject to legal orders delegating their decision-
making powers to a guardian. The specific test to determine the effect of cognitive impairment was the Mini Mental State Examination (MMSE), with a score of less than 24 indicating the onset of clinically significant signs of cognitive impairment and a definitive point of exclusion (Tombaugh & McIntyre, 1992). While protecting participants during the consent process, this exclusion criterion had the effect of excluding individuals with dual diagnosis and cognitive impairment, arguably a highly vulnerable and poorly researched population (Wu & Blazer, 2011).

Further, McCrady and Bux’s (1999) participants highlighted the importance of stressing that participation would not affect treatment decisions and that participation remained voluntary. These suggestions were incorporated in the plain language statement, and special emphasis was given to these points when providing a verbal explanation by the researcher. Additionally, potential participants were given the opportunity to spend time reading the plain language statement, or seeking the input and advice of a relative, friend or health professional not involved with the study to assist with explanation of the research and advice on whether to participate.

**Payment for interview.**

Payment for interview is somewhat controversial in contemporary discussion concerning research with vulnerable populations. Some authors contend that financial compensation for participation in research is an appropriate measure and validates the contribution made by participants, while others argue that it amounts to coercion and encourages participation merely for fiscal benefit (Sandberg & Copes, 2013). Vanderstaay (2005) describes ethnographic fieldwork where the author explains that payment for participation led to a tragic chain of events, triggered by the purchase of illicit substances with research payments, and leading to a participant being jailed for murder. Although an extreme example, an ethical debate does exist around payment for interview and enabling illegal behaviour by paying participants for their time.
The health service ethics committee overseeing this research project mandates a policy that all consumer participants in research undertaken by the health service are reimbursed a token payment of $25. Fry and Dwyer (2001) found financial gain is a substantive reason for research participation in an exploratory study of injecting drug users, also indicating that Australian research guidelines at the time indicated that provision of financial incentive was tantamount to coercion and a barrier to informed consent. Certainly, consumer participants in this study were grateful for reimbursement for their time, which typically amounted to an hour, however most were appreciative of the opportunity to tell their story and provide their feedback on service experiences. This sentiment is echoed by the work of Alexander (2010) when interviewing palliative care patients, who frequently reported the need to tell their story, and for their contribution to “help someone.”

Fry and Dwyer (2001) also indicate that research participation is not merely driven by economic incentive alone and involves a number of altruistic elements. These include involvement in shaping policy, sharing experience and expertise, personal satisfaction and activism, validating the argument that research payment is closely aligned to reimbursement for time of participation and a recognition of the value of a participant’s contribution, rather than an impediment to gathering consent.

**Researcher safety.**

An issue that arose while conducting consumer interviews involved interviewing in “unsafe” locations. The Human Research Ethics Committee of the health service where this study was conducted required extensive evidence of contingency plans when interviews potentially became unsafe. Fortunately, this situation only occurred once when visiting a participant who had agreed to participate at his residence at an agreed time. On arrival, five individuals were present and using illegal substances, requiring a reschedule of the interview. The participant later confided that these
individuals frequently arrived at his residence uninvited, and if told to leave, would break his windows and physically threaten him. Aside from this situation, interviews were sometimes conducted in premises where illicit drugs were often used, leading to potential to be caught up in Police investigation or be present when drug sellers, buyers or users arrived.

Parker and O’Reilly (2013) expand on these issues while discussing their experiences of physical threats during a qualitative study, recommending a risk assessment of participants prior to interviews, as well as specialised training in managing risk. Situational risk, as labelled by Bahn (2012), includes threats of violence, verbal abuse from the participant as well as others who may be present. Fortunately, this researcher had the opportunity to discuss potential issues with participants with their mental health case managers and the multidisciplinary team prior to interviewing. Despite the lack of training available in these situations for qualitative researchers, this researcher had completed safety training as a community mental health nurse. However, this was by no means considered to mitigate risk in any way, and as mentioned in the example earlier, if the situation was deemed to be inappropriate or risky, the interview was rescheduled.

Devising a research safety protocol is considered to be a way to manage the risk of field-based interviews conducted by lone researchers (Paterson, Gregory, & Thorne, 1999). Barr and Welch (2012) expand on this idea, indicating that most ethics procedures are geared towards the safety of participants rather than researchers. To this end, the authors identify another aspect of safety when conducting qualitative field research of sensitive topics: psychological health. To maintain the psychological health of this researcher, regular supervision meetings often served as debriefing after field interviews, where transcripts and experience were discussed in depth.
Summary

This chapter has provided a comprehensive overview of the research process undertaken to address the research questions posed in the introductory chapter of this study. The explanatory sequential approach, using three phases whereby each informs the next has been described in detail in relation to each of the three phases of the study. These phases, being a quantitative file audit and two semi-structured interview phases also have a number of ethical considerations that have been described in this chapter. The next three chapters will outline the findings of each phase of the research project in depth.
Chapter Five

Phase One: Results of the File Audit Process

Introduction

This chapter presents the results of the first phase of the research project: a file audit of assessments and admissions to MAPS over a two-year period, June 2012-2014. The file audit aimed to determine the prevalence of dual diagnosis within MAPS. In addition, it also collected basic demographic and descriptive data of the sample, as well as allowing a review process of the electronic file notes entered by clinicians performing assessments. This review highlighted a number of systematic issues with the assessment process; these issues will be discussed separately later in this chapter.

The file audit process required cross-checking of electronic records from a computer-generated spreadsheet of eligible consumers to the electronic records program followed by manual review of summary file notes contained within the system. This process took approximately 50 hours to complete, requiring access to an electronic system of consumer files. Upon completion, data was entered into SPSS version 22 for statistical analysis, allowing demographic information to be summarised and descriptive statistics to be presented in this chapter. The study process is displayed graphically in Figure 4.
Descriptive Statistics of the Sample

The audit identified a total of 593 individual assessments for a two-year period spanning June 2012 - June 2014. Summary descriptive statistics for the sample are shown in Table 1. The total sample had a mean age of 78.24 (SD=9.76). The cohort comprised 263 males (44.4%) and 330 females (55.6%), predominantly referred to MAPS for a diagnosis of depression (25.8%), with behavioural and psychological symptoms of dementia (24.3%) and mental state for assessment...
(undefined diagnosis, 19.6%) ranking second and third respectively. The chief suburb of residence of individuals assessed was Caulfield (14%), followed by St Kilda (9.1%). Figure 5 shows suburb of residence graphically. These results may be explained by the large proportion of nursing homes in Caulfield (including on the Caulfield Hospital campus, home to the MAPS office), however this figure also indicates the publicly funded nature of the MAPS service. Suburbs with little representation have a higher median house price, higher mean household income and a smaller proportion of both public housing and boarding house accommodation (Birrell et al., 2012). This may suggest an entirely separate older dual diagnosis population being managed by the private healthcare sector. This is discussed further in chapter eight of this thesis.

<table>
<thead>
<tr>
<th>Gender of consumer</th>
<th>Male</th>
<th>Female</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Std Dev</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Age of consumer | 77  | 9   | 80  | 10   |

<table>
<thead>
<tr>
<th>Diagnosis of consumer</th>
<th>Schizophrenia</th>
<th>Schizoaffective Disorder</th>
<th>Bipolar Affective Disorder</th>
<th>Depression</th>
<th>Behavioural and Psychological Symptoms of Dementia</th>
<th>Personality Disorder</th>
<th>Mental State for Assessment (Undefined)</th>
<th>Eating Disorder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>36</td>
<td>20</td>
<td>24</td>
<td>60</td>
<td>61</td>
<td>0</td>
<td>62</td>
<td>0</td>
</tr>
<tr>
<td>Std Dev</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number</td>
<td>52</td>
<td>15</td>
<td>28</td>
<td>93</td>
<td>83</td>
<td>4</td>
<td>54</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 1. Summary descriptive statistics of the sample.
Of the total sample, 92 individuals (15.5%) were recorded to have co-occurring alcohol and other drug use on assessment. Age outliers (under 65 years old) represented in the data relate to individuals assessed in the hospital by MAPS consultation-liaison staff, or individuals accepted by the service due to age related conditions or early handover from adult community mental health services. A number of individuals 100 years of age and over were also assessed during the specified time period. Outliers also exist geographically, and result from individuals assessed “out of area,” whereby they are admitted to a neighbouring mental health service due to capacity issues in the parent service.

**The Dual Diagnosis Group**

The following section describes the characteristics of the dual diagnosis group, being individuals who were identified in the assessment process as having co-occurring alcohol and other
drug use. The following sections describe the statistical processes used to analyse the dual diagnosis group and their results.

**Gender.**

Examination of the dual diagnosis group indicated that this group were more likely to be male (n=60, 65.2% of the group) than female (n=32, 34.8% of the group). Pearson’s chi-square analysis revealed a significant association between gender and alcohol and other drug use ($\chi^2(1) = 19.21, p=<0.001$). Odds ratio analysis was calculated, and based on the result, the odds of males using alcohol and other drugs were 5.45 times higher than females. Assumptions of this analysis are that the self-report of individuals using alcohol and other drugs is accurate. This limitation is discussed later in this chapter.

**Age.**

Consumers in the dual diagnosis group were younger (mean 72.82, SD 8.318) than those who did not use alcohol and other drugs (mean 79.24, SD 9.682). An independent samples $t$-test was conducted, identifying a statistically significant difference ($t (-6.629)$, 95% CI [-8.340, -4.508], $p=<0.001$). When comparing the age distribution graphically, a box plot (Figure 6) of both age groups demonstrates a lower median age and a narrower range than those who were not identified as using alcohol and other drugs. Outliers in the “yes to AOD” column of the box plot are younger individuals assessed in Caulfield Hospital by a consultation-liaison psychiatry service run by MAPS.
Substances used.

Alcohol was the most commonly used substance in the dual diagnosis group as illustrated in Figure 7. This histogram demonstrates that alcohol is the predominant substance used by older adults assessed by MAPS. However, further analysis based on gender indicates that males are more likely to use alcohol, while female consumers had a more equal distribution of substances in addition to alcohol, including benzodiazepines and opiates, as indicated by the histogram in Figure 8.

Fisher’s exact test found a statistically significant association between gender and type of substance used \( (41, p<0.001) \). Of note is that the total of benzodiazepine and opiate using females were almost equal to alcohol drinkers (11 versus 13), whereby male alcohol drinkers \( (n=52) \)
dwarfed all other categories. The closest male category was polysubstance use of alcohol, cannabis and another drug (n=3).

Figure 8. Substances recorded in assessment documentation.
Mental health diagnosis.

The dual diagnosis group reveals depression as the most common diagnosis in this cohort. This result is in line with Coulson et al (2014), and the descriptive study performed by Chaput, Beaulieu, Paradis and Labonte (2011) which both show a high degree of affective disorders in older adults who use alcohol. In contrast, the non-dual diagnosis group predominantly showed behavioural signs and symptoms of dementia as the primary diagnosis, possibly reflecting the role of a nurse practitioner program specialising in this area in MAPS. The differences between primary diagnosis in each cohort are illustrated visually in Figure 9.
A chi square test of association was performed, finding a significant association between dual diagnosis status and mental health diagnosis ($\chi^2(1) = 30.353, p<0.001$), suggesting that depression is the most common mental health diagnosis in dual diagnosis presentations to MAPS.

**Comorbid health conditions.**

Comorbid health conditions were prevalent for both dual diagnosis and non-dual diagnosis groups, indicating a degree of medical complexity inherent in the older adult mental health population presenting to MAPS. Given the wide spectrum of medical conditions indicated in assessment documentation, conditions were clustered into systems: neurological (such as stroke, acquired brain injury and the dementias), cardiovascular (including hypertension, prior acute myocardial infarction and heart disease), respiratory (chronic obstructive airways disease, asthma),
musculoskeletal (primarily osteoarthritis), endocrine (primarily diabetes), gastrointestinal (such as gastro-oesophageal reflux disease) and any cancers. Individuals were marked positive to each category if any medical conditions were listed in their assessment documentation. Figure 11 demonstrates the percentages of individuals with medical conditions in each category, divided into gender and dual diagnosis/non-dual diagnosis status. Percentages represent proportions of both the dual diagnosis group (n=92) and non-dual diagnosis group (n=501) respectively.

<table>
<thead>
<tr>
<th></th>
<th>Neurological disorders</th>
<th>Cardiovascular disorders</th>
<th>Respiratory disorders</th>
<th>Musculoskeletal disorders</th>
<th>Endocrine disorders</th>
<th>Gastrointestinal disorders</th>
<th>Cancers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male dual diagnosis</td>
<td>28.3%</td>
<td>27.2%</td>
<td>17.4%</td>
<td>5.4%</td>
<td>10.9%</td>
<td>6.5%</td>
<td>6.5%</td>
</tr>
<tr>
<td>Male non-dual diagnosis</td>
<td>17.2%</td>
<td>25.1%</td>
<td>7%</td>
<td>7%</td>
<td>9.2%</td>
<td>6.4%</td>
<td>4.4%</td>
</tr>
<tr>
<td>Female dual diagnosis</td>
<td>10.9%</td>
<td>15.2%</td>
<td>7.6%</td>
<td>3.3%</td>
<td>5.4%</td>
<td>6.5%</td>
<td>7.6%</td>
</tr>
<tr>
<td>Female non-dual diagnosis</td>
<td>22.4%</td>
<td>34.5%</td>
<td>8.2%</td>
<td>15.8%</td>
<td>18.4%</td>
<td>8.6%</td>
<td>7.6%</td>
</tr>
</tbody>
</table>

Table 2. Medical conditions grouped by dual diagnosis status and gender.
Pearson’s chi square test was conducted to determine potential associations between gender and dual diagnosis status. The split file command in SPSS version 22 was utilised to order cases by a positive indication to alcohol and other drug use prior to performing statistical testing. A statistically significant association was found between female gender and musculoskeletal condition in the non-dual diagnosis group ($\chi^2(1) = 5.902$, $p=0.015$), in addition to female gender and endocrine disorders ($\chi^2(1) = 4.080$, $p=0.043$). No statistically significant associations between gender and medical conditions were found in the dual diagnosis group.

Similarly, Pearson’s chi square test was used to determine potential associations between dual diagnosis status and medical conditions. This testing found mixed results, with statistical significance suggesting associations between the non-dual diagnosis group and cardiovascular conditions ($\chi^2(1) = 9.479$, $p=0.003$), musculoskeletal conditions ($\chi^2(1) = 9.402$, $p=0.003$) and endocrine disorders ($\chi^2(1) = 5.130$, $p=0.027$). Likewise, a statistically significant association was found between respiratory conditions ($\chi^2(1) = 5.401$, $p=0.023$) and dual diagnosis status.

**Qualitative Analysis of the Assessment Process**

Qualitative analysis of the assessment process was primarily conducted to determine whether file notes entered into the electronic assessment document indicated AOD use without a “yes” recorded in the AOD use section. Analysis of the notes also allowed examination of the assessment processes and demonstrated a number of substantial shortfalls. While examining assessment documentation, notes were entered alongside the collected demographic details on the SPSS dataset. These notes were condensed accounts of the file notes presented in the electronic assessment document. This section identifies the issues arising from the analysis of the summary file notes examined during the file audit process.
Lack of documentation.

Some assessment documents suffered from a lack of documentation regarding AOD use, as evidenced by the two consumers who were recorded as “yes” to AOD use without any substance being recorded in the assessment document. Additionally, a number of consumers were recorded with substance use, however poor and ambiguous documentation of usage patterns and history was present:

- Pethidine - past history not specified (case number 406).
- Drinks beer on a daily basis. Not quantified further (case number 455).
- Increased consumption - not specified in units (case number 20).
- Daily alcohol not quantified. Alcohol related acquired brain injury (case number 173).

Poor quantification and exploration of substance use history is in contradiction to best practice of substance use assessment, where a comprehensive screening and history-taking process guides treatment decisions in both the AOD and mental health realms (Mohlman et al., 2012; Pennington, Butler, & Eagger, 2000). It also demonstrates that sufficient importance was not given to a correct account of AOD use during the initial assessment. A lack of consideration of AOD within mental health clinical assessment was addressed in the Victorian State Government’s *Dual diagnosis: Key directions and priorities for service development* document (2007). This document identified a service outcome whereby “… intake and assessment approaches … promote integrated dual diagnosis treatment and recovery programs as core aspects of service,” (p. 24), however this finding illustrates that this service outcome is not being met.
There was also inadequate exploration or documentation of the consumer’s use of AOD in response to mental health symptoms, and/or the impact substance use has on an individual’s mental state. In this example, anxiety is the focus but the co-existing problem of increased alcohol consumption is not further quantified:

Increased [alcohol use] in the context of anxiety, usage not quantified (case number 320).

**Poor understanding of alcohol guidelines.**

An additional issue arising from a lack of documentation is the apparent poor understanding of current Australian Government guidelines for safe alcohol consumption. These guidelines indicate that for prevention of long-term health impacts, no more than two standard drinks should be consumed daily; for the prevention of injury related to alcohol use, no more than four standard drinks should be consumed in one episode (National Health and Medical Research Council, 2009). Two assessments recorded AOD use as “no” while indicating that an individual was consuming beyond these guidelines, as indicated by the following examples:

Reports 2 glasses of wine nightly (case number 69).

2-3 glasses of wine daily (case number 45).

Although this use of alcohol can be categorised as sub-threshold when referring to traditional definitions of alcohol abuse and dependence, it remains problematic in respect of documented long-term health risks. Failing to identify this level of drinking as risky also eliminates the opportunity to provide brief interventions and feedback around drinking levels, a strategy that has proven useful in reducing drinking levels in the older adult population (Schonfeld et al., 2010).
Another problem inherent in poor understanding of alcohol consumption guidelines was a failure to quantify drinking vessel size, particularly given the research demonstrating over pouring in older adult populations (Wilkinson, Allsop, & Chikritzhs, 2011). Safe consumption guidelines are based on the notion of a standard drink, which is a predetermined measure of various types of alcohol, each containing 10 grams of alcohol. Assessment documentation was absent in discussing any attempts to determine drinking vessel size when exploring alcohol consumption.

**Referral for AOD treatment.**

Consideration of referral for ongoing AOD treatment at the time of assessment is pivotal in addressing co-occurring disorders (D’Onofrio & Degutis, 2010; Mcinnes & Powell, 1994). Even in the assessment documents with positive recordings for AOD use, no notes were found indicating intent or recommendation for referral to specialist AOD treatment services. At times, prior AOD treatment was noted, such as:

Current fortnightly 6-8 cans alcohol, history heroin, prescription painkiller, heavy THC and methamphetamine.

Rehab admission 2008 (case number 521).

In spite of prior AOD treatment becoming part of the assessment process, it was not considered as a future option in all 92 of the individuals who recorded positive for AOD use. Potentially, AOD treatment options were explored later during the case management process, however this is at odds with current research suggesting that integrated treatment planning for substance use disorders should occur during the assessment and screening process (Substance Abuse and Mental Health Services Administration, 2013). Four examples of other assessments documenting prior treatment encounters specifically with AOD services are:

Long history with multiple rehab admissions (case number 72).
10-20 units [alcohol] a day. 2 prior detox admissions (case number 101).

Amount not quantified. Detox admission - claims recent abstinence (case number 132).

Longstanding [alcohol use] since early 20s, multiple detox and rehab admissions (case number 273).

Summary

The initial phase of the project demonstrates a small but substantial older adult dual diagnosis population cared for by MAPS. However, the results are also limited due to the absence of a formal screening process for alcohol and other drug use, as will be discussed later in this thesis. This chapter has provided a comprehensive overview of the demographic characteristics of the study sample, in addition to illustrating the prevalence and morphology of AOD use in older adults presenting to the Caulfield Hospital MAPS. It also addresses the first research question guiding this project, “Does the Caulfield Hospital Mobile Aged Psychiatry Service care for a significant dual diagnosis population?” The implications of these findings will be discussed further in Chapter Eight. The next chapter discusses the second phase of the research project, being the exploration of the experiences of service users with dual diagnosis.
Chapter Six

Phase Two: Findings from In-Depth Client Analysis and Interview

Introduction

This chapter presents the findings of the second phase of this study, which aims to explore the experiences of consumers with co-occurring mental illness and substance use disorders. Six participants agreed to participate in a semi-structured interview process, and after being identified by their case managers, were provided with a detailed plain language statement and verbal explanation if required prior to consenting to the process of interview. All six participants have had mental health care provided to them by the Caulfield Hospital MAPS.

Several key themes emerged throughout the interview process, mirroring the notion of dual diagnosis being a complex phenomenon involving a number of interrelated factors (Weiss, Mirin, & Frances, 1992). The interviews conducted also demonstrate the challenges inherent in providing care to this cohort, with the participants frequently describing their experiences with services as being fraught with difficulty. These issues will be illustrated in greater detail throughout this chapter.

The Second Phase

As indicated in Chapter Four of this thesis, this research project was conducted under and explanatory sequential framework, whereby each phase informs the next (Stange, Miller, Crabtree, O'Connor, & Zyzanski, 1994). The second phase of this study was informed by the first by drawing questions from the initial file audit phase of the study: how did older adults come to be assessed by MAPS? What substances were they using? What were their experiences of both having a dual...
Diagnosis and the care provided to them? This chapter reinforces the conclusions evident in the previous chapter, such as a small, complex, difficult to assess population, particularly given the difficulties in approaching and recruiting individuals to participate in such a project.

More specifically, analysis of the qualitative data was performed using the qualitative descriptive methods outlined by Sandelowski (2000). Sandelowski described this method of data analysis as “[entailing] an interpretation that is low-interference, or likely to result in easier consensus among researchers,” (p. 335). As discussed in Chapter Four, this methodology allowed a ‘pure’ presentation of the findings of the interview process, free of the interpretations applied with other qualitative frameworks. This step was considered necessary given the dearth of qualitative research conducted with any cohort of older adults with dual diagnosis, and a desire to allow this exploratory work to harness the voices of the participants in a form as close as possible to their intended meaning (Sandelowski & Barroso, 2002).

The individuals who agreed to participate in this research project represent a broad spectrum of substances used, mental health problems, social settings and experiences with treatment services. Each participant’s history is summarised in the following section.

**Participant Background**

This section intends to provide a brief clinical synopsis of the participants who agreed to participate in this phase of the project, both in order to provide context to the qualitative analysis that follows and to illustrate the diverse presentations of older adults with dual diagnosis. The clinical data presented was drawn from clinical histories stored on the electronic medical record system at the time of interview, and each participant agreed to this process per the plain language statement and consent form provided prior to interview. Despite the recruitment difficulties discussed in Chapter Four, the participants represent a mixed range of mental health diagnoses,
substance of choice, social circumstances and life events leading to the narratives they provided for this research project. As such, they represent a broad spectrum of consumers of dual diagnosis older adults who utilise mental health services.

**Participant one.**

Participant one was a 72-year-old female, residing alone in Government housing with financial support from the aged pension. Participant one has three daughters who she has intermittent social contact with and regular telephone contact. She has a medical history of chronic obstructive airways disease (COAD) caused by cigarette smoking, with frequent hospital admissions for infective exacerbations. Participant one also has hepatitis C. She had previously had a number of jobs, including working in a pinball parlour as well as owning a business selling flowers to the public.

Participant one describes a long history of intravenous drug use, initially commencing at age 22. During interview, she described being prescribed “Veganin,” an oral medication containing paracetamol and codeine, and being administered morphine by injection by a home visiting doctor for menstrual pain. Her initial experimentation with heroin “clicked,” and she described it as giving her a feeling of relief similar to these occasions. Participant one advised on assessment that she often used heroin to cope with social anxiety. Participant one began on the methadone program at age 42, ceasing when incarcerated for fraud at age 68; this was a high-profile fraud case covered by the media, resulting in the “outing” of her heroin use to her eldest daughter’s in-laws and friends. She also had periods of abstinence due to court-mandated detox and rehabilitation stays, and after being gaolled, quickly resumed heavy heroin use and resumed methadone to control this use. She currently takes 15mg daily, picked up at her local pharmacy, and openly admits to using $100 of heroin on pension day. Participant one also smokes tobacco (cigarettes).
Participant one’s general practitioner described a 40-year history of depression, and had commenced an antidepressant, paroxetine, which participant one was poorly adherent to. She reported a long-term goal of ceasing both heroin and methadone, in order to play a more active role in her grandchildren’s lives. Participant one lived in a three-bedroom, double storey house alone, with a moderate level of hoarded belongings, and openly admitted that she had not been upstairs in years. She also presented with poor eye contact, hypersomnia, anhedonia, poor motivation and general malaise.

**Participant two.**

Participant two was a 64-year-old divorced male, living alone in government housing. He is financially supported by the disability support pension. He has a medical history of COAD, hepatitis C and a possible acquired brain injury stemming from a motor vehicle accident in 1997. Participant two has an adult daughter from his marriage who he has no contact with presently. He has not worked since 1977, and prior to this worked as a mechanic.

Participant two has a long history of case management by public mental health services, predominantly involuntarily under the Mental Health Act. He has a diagnosis of paranoid schizophrenia, initially diagnosed in the late 1970s, and presently managed on a fortnightly zuclopenthixol depot. Participant two continues to have regular admissions to public health services, often with police assistance, and his relapse manifests as antisocial behaviour, occasionally with violence. He has also had a number of serious suicide attempts. Participant two also tends to collect belongings that have been abandoned for rubbish collection, and on assessment by MAPS, was living in squalor. His premises required an industrial clean by a specialist contractor who also removed six cubic metres of hard rubbish. Due to his antisocial nature, participant two alienates community services, who refuse to provide care in his home. He also frequents a local
Hare Krishna temple and restaurant to volunteer, however is occasionally banned from this venue due to threats of violence.

Participant two currently uses approximately two grams of cannabis daily, with a history of intravenous amphetamine and heroin use. He often forgoes food and paying utility bills to purchase cannabis. Previous attempts to cease use or cut down have been unsuccessful, although he does describe receiving acupuncture many years ago leading to a six-month period of abstinence. Participant two also smokes tobacco (cigarettes).

Participant three.

Participant three was a 68-year-old male residing in a supported accommodation service. He is financially supported by a Veteran’s Affairs pension. His medical conditions include hepatitis C and diabetes. Participant three has a daughter from a past relationship who he maintains contact with. He has a diagnosis of schizoaffective disorder, initially diagnosed in 1968 and resulting in many lengthy hospitalisations in the public mental health system.

Participant three served in the Army, however was discharged due to criminal actions believed to be associated with his psychosis. He commenced smoking cannabis while an inpatient in a large psychiatric institution and has used a variety of stimulants and hallucinogenic substances since. He currently describes frequently using cannabis and alcohol, and infrequent use of psilocybin (magic mushrooms) that he forages for in local areas. Participant three also uses tobacco. He was commenced on clozapine in 2008 due to treatment resistant symptoms complicated by drug use, which have included psychotic episodes that have resulted in police apprehension.

Presently, participant three has been well psychiatrically since 2008 (his last hospitalisation). He remains disorganised at times, however attends for monthly clozapine reviews.
at the clinic. He is isolative and spends much of his time sitting alone in parks when away from the supported accommodation service. At the time of the research project, he was enjoying increased contact with his daughter.

**Participant four.**

Participant four was a 74-year-old male living alone in an office of housing one bedroom flat. He has a long history of paranoid schizophrenia, with an index admission in 1974, and many admissions to public mental health services and treatment as an involuntary community patient with depot antipsychotic medication. He migrated to Australia in the late 1950s and has held a number of primarily manual labouring jobs. He has also spent a period of time homeless, living on the street and in rooming houses.

Participant four mainly experiences positive symptoms, including persecutory delusions about government agencies and paranoia about neighbours stealing from him and the presence of germs in his ears. He has a long history of non-adherence to medications, with poor insight into the need for antipsychotic therapy, and has been trialled on a number of typical and atypical antipsychotics and a mood stabiliser. He currently takes oral olanzapine and his case manager reports good adherence. Participant four currently consumes alcohol, the amount of which is difficult to quantify. He freely admits to heating wine in a saucepan, consuming around a bottle in an evening, however is elusive when asked as to how often he does this, reporting it as being only for “special occasions.” However, his medical record demonstrates documented evidence of higher consumption, such as a large stock of alcohol present in his flat. His oral intake is poor, as he believes that wine is all he needs to consume to sustain himself. As a result, participant four has lost a significant amount of weight while under the care of MAPS.
There are concerns around the ability of participant four to remain in independent accommodation, as he relies on his sister to provide meals and assist him with cleaning. He has become socially isolated due to irritable bowel syndrome, with participant four concerned about diarrhoea and subsequent faecal soiling in public. He also has macular degeneration, with psychotic beliefs about injections preventing treatment to prevent his loss of eyesight.

**Participant five.**

Participant five was a 64-year-old male residing in a private rental property with his partner and her seven-year-old daughter. He has a long history of polysubstance use and was diagnosed with bipolar affective disorder in 2004 after an episode of elevated, agitated and aggressive behaviour. He has poor adherence to his prescribed medications. He has also attended an inpatient rehabilitation service for drug and alcohol dependence. Participant five has numerous criminal convictions. He came to the attention of MAPS after a manic relapse, which resulted in police and ambulance attending his home and conveying him for an inpatient admission involuntarily. He has a number of medical conditions, including liver cirrhosis and chronic obstructive airways disease.

Participant five describes a long history of drug use, commencing with cannabis and heroin, and leading to methamphetamine use. He was involved in a serious car accident, and after this event began injecting crushed opiate pain medications. Participant four also drinks alcohol heavily with a peak consumption of 24 cans of beer daily. He also smokes cigarettes. Participant four currently describes a period of abstinence from illicit substances and prescribed or illicitly obtained opiates, and at the insistence of his partner, now only binge drinks weekly to fortnightly. During these sessions, he consumes a substantial amount of “mixer” cans of bourbon and cola.

During the writing of this thesis, participant five was admitted to hospital with dyspnoea, falls and confusion. During this admission, his condition deteriorated, and palliative measures were
instituted. He died in hospital, with the cause of death being “aspiration pneumonia secondary to haematemesis secondary to liver cirrhosis secondary to chronic hepatitis, complicated by COPD,” [death certificate entry].

**Participant six.**

Participant six was a 72-year-old divorced male, living in a private rental flat, financially supported by the aged pension. He was referred by his GP due to increasing anxiety over a six-month period, the precipitant stressor being legal proceedings around contesting his father’s will. Participant six has had two prior public mental health service admissions, one in the 1990s for depression, and the second in 2009 due to lowered mood after ceasing alcohol. He has a long history of alcohol consumption, peaking at 40 standard drinks per day. After attaining abstinence two years ago, participant six has recently recommenced consumption of “a tumbler of brandy” to aid sleep.

Participant six’s medical history includes bilateral knee replacement, impaired glucose tolerance and hypertension. He has four children who he has intermittent contact with and is largely isolative in his flat apart from social activities with a friend. On assessment for admission to MAPS, he described anxiety as preventing him from undertaking tasks such as catching a local bus. His anxiety and depressive symptoms have also manifested as insomnia, and despite a prescription to temazepam, participant six described his use of alcohol as helping to attain and maintain sleep. His antidepressant therapy is venlafaxine 150mg, prescribed by his general practitioner.

Despite scores of 30/30 on mini mental state examination (MMSE) and 30/30 on the Montreal Cognitive Assessment (MoCA), both considered “gold standard” measures of dementia (Nasreddine et al., 2005; T. Smith, Gildeh, & Holmes, 2007), a psychiatrist’s assessment of participant six discerned moderate executive dysfunction which was felt to be of a vascular nature.
As a result, participant six described a number of anxieties around keeping appointments and his ability to perform day to day tasks, which were felt to be in keeping with this level of cognitive decline.

**Content Analysis**

Content analysis of data garnered from the interviews was a considerable task, involving hand transcription by the researcher as requested by the ethics committee. This determination was a condition of ethics approval and was requested to ensure privacy of the data obtained during the interview process. In spite of the level of work involved transcribing the interviews for both of the qualitative phases of the project, it did allow a chance for the researcher to revisit the interview, intricately reviewing responses to the semi-structured questions provided. After transcription, completed transcripts were loaded into the NVivo for Mac software program. This process allowed more comprehensive coding than traditional “pen and paper” coding, and also ensured greater data security with the provision of data encryption and password protection (Johnson, Dunlap, & Benoit, 2010).

Content analysis discerned four core themes, including the notion of addiction as a career, patterns of drug use, complexity, and the drug and the mental illness. A number of sub-themes emerged from the core themes, capturing each individual’s experience of both mental illness and AOD use disorders, as well as interactions with mental health services over time. These themes are explored in greater detail throughout this chapter.

The notion of addiction as career.

As discussed in Chapter Three of this thesis, several scholars in the addiction research field have likened addiction to a career. This definition has been drawn from apparent similarities
between “law abiding” occupations and the process of drug addiction, particularly around the
amount of time invested in sourcing and consuming drugs and alcohol (Faupel, 1991). Additionally,
use is noted to move through a pattern of experimentation, addiction and the substance often
becoming the primary activity for an individual (Best et al., 2008). Adler and Adler’s (1983)
seminal study extends this idea to drug traffickers and dealers and noted a similar pattern,
mimicking a traditional career: early stage “hard work” to establish oneself in the field, a rise
through the ranks and eventual disenchantment and/or law enforcement attention leading to
cessation of drug dealing activities.

The Australian Injecting and Illicit Drug Users League (AIVL) describes drug use careers as
fluid, with users having periods of abstinence, lapse and relapse, and often moving between
substances both in isolation and polysubstance use (2012). Arguably, the notion of career can also
be applied to mental health. Often, consumers have an initial onset of mental illness, followed by
intense hospitalisation and community case management, medication regimes and potential
involuntary treatment under the Mental Health Act. A consumer may go through several periods of
remission and crisis, and during the latter phase may feel that the mental health service is their
primary focus in life.

Throughout the interview process, the participants described experiences that fit with the
definition of addiction as a career. In addition, they spoke of mental health services in a similar
way. This section describes the dominant theme of addiction as career, and the sub themes that
emerged during the interview process.

Onset.

Each participant had a divergent entry into both drug use and mental ill health. When using
the analogy of career, the point of onset into drug use followed a similar trajectory to any other
career, often beginning with innocuous, experimental or social use of alcohol or substances. The participants all then identified a long period of use, with “fluid” changes to other substances and varied periods of abstinence described during their interview (Australian Injecting & Illicit Drug Users League (AIVL), 2012).

As mentioned in the introductory section to this chapter that sought to narrate participant backgrounds, participant one had an entry into the use of opiates in her early twenties. She described this as an extension from receiving opiate pain medication previously:

I would say I started using heroin when I was 22. I was in a rehab once and they were talking about when you first started using drugs. And I was ready for it, you know, 22. But as it got around the circle, all these people started talking about when they first used strong pills, and other things. And then I thought about our local doctor, who used to come every month. I had shocking period pains, really bad, had them every time.

And he used to give me injections and I remember the feeling. He’d give me the injection and in 10 minutes I’d be floating. No pain. Nothing. I could do anything. And that went on until I was about 15 or 16, [until] I could swallow Veganins, they were old pills that were really strong. And drop 8 or 10 of those and do the trick. So really, I decided that I got my physical thing for opiates at a far earlier age than I ever thought. It wasn’t that magically one day when I was 22, I had some smack and it did it. It’s like my body was ready for it or something (transcript one, page 1).

Accordingly, participant one had a lengthy career of primarily opiate use, although it was interspersed with brief periods of amphetamine and hallucinogen use. Participant two had experimented with heroin, also having a lengthy period of amphetamine use leading to psychosis. Initially, his experimentation with heroin was a result of association with drug using peers. Proponents of social learning theories of drug initiation and use indicate that peer influence is often a primary factor in substance use (Oetting & Beauvais, 1987; Oetting & Donnermeyer, 1998; Reyna & Farley, 2006):
Using heroin was just… associated with junkies over the years, and I met up with one back when I was a pretty young kid. He was about 13 when he started. And I lived with him and then I started using (transcript two, page 8).

Don’t like speed. I used to like speed when I was younger, but I don’t like it anymore (transcript two, page 13).

Despite use of these substances prior, participant two described only using marijuana, smoked through a bong, daily at present:

I’ve been stoned every day since I’ve lived here. I’ve always had pot (transcript two, page 5).

Participant three had an early onset of mental ill health, resulting in hospitalisation and treatment in his late teens. His commencement of substance use followed, with him describing initiation while an inpatient of a psychiatric facility:

I don’t know really. My cousin turned me on. When I was in this [psychiatric] hospital… he visited me a few times and one day out on the end of the pier he rolled a little joint and said “here, take this,” and he said “remember, you’re in control of the drug, the drug is not in control of you.” And he said [inhales deeply], and release… and oh no, it hit me (transcript three, page 2).

Participant three described what “hit him” as being an exacerbation of his psychosis, including visual hallucinations and paranoia. In spite of this experience, he continues to use marijuana at the time of writing. His initiation into hallucinogens was also conducted within a psychiatric facility:

When I was at Morisset [psychiatric hospital] this bloke mentioned it to me, magic mushrooms. I became sort of interested, or would intrigued be the word? (Transcript three, page 12).

Participant four described early social use of alcohol, particularly in work settings and in the context of binge drinking. However, when recounting his current drinking pattern, participant three
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identified the presence of side effects from his antipsychotic medications as a catalyst for commencing problematic drinking patterns. According to the clinical notes present in the participant’s file, these side effects had been a source of friction between himself and the treating team throughout his treatment episode:

I started doing alcohol… to put me to sleep. I couldn’t sleep from the injections, the pills and that sort of thing. I started drinking as soon as I got bored. I bought a bottle of whisky once, a cheap bottle of whiskey to put me to sleep… then I fell asleep and that was alright. That was a long time ago, that was about… twenty years or something. I started drinking to wash down the poisons they injected in me (transcript four, page 6).

Participant five used a range of substances, primarily methamphetamine at a younger age, however began crushing and injecting morphine tablets after a serious car accident. He also used cannabis frequently throughout his life. Participant five began use of alcohol at an early age, surpassing all other substance use, and also described the commencement of various substances in line with life events:

Interviewer: How long ago did you have the accident?

Participant five: Ah, about… 15 years ago now.

Interviewer: And you were prescribed morphine tablets?

Participant five: Yeah. But I would crush them up and shoot them up, (transcript five, page 1).

Interviewer: How was your alcohol use prior to the morphine?

Participant five: Quite extraordinary [laughs].

Interviewer: Can you define extraordinary for me?

Participant five: Yeah, about a slab a day [24 cans of beer].

Interviewer: Okay. When did you start drinking, what age?

Participant five: Oh, about 13, (transcript five, page 2).

Interviewer: What about the ice? When did that start?
Participant five: That was in Queensland. That was after the accident, I started shooting ice and that to get over the loss of my loved one up there (transcript five, page 2).

The final participant consumed alcohol initially in social settings, progressing to heavy consumption over his life. This progression is a common example of problematic drinking in Australian settings (Australian Institute of Health and Welfare, 2014). Participant five’s dialogue also indicates that recognition of his as a problematic level of alcohol consumption did not occur until his drinking was well entrenched, and attempts to cease resulted in mental ill health and initial contact with mental health services:

What age did I start drinking? Uh, I must’ve been 17 or 18…. Yeah, it was a social thing. Over the years I had a lot of beers as such, growing up. Yes, had a lot to do with beer over the years growing up. Parties, football matches. … But it was in the later years that I really thought of controlling it. And then I thought of getting rid of it, and that’s when I ended up falling on my head. It wasn’t such an easy thing to get rid of it. Because I mean, as it turned out I went in depression and… I was treated for depression (transcript six, page 8).

The above examples indicate the diverse entry to alcohol and other drug use reported by the participants in this study. They also highlight the onset of alcohol and other drug use as a career, which will be explored further in the next section.

The need to use overriding all else.

By definition, a traditional career often becomes a significant part of an individual’s life, with a substantial amount of time engaged in the activity, as is often the case with income generating actions such as employment (Hallstone, 2006). Participants in this study described AOD procuring and using activities as being a substantial burden on their time, and the need to use AOD as overriding many other commitments. For example, participant one identified her purchasing of heroin in terms of a career requiring substantive investment of her time and a perceived alienation from friends, family and associates living non-drug using lives:
Getting the drug impacted. I mean it’s a 20-hour a day job if you haven’t got a bloke who is doing business or something. You’ve got to have money to use. And everything goes in order to have that money (transcript one, page 1).

Participant one further elaborated on this point to identify the importance heroin had in her life, often in conflict with her role as mother to her children:

And that’s another thing heroin does to you I think. There’s nothing I want, no clothes, nothing I… never had since I was using heavily. Money is heroin to me. Put $200 in my hand and it will be gone in… 20 minutes (transcript one, page 3).

And I needed a hit in the morning to get myself together and left the kids at home 7:30 in the morning, zoomed over to [friends] place to get a hit from them… (Transcript one, page 2).

These accounts illustrate the long-held notion of addiction as being a powerful motivator of ongoing “deviant” behaviour (Klingemann, 1999). In spite of this, participant one proudly indicated during the interview that her three children had grown into independent, successful adults despite being raised by a heroin addict, a notion at odds with societal ideas around drug users and an inability to perform tasks of responsibility (d'Orbán, 1973). Participant two also identified risk-taking behaviour to enable his drug use, which ultimately resulted in the termination of his employment:

<table>
<thead>
<tr>
<th>Interviewer:</th>
<th>Did you use speed for long?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participant two:</td>
<td>About 12 months. That was rather funny. When I got found out. When they found that the dexamphetamine only had one slide in the packets instead of two.</td>
</tr>
<tr>
<td>Interviewer:</td>
<td>What happened?</td>
</tr>
<tr>
<td>Participant two:</td>
<td>I got the sack.</td>
</tr>
<tr>
<td>Interviewer:</td>
<td>Where were you taking it from?</td>
</tr>
</tbody>
</table>
Participant two: [Pharmaceutical supply company in Australia].

Interviewer: When you were working for them?

Participant two: Yeah, just walk into the section with the dexamphetamine, open up a packet, take out one slide. 20 pills or whatever, 15 pills or whatever.

Interviewer: Were you a storeman then?

Participant two: Yeah. Storeman, delivery guy… When they sacked me, I was fucking loopy. I went to a bloody clinic and… all they did was give me vitamin B injections and talk to a psychiatrist or psychologist or whatever (transcript three, page 14).

The final statement made by participant three also indicates that drug use was common in spite of the ramifications to mental health. Participant three, who continued to consume substances in defiance of serious psychotic symptoms, echoed this sentiment:

I started turning into some sort of maniac. I turned into a bloody idiot after a while. Year in, year out, there I am. Roaring out abuse. And primalling [sic] everywhere I went like a maniac. About 25 years ago when I was living in South Yarra, and I used to take my football and run through the Botanic Gardens roaring out, like primalling [sic], you know. I got away with that for about 6 months to a year. Finally, this guy appears from behind a bush… a gardener… with something that could be used as a weapon, saying, “there are old women present,” (transcript three, page 8).

Further, participant three described a number of occasions that appeared to be psychotic in nature, demonstrating the complex interplay between drug use and mental illness:

I was peaking on magic mushrooms… I had a bit of paper with a list of 17 different problems I wanted to discuss with my psychiatrist written in red. And I went up to the men’s store, I found myself in the men’s store, and I went into the change cubicle, stripped off [naked] and started walking around.

Anyway, nothing happened then. Then I went down to the women’s store, the store below, I was standing there near the brassieres and this woman… blushed immediately. Then I sort of did a bit of a pirouette, and the moment I hit the floor, after the pirouette, there was a big car park right around the store, and then I went back
to the men’s store and I went to the cubicle and the store detective was there. He would’ve been about 6’3”, 6’4”, a great big solid guy, and he said to me “I’m going to be lenient on you this time, but if I see you in here again, I’m going to come down on you like a tonne of bricks. I got away with that, got dressed and out of there… then, uh, on the other two occasions, there I was. I was walking along the street, Collins Street. I did the city block. Down Collins, right into Swanston, up Bourke then along Exhibition. I got away with it. Nobody said a word. All I was dressed in was just naked with socks on. And this woman that I know introduced me to a new person that I hadn’t met before. Another woman, a girl, you know. There was no sort of, nothing strange seemed to occur.

On the third occasion, it was sort of like an overcast sort of a day. I tried it again and I ran into trouble. At the corner of Collins Street and Swanston Street, it was one of the boys, one of the policemen. He goes “alright you, come on,” and he gives me his policeman’s hat and goes “put that over it.” And I went like that then he said “you’re not going to piss in that are you? Put this over it,” then he gives me his notebook. Then they took me to the station. Looking back on it… did that happen? Did that occur? (Transcript three, page 14-15).

In addition, use of AOD had often led to legal complications. Participants described understanding that legal ramifications were a possibility of their actions, however continued the behaviour in spite of the consequences. This sometimes led to a misunderstanding, as everyday activities were often completed under the influence of AOD due to the large impact it had on the participant's everyday lives, as indicated by an account from participant six of being apprehended for impaired driving:

I got pulled over once for drink driving… It was a random breath test. What had happened was I was drinking with my family on the Sunday, and this friend of mine who'd been in an accident she came down on crutches. And I felt sorry for her, and I thought I'll give you a lift home. So got in the car, got her in the car, got safely up the road, and then a police car pulled me over. I said, “what's wrong officer?” And he said "It's just a random check. Could you breathe in to this?" That's how he got me. Just a random check it was. And I thought to myself doing my friend a favour, running her home, which was only five minutes up the road… I thought that was terribly unlucky. I even told the policeman, "Was I driving erratically or something?" And he said "no, no, you're right." So that's how I got picked up (transcript five, page 4).
Of note is the participant's potential to normalise this behaviour, in explaining that his driving wasn't impaired in spite of exceeding the limit. Using AOD also had a financial cost for the participants, with many forgoing essential items to continue to afford ongoing use. This generally may have not been a lifelong pattern, however at the time of the interview some participants described financial difficulties. This was also evidenced by the number living in Government housing or funded residential services (four). An example of the fiscal pressures of use are illustrated in this example from participant two:

8 years. 8 years I've been stoned every day. Well not every day, there's been a couple of days in between, but… Oh, $40 [of cannabis] a day I guess… (Transcript two, page 5).

Participant two then described going without groceries and utilities to ensure he had his $40 to spend on cannabis daily. At the time of interview, participant two was living in a squalid Office of Housing Flat. He had significant debts to utility companies, and had his electricity, water and gas disconnected a number of times, although he managed to reconnect it himself due to his mechanical background. Participant two relied on food hand-outs from local charities to eat.

This section indicates that the use of AOD often overtakes all other priorities that society, and clinicians, may judge as being more important for an individual. For example, the use of AOD by these participants has resulted in financial and legal costs, a toll to their mental health and isolation from family and friends. They described being reliant on external services to manage the later stages of their lives. In spite of the media sometimes reporting addiction as being a "choice" made by users, these accounts do not illustrate a logical decision-making process, rather one driven by the primary need of maintaining an addiction (Kalivas & Volkow, 2005). As discussed in Chapter Eight, this finding has serious implications for a clinical position advocating abstinence as a pathway to better mental health and societal functioning.
**Changing drug worlds.**

Throughout the interview process, participants who used illicit substances spoke of a change in drug worlds. This finding is in accordance with Levy and Anderson's (2005) work with injecting drug users that was discussed in Chapter Three of this thesis. In fact, the participants who used predominantly alcohol also spoke of a different nature of drug world, where the consumption of alcohol had been largely a social event in public, however the bulk of their consumption was done in private; this led to a discordant public identity of the stereotypical social drinker in public and a dependent alcoholic in private. Participant six demonstrates this point through his account of his former working life and the expectations of binge drinking that accompanied it:

> Once I was a storeman… The firm took us to the pub, and uh… Free beer. I drunk 24 glasses [laughs]. I had no food, nothing, worked hard and the work was easy. But no food makes it a problem, because not enough energy to do every job. I came back on the train and stopped before the junction, I collapsed drunk (transcript six, page 7).

As mentioned in the onset section of this chapter, participant six commenced heavy drinking to counteract side effects of psychotropic medication. He reported doing this because "It was logical. If you’re drunk, you fall asleep, and that’s all. That’s logic, my logic. That’s why I bought alcohol to make myself fall asleep," (transcript six, page 8). Arguably, being socialised into a drinking culture that encouraged intoxication shaped participant six's current drinking habits.

Participants involved in illicit drug use spoke openly of changes in drug worlds associated with these substances, with participant one describing polysubstance use as being common in the present day, which was at odds with her experience of using only one substance at a time:

> See that's how it's all changed in the different generations. I don't know anyone who would do what some of those young ones do. Who would want to eat a packet of antidepressants, you know, with a hit of speed? I mean, it just doesn't enter my head, whereas the young ones will do anything (transcript one, page 14).
This was reinforced by participant five, who found himself immersed in illicit drug worlds while obtaining licit medications; in this case, purchasing morphine sulphate tablets on the ‘black market’ to supplement those which were prescribed through legitimate means:

Yeah, when I had to, the necessity. I also sold it on the black market, which… Only when I was asked by other druggies do I have anything spare. You seem to be in another culture, when you're in with that (transcript five, page 8).

Participants also spoke of a perceived change in purity of substances resulting in their reluctance to use substances, however in the case of participant one, this led to her believing that contemporary heroin was so impure it was impossible to overdose on. Despite this belief, during her MAPS care episode she was found by clinicians having overdosed twice. She also hints on this perceived reduction in purity as a reason for individuals having to use many substances together:

Smack has changed again in the last year or two even. Because the money's in ice and speed. And see, when heroin was worth using, like when it was, because the heroin that's on the streets now is terrible, it was better. Because people that used heroin used heroin. They didn't want to go out and use anything else to spoil the smack (transcript one, page 14).

Conversely, participant two identified adulteration as a reason for him to avoid the use of contemporary heroin, despite a short history of prior usage:

Oh, about 6 months [heroin use]. Occasionally. Now I don't do it at all. Don't trust it. Never know what you're getting (transcript two, page 4).

Participant two also identified, through his extended time period of cannabis use, the movement of dealers in and out of the drug world. This echoes the conclusions of Adler and Adler's (1983) seminal study of drug distribution, where the authors identified various career trajectories of drug dealers, including cessation due to the perception that legal ramifications were close:
I've lost, I used to have about 8 dealers and I've lost 5 of them. They've moved. It's got too hot where they're living so they've moved somewhere else (transcript two, page 17).

Accordingly, participant two identified that buying cannabis had been solely based on availability. He tended to enmesh his social networks with his chosen drug dealer and the other users who purchased there. This indicates one of the challenges with attempting to abstain from substances: users are often immersed in social networks that are heavily invested in drug use, therefore removing oneself from these networks would result in social isolation. An interesting observation on availability is that of the availability of alcohol, with research indicating that alcohol is cheap, readily available and socially acceptable to purchase (Brand, Saisana, Rynn, Pennoni, & Lowenfels, 2007; Livingston, 2012). Participant four summarised this during the interview, where he spoke of alcohol as being plentiful and cheap in a shop nearby:

All over the place, bottles are cheap, $5.50. I buy from a bottle shop just up the road. It’s good quality, it’s good in winter, (transcript four, page 10).

Changing drug worlds would seem to have an impact on the substances consumed and patterns of consumption in the participants of this study. This is explored further in the next section of this chapter.

"We are dying of things normal people die of."

An interesting finding of this research process was the notion of older adults with dual diagnosis describing themselves as dying of "normal" events that a non-dually diagnosed individual would suffer from, as well as expressing surprise at getting to old age in spite of heavy use of AOD. For example, participant one described her network of friends, mostly heroin users themselves, dying of overdose at early ages. However, when speaking of her current using peers who remained alive at the time of interview, she stated:
I don't know, people die. Like, all my friends who've died in the last ten years, none of them have overdosed. They've just died of... cancer and heart attacks (transcript one, page 4).

Despite living older ages, the participants in this study still experienced a multitude of health problems, often related to their use. This is explored further in the 'Complexity' section of this chapter, however the following example indicates this notion:

Interviewer: This is what I hear a bit, people go “I can't believe what I've done through my life, and I can't believe I'm still around,” basically. Is that something you... can relate to?

Participant five: Yeah, 100%. Who'd think I'd get to 65? [Laughs].

Participant five's partner: Even his carer said, he was carrying on the way he was last year, right until December, and the carer said he's only got 3-6 months. And I used to go "really?" And, uh, and I just think what a shame, couldn't he turn it around, or if he... had something worthwhile in his life. Because he is such a caring, gentle person that you'd think... yeah, you know, can something help. Because everyone allowed him to drink and smoke, they were getting him his alcohol and everything. So I just think he was sitting there like the king and going "yeah, here's some money, get me another slab [24 cans of beer]," every day, and have my carton of cigarettes. You know, more than a carton a week, and people were just watching him and just turning a blind eye. Even with the dope smoking, I couldn't believe it, he had representatives coming out and allowing him to just smoke it everywhere (transcript five, page 15).

As described earlier in this chapter, participant five died after the interview process was conducted, indicating the substantial medical comorbidities he had in addition to his AOD use and mental ill health. When exploring this issue with participant five, he responded in a manner that seemed to minimise his serious health concerns at the time:
Interviewer: At 65, you've gone through this life where you didn't think you were going to get here, because you've lived this pretty hard lifestyle. How do you feel now that you've got to this age?

Participant five: Unbelievable [laughs].

Interviewer: In a good way or a bad way?

Participant five: In a good way I suppose.

Interviewer: Good. It sounds like you've got a few health things going on?

Participant five: Yeah, nothing I can't overcome, (transcript five, page 18).

Participant three echoed this when describing his use of hallucinogenic drugs previously, punctuating the discussion with this statement:

I don't know really, um, looking back on it like why am I still here, I should be dead. You know what I mean? Ever had that feeling? (Transcript three, page 12).

The idea that arriving at old age, after a long period of alcohol or substance use may reinforce the notion that AOD use is not particularly harmful. This is often expressed by consumers and healthcare professionals alike as people "needing to die of something," and contributes to the inertia in making changes despite obvious effects on physical and mental health (Dar, 2006).

Extended lifespans may also be the result of the success of harm reduction initiatives, primarily needle exchange programs that have been proven to reduce the rate of mortality from blood borne viruses (Ritter & Cameron, 2006). Two of the participants described injecting behaviours that were previously risky, with participant three disclosing an account of having a friend inject him with unknown substances which he believed to be a combination of amphetamine and cocaine:

Interviewer: Do you use that IV [intravenously]? Inject?
Participant three: A friend of mine injected me.

Interviewer: You must have a lot of trust in your friend to be injecting you.

Participant three: Yeah, (transcript three, page 4).

Participant one spoke of the changing drug scene in the 1980s, where a transition from sharing injecting equipment to obtaining clean needles and syringes for use became commonplace due to fears of blood borne virus mortality:

Well anyone with a brain stopped sharing fits in the mid 80s, as soon as we found out about AIDS. We were absolute pigs before that, I can tell you. We used to have a table of fits with blood in them, didn’t matter, once the dope hit you just grabbed one, pulled some water up and used it. But once the AIDS thing hit, and you know, the news got through to us that finished. And… When the needle places opened and you could go and get a box. So, we’d go down and get 10 boxes [laughs], and the lady at the counter would say, “Oh do you need that much dear?” Yes. And we’d all have enough (transcript one, page 9).

Regardless of the reasons behind extended lifespans in this population, both these findings and the literature examined in Chapter Three of this thesis provide evidence to challenge the notion that individuals who use AOD succumb to mortality prior to reaching an age where they can be described as "older." Discussed further in Chapter Eight, the impact of an ageing population and extended lifespans of older adults with dual diagnosis may pose a substantial challenge to service provision to this cohort in the future.

Patterns of drug use.

Patterns of drug use in older adults are a topic that requires examination. During the interview process, participants described diverse AOD use both throughout their lives and at the time of interview. As identified in the literature review of this thesis, AOD use is often recognised as a fluid phenomenon, with periods of abstinence, changes of substance and various treatment approaches often trialled during a lengthy period of use. The following section explores the current
use of the participants in the study, the phenomenon of adaptive use, relates the concept of AOD use as self-medication for ill mental health to the participants in the study and finally discusses the participant's description of their intent and efforts to make changes to their AOD use.

**Adaptive use.**

Adaptive use is the changing of alcohol or drug use in accordance with advancing age, availability or physical tolerance, as discussed in Chapter Three (Levy & Anderson, 2005). Adaptive use was apparent in the accounts of participant one, a long-term injecting opiate user, who self-reported her present use as fortnightly when paid her pension. She used a small dose of methadone (15 milligrams daily) to control her craving for opiates and maintain her use at a level she felt was appropriate for her age:

So that, in the morning I don't wake up with that feeling I want to get on. And that's probably ridiculous, you know. I went off it 3 or 4 years ago, but then I started using again and needed to go back on it. Just because, when you're using, when you wake up the first thing on your mind is getting on. And it's horrible (transcript one, page 14).

All of the participants in this section of the study described some form of adaptive use as they grew older. This may have been a result of medical comorbidities, or financial or social pressures. Participant five, who described a long history of polysubstance use combined with alcohol abuse, had adapted his use under the tutelage of his partner:

Yeah, I binge drink but… might be a fortnight in between drinks and that. Between six and eight cans [in a drinking session] (transcript five, page 3).

When asked why participant five felt the need to stop, he cited external influences as the driver of his transition from daily drinking to binge drinking:
Well, [participant's partner told me to quit smoking] And I’ve agreed with [participant's partner]. I said I might have a drink, but that is my right, you know I haven’t got any bans on drinking. But I don’t drink every day or anything like that (transcript five, page 10).

As a result, participant five believed his current, adapted use to be less harmful than previous levels of use, in spite of it being beyond current guidelines for alcohol consumption in a single session (National Health and Medical Research Council, 2009). His partner also described a reduction in medical symptoms she attributed directly to alcohol. This was echoed by the description of participant six, who also explained his reduction from a substantial pattern of drinking up to twelve cans of beer daily to a tumbler of brandy every night to aid sleep. He then described using temazepam for a period of time while abstinent, and then reverting to alcohol to aid sleep when he felt a tolerance to benzodiazepines had developed. This seemed to be reverting to a long-established pattern of behaviour for participant five, who historically described his heavy drinking as necessary to attain sleep:

No, no. Well, what it did do for me [drinking]… Helped me go to sleep and sleep. And to compensate for that in recent times I've uh, got from the doctor temazepam. But what I've found after having that for so long is that you become immune to it, it doesn't knock you out like it should. [You] build up tolerance to it. In which case is why I find in the evening now I've got to have a shot of brandy. I do that mainly because it helps me go to sleep, where the temazepam did, and helps me stay asleep. And have a restful night's sleep… Whether it's psychological, or it's the alcohol content itself is… what helps me go to sleep rather than temazepam. I used to like the temazepam too but without a tolerance to it I could go to sleep very well. But um, now I find these days I've got to have the brandy (transcript six, page 2).

In spite of the clear risks of such a strategy, for example building a "tolerance" to brandy and returning to prior levels of heavy alcohol consumption, participant six felt this adaption to his present style of drinking was not a concern, describing it as medicinal, a curious statement given his cited reason for abstinence previously was due to health concerns:
Well, because I don’t consider myself to be an alcoholic, as such. Okay, it might sound, …a drink every night, but it’s only a tumbler half full of the brandy and go to bed and then… it works. So it’s only for medicinal purposes as I see it, not drifting back in to a world of crazy drinking (transcript six, page 2).

Participant three also described an adaptive pattern of use in line with health concerns, identifying the respiratory symptoms experienced from heavy cannabis smoking:

I suppose the main thing is that all it really results in is a harsh cough. Smoker's cough. And of course, you know that one that you can smoke yourself straight (transcript three, page 7).

Participant three also raised concerns with tolerance to cannabis: "you can smoke yourself straight." Conversely, participant four expressed that his alcohol use was primarily to counteract side effects of antipsychotic medications, as explored earlier in the onset section of this chapter. His true level of alcohol consumption was difficult to ascertain and had been a concern for his MAPS case manager for some time; participant four had described ongoing drinking for "celebrations," however these sometimes became daily events with dubious reasoning. During these periods, he consumed primarily wine that he cooked in a saucepan, however had adapted his use previously when placed on an injectable depot antipsychotic medication:

It was logical. If you're drunk, you fall asleep, and that's all. That's logic, my logic. That's why I bought alcohol to make myself fall asleep… So what, drinking at home, you collapse in bed and sleep. That's my logic, that's why I drink (transcript three, page 8).

The concept of adaptive use in older adults who use AOD is one that warrants further investigation. This is particularly evident when exploring benzodiazepine dependency, as touched on in the discussion with participant six who described a pattern of moving from temazepam to alcohol and back when he felt the tolerance destroyed his capability to sleep. Benzodiazepine dependence is a significant issue in older populations and is often overlooked or not disclosed due to the fact that there is a pervasive attitude that medications prescribed are not problematic (Closser, 1991; Simon & Ludman, 2006).
Adaptive use makes AOD more difficult to detect in older adults, particularly as individuals move from cohort to cohort, for example from being maintained on a methadone maintenance program to using cannabis and benzodiazepines obtained from many different prescribers. It may result in individuals presenting to a number of potential providers of care, making cohesive treatment difficult to attain (Wilsey et al., 2010). Adaptive use will be discussed further in Chapter Eight, however the key observation is that adaption of AOD use is a substantive barrier to service provision in older adults with dual diagnosis.

*Contemplating changes to use.*

As mentioned throughout this analysis, AOD use had a number of costs for each participant in this phase of the study. Accordingly, five of the participants made statements indicating their desire to cease or reduce their use of substances. This finding challenges attitudes that older adults should be either allowed to continue their use unabated as enquiring about AOD use is seen to be taking away one “last vice,” or that older adults who use AOD are “set in their ways” and therefore AOD treatment would be a futile endeavour (Allsop & Stevens, 2009).

Participant one mentioned the financial cost of using AOD as a negative aspect to sustained heroin use. The example below indicates the long term fiscal cost to participant one's family of her heroin use, resulting in a reliance on services provided at a State and local council level to remain housed. When asked to comment on the financial effects of heroin she stated:

> Oh massive. Ask my daughters. No, we always got through. I mean, when you’re on your own it’s easy. Like when you’ve got kids, but I was blessed with places like the [local council]. They rented us a cheap house. And once we had a roof over our head, food and everything was easier. But, they didn’t have ice cream in the fridge, or… now that they’re grown up they’re glad, let’s put it that way that they weren’t bought up on shit. You know, the kids down the road would have all these bloody awful plastic toys, zooming things, and my girls thought they wanted them, but they realised they didn’t. When they got older (transcript one, page 4).
In spite of the realisation of the financial cost heroin had taken on her life, participant one described her current desire to achieve abstinence as being based on attaining a sense of control over her opiate addiction:

I didn’t go on [methadone] until I was about 45. We held out against it, you know, because before that French junkies used to be on methadone. And, we used to look at them and feel sorry for them. Oh dear, but then it got to the point that I had to go on it (transcript one, page 15).

Accordingly, participant one expressed a long-term goal to her case manager of ceasing her fortnightly heroin use and eventually discontinuing her methadone maintenance treatment. Participant two was more ambiguous regarding his reasons to change, citing a general desire to change his lifestyle as a reason for ceasing cannabis use, however his initial dialogue did focus on running out of cannabis prior to being paid his fortnightly pension and the stresses associated. He went on to describe feeling frustrated with this lifestyle, expressing a desire to cease his use:

I wish I didn't do it [smoke cannabis daily]. Trying to [quit], but not succeeding, I'm sick of doing it (transcript two, page 5).

In itself, this finding is significant when considered alongside the history of participant two, who had frequently been treated as an individual with heavily entrenched substance use patterns, which had resulted in his motivation to change not being explored during the majority of his mental health service involvement. Medical issues were also cited as being a reason for change, as indicated by participant six:

Well I virtually said it can't be good for my body. That's what I said to myself. It can't be good for my body… because my grandfather died of cirrhosis of the liver, and I thought of him. I thought give it away, beside it being sort of expensive. When you stop and think about it in retrospect it was an expensive way to go to sleep (transcript six, page 4).
Prior to his involvement with the mental health service, participant six had suffered a stroke. In spite of his return to controlled drinking as discussed earlier in this chapter, participant six did not equate this as a health problem resulting from prior drinking. When asked about health issues as a result of drinking he replied:

The only health issues I’ve basically had are replacement knees for arthritis, and the recent bout of having a bit of a stroke. Mind you, um, I think I had a warning before that stroke. A warning in as much as this eye, I went blind in this eye for a number of weeks. That was a minor stroke (transcript six, page 6).

The above passage illustrates the opposite of expressing a desire to change and has been termed "sustain talk" by leading proponents of motivational interviewing, a counselling methodology specifically designed to determine and elicit change in behaviours (Miller & Rose, 2009). In itself, sustain talk is an expressed resistance to change, and often expressed as minimisation of the extent of AOD use as illustrated by participant four:

Yeah [drinking is] good for health. In my youth, I’d go to a restaurant… I got as drunk in my youth but that proves I’m only drinking for celebrations (transcript four, page 10).

In spite of a reported minimal use of alcohol, participant four suffered from several health problems and as discussed in the participant background section of this chapter, his actual consumption of alcohol appeared to be incongruent with his reported amounts. Another example of attempts to justify ongoing use was evident while interviewing participant six, who spent a significant amount of the interview explaining how his present consumption of alcohol was markedly different from past levels and patterns. During the interview, he was asked whether he still related to the term alcoholic and considered himself as having an alcohol problem despite his apparent reduction in consumption:

No, I don’t. I don’t, because it’s the same way you would have temazepam as a medicinal answer to it, I find the brandy is medicinal to me. So, what’s basically the difference? If I have half a tumbler of brandy to go to sleep, it’s the same as if I have a sleeping tablet. See, tonight, okay, I say I'm not an alcoholic, but I'll look
forward to when I want to go to sleep, and drink the brandy, have the brandy, turn off the TV and uh… just lay my head back on the pillow (transcript six, pages 4-5).

These findings reinforce the importance of ongoing assessment of an individual's readiness to make changes to their AOD use rather than viewing consumption of drugs and alcohol as an entrenched problem. They also highlight the importance of psychotherapeutic skills in the professional relationship between clinician and consumer, which will be discussed further in Chapter Eight.

The concept of self-medication.

Self-medication, described in the literature as a tendency to use AOD to reduce emotional distress is frequently cited as a common reason for substance use comorbidity in individuals with severe mental illness (Bolton, Robinson, & Sareen, 2009). Studies of self-medication often cite individual reasons for use as a relief of psychiatric symptoms and improving social abilities (Bizzarri et al., 2009). During the interview process, the participants indicated a degree of self-medication of their mental health symptoms, citing the use of AOD as necessary to maintain everyday functioning in light of persistent mental ill health. Participant one, who described a protracted period of depression with anxiety, described heroin use as a relief of her depressed mood:

It just feels fantastic for the time you've got it. And you'll do all that, forsake all that for a few hours of just… that wonderful feeling (transcript one, page 3).

Participant one also described periods where her mood had deteriorated, often preventing her from leaving her residence and engaging in social interactions with friends and family. During these periods, she did not seek professional help, instead describing the use of heroin to lift her mood. As the following example indicates, this was often in the context of significant social
stressors occurring in her life, although this example also indicates that respite from these situations was also beneficial:

I've had various times when I've needed some help, but mostly I've self-medicated [laughs]. I did have a period where, in a violent sort of relationship, ended up in a hospital… And after about two weeks sort of came out of it. I sort of turned off for a couple of weeks. Like I was there but not there (transcript one, page 5).

When directly queried as to her tendency to seek heroin to ameliorate the symptoms of depression, participant one described it as a drug with euphoric effects that she felt improved her mental state, comparing it to prescribed substances to treat depression as follows:

I used to say to doctors, you know, don't give me antidepressants, give me some heroin. And they'd say nah, but I meant it. See, I still don't get it, it's the most amazing drug ever been made by human beings. And they treat it like it's poison. You know, it's crazy (transcript one, page 7).

Likewise, participant two described his smoking of cannabis as a method to keep his symptoms of schizophrenia under control; he described that without cannabis, his mood quickly became depressed and his agitation and aggression intensified. When asked whether he felt daily cannabis consumption had an effect on his mental health, participant two stated:

Not really. If anything, it's kept me balanced… I can always see the bright side of life (transcript two, page 7).

The notion of using substances to cope with serious mental illness was present throughout all of the interviews, however participant three identified the relief he gained from using substances as a hindrance to ceasing use. This relief was what made it difficult to stop use:

I suppose because of the feeling it gave me, you know? Searching for that… Overall feeling of wellbeing as someone once put it (transcript three, page 9).
The above interaction indicates one of the primary difficulties in attempting to motivate individuals with dual diagnosis to cease or reduce their AOD use. Accordingly, while individuals may be able to attain abstinence of a sense of controlled use, this often becomes difficult in the setting of mania. Participant five described this phenomenon well, explaining that his substance use and the risks associated with it often increased when his mood elevated:

**Interviewer:** And when [your mood is] high, have you found in the past that kind of coincides with an increase in your drug use, or is it more when you get low?

**Participant five:** No, the high.

**Interviewer:** Does it tend to go with that conquer the world kind of thing?

**Participant five:** Yes, it does [laughs] (transcript five, page 7).

As described earlier in this chapter, participant five commenced his methamphetamine use as a way to manage the emotions related to the death of his then partner: "…I started shooting ice and that to get over the loss of my loved one," (transcript five, page 2). In itself, this disclosure indicates the commencement of a pattern of use that meets the definition of self-medication as described in the opening paragraph of this section. Such patterns can rapidly become an entrenched scheme of AOD use, which may not become evident until attempts to cease use are made. Participant six, who described a significant decompensation in his mental state when making the decision to cease drinking alcohol, illustrated this point; an attempt at abstinence resulted in a psychiatric admission and exacerbation of his symptoms of depression and anxiety:

When I gave up alcohol, I was… Affected somewhat mentally, mentally. Which I sought help with. I was put in [psychiatric hospital] for a number of weeks. I… Lost my way with things. I couldn't put two and two together so to speak. And I thought that, at the time, [psychiatric hospital] could help me. That was withdrawals after giving up alcohol. Normally I'd been drinking through… Quite a number of years. And their psychiatry division… Had me out for two weeks. At one stage I could walk to the front gate but I was too afraid to walk out (transcript six, page 1).
Further on in the interview, participant two described his treatment while an inpatient of the psychiatric hospital:

They put me on to drugs… To try and help me. A drug that's no longer used anymore called mellaril. Yes, I had that and I was said to be in deep depression. That's what the analysis was, that I was deeply depressed. I certainly had to agree with it [the diagnosis of depression], because I saw no other explanation for it. There had to be a reason why I went basically… stupefied. I needed to be evened out, evened out psychologically. After giving up the alcohol. I was drinking at least, uh, half a dozen… half a dozen cans or stubbies at night. For years, this went on for years. I suppose it was relief. Originally, I thought I was… I originally thought that I wouldn't be able to cope without [alcohol] (transcript six, pages 1-2).

When queried directly as to the reason for his heavy drinking, participant six described it as a means to attain sleep, which he described later in the interview as being disturbed by ruminating thoughts of hopelessness and worthlessness. These thoughts had resulted in participant six relapsing from his abstinence, and resuming his drinking as a means to self-medicate this symptom and attain sleep:

So that's where I decided to have a half tumbler of brandy, because it was strong enough to knock me out (transcript six, pages 2-3).

As a concept, self-medication goes some way to explain the motivations for individuals with dual diagnosis to maintain their AOD use in spite of the emotional, financial and social ramifications ongoing use may hold for them. Self-medication also highlights the difficulties inherent in providing AOD treatment to individuals with mental ill health, as symptom control remains a valid reason to the individual to maintain use.

**Complexity.**

Evident in the analysis of responses to the semi-structured interview process, the participants in this study displayed high levels of complexity, generally emanating from three domains: a high degree of medical comorbidity, the presence of stigma and the need to seek
treatment from a system not catering specifically to older adults. This section aims to explore these responses in greater detail.

**Medical conditions.**

In spite of the idea expressed by some participants that they were dying of things not associated with AOD use, the use of substances and alcohol had an impact on their lives, particularly when considering their physical health. The net result of this situation was a requirement for greater contact with health service providers, and although discussed in Chapter Three as a potential area for professional stigma, some participants reported mostly positive relations with clinicians despite their AOD use and mental health concerns. Participant one disclosed during the interview process that she was always determined to disclose her heroin use to hospital staff:

> But I’ve always been outspoken about it, well, when I say always, for a long time. I just refuse to let doctors and those people get away with… not recognising people like me and my friends. So I would tell them loud and clear, I use heroin, so from the outset they know. Still, a lot of my friends are very careful about which people they tell (transcript one, page 9).

As a result, she felt that the recent quality of care she received had improved from previous admissions, where she felt that both herself and her friends had been denied adequate pain relief during her stay. Participant one felt this was a clear consequence of her open disclosure of her opiate use:

> That’s exactly right, we used to not tell them a thing, but if you had tracks [injecting marks] they’d find them. But to the point of cruelty I reckon. And it would lead to all this unnecessary, you know, some people would just flip out. Deck [hit] the nurses [laughs]. And they’d deserve it. And, you know, there would be mayhem, all over a couple of Panadeine Fortes or, or a hit of something to take the pain away (transcript one, page 8).
She followed to discuss a recent admission, where she felt that her opiate use was managed professionally, in a manner that was sympathetic to both herself and her medical condition at the time:

I couldn’t believe the Alfred when I went there about eight years ago I went for exactly what I went for this time, I got this weird pneumonia, and, I was extremely sick. And I just couldn’t believe them, their whole attitude towards heroin users and stuff. I was unconscious for two or three days, and then, the first day I was with it the nurse came in with my methadone and I nearly fell out of bed with shock. I said, “What do you mean my methadone?” She said, “Well here it is.” I mean, I was used to the old days when you’d hang out in there and they’d treat you like shit. They’d hardly come near you (transcript one, pages 7-8).

Despite this positive account of healthcare interactions, participant two reported poor prior experiences, particularly with general practitioners. He felt that he was judged as an opiate seeking patient in spite of legitimate physical pain:

Participant two: Back pain. When I got hit by that fucking car… Crossing the road, and he bowled me. Like and he saw me, I know he saw me. He just accelerated up that hill like a crazy bastard like he was trying to kill me.

Interviewer: Have you taken anything for your back since? Any pain killers?

Participant two: Yeah, but I’ve given up on pain killers. They don’t work… It’s not that they don’t work, it’s getting the bloody prescriptions all the time.

Interviewer: Do you find it hard to get them?

Participant two: Yeah, they fuck you around.

Interviewer: What sort of pills?

Participant two: Oh, just morphine and that. Oxycodones if I can get them.

Interviewer: They’re hard to get?

Participant two: Oxycontin… Oh, I don’t know if they’re hard to get, it’s just hard for me to go and get them. I just don’t like doctors. So I suffer (transcript two, page 11).
As a result, participant two received very little primary health care in the community, instead being investigated for physical health concerns during admissions to the psychiatric unit. Physically, participant two presented as frail, with marked loss of weight and pallor. As previously mentioned, his oral intake was poor due to poverty, as his funds were often spent on marijuana rather than food. Participant two acknowledged the effect both cannabis and tobacco smoking had on his health:

Yeah, yeah it has [affected my health]. I’ve got emphysema, bordering on emphysema (transcript two, page 12).

On interview, participant three presented in a similar fashion, with a pronounced loss of weight over the last twelve months as corroborated by his case manager. He appeared frail and gaunt, and again, described very little oral intake apart from alcohol. In spite of this, he felt that his physical condition had improved over recent months:

Simple cooking. Hot wine with biscuits in the hot wine, that's a meal for me. Couple of biscuits and hot wine and that's a meal (transcript five, page 4).

I was starved, I was… I wasn’t healthy. And now I’m the healthiest I’ve been and yet I have problems on problems. Leg problems, cannot walk, can only manage one kilometer. Eye problem, cannot see too clearly, night vision getting worse. Night vision, it’s a funny thing I was in the city one night three or four years ago. I looked at the tram coming, capital S, I thought maybe South Melbourne. I jumped on and it was going to St Kilda [laughs]. So I got off and walked back, crossed a dangerous intersection, got on next capital S [laughs]. South Melbourne (transcript four, page 1).

As participant four himself describes, his medical conditions were causing him significant problems in his ability to travel around his local neighbourhood. Additionally, he had developed chronic diarrhoea that also caused problems with his appointments and trips in the local area:
The only problem is when I have to go somewhere, when I have appointments I cannot eat because I have to go to the toilet in the middle of the village and that’s not pleasant. That can be, uh, nasty. For appointments I don’t go to [the] bank, I don’t eat. And when I come back from [the] bank then I eat (transcript four, page 6).

I had a little accident. Stool, you know, toilet. Hygienic duty, that’s what I’m talking about. Little accident I had. And that’s why whenever I have appointments or something, I don’t eat until it’s over and then I eat (transcript four, page 7).

Finally, the cognitive impact of prior overdose was an outcome of previous opiate use not anticipated until disclosed by two participants in this study. Although cognition was not assessed as part of the methodology of this study, repeated hypoxic brain insults as a result of opiate overdose raise the question of long-term damage that may manifest itself in later years. For example, participant two described overdosing during his first experimentation with heroin:

OD’ed. First hit…. Christmas Eve, 75 or 74 or something. They [friends] dumped me in a pool room, slid me under the table (transcript two, page 8).

Participant one also described a number of opiate overdoses throughout her time using heroin, however in contrast to participant two’s description of overdosing on his first use of heroin, participant one described a substantial amount of time between the onset of regular use and her first overdose. When asked if she had ever had any overdoses during her opiate use, she replied:

Yeah. 5, but only 3 hospitalised. I didn’t drop until I was about 42, and that was all to do with money as well…
I went there in the morning and the dope was extremely good back then, you know, in the 80s. And I needed a hit in the morning to get myself together…zoomed over to their place to get a hit from them so I could get out and get some money. And she fell out of bed to make me a hit, but couldn’t find her contact lenses. So she made the hit anyway and gave it to me, and God knows what she put in the spoon but she must’ve filled it up, because I put it in my arm and just went bang… (Transcript one, page 2).

From reviewing the responses to the semi-structured interview process, it is clear that the medical conditions the participants face caused a need to adapt their daily routines to accommodate,
as well as be in contact with healthcare providers on a more regular basis than they may have needed in younger years.

**Stigma.**

As mentioned in the previous section, stigma from healthcare providers was a substantial barrier to help seeking for some of the participants involved in this study, echoing findings by Conner and Rosen (2008). Not only did stigma affect the care provided during the participant’s older age, it had certainly shaped the experience of dealing with services throughout the lifespan. Participant one expressed this candidly when discussing her long-term heroin use and the impact on raising her three children. She discussed this in reference to clinical and community services she had interactions with, believing that had her opiate use been discovered the custody of her children would’ve been in jeopardy:

God, the minute one of those people had found out about me with 3 kids, selling smack and using, [it] would’ve been the end (transcript one, page 4).

Further, she described situations whereby she had to make the difficult decision to either be incarcerated or mandated to residential rehabilitation, all while attempting to maintain custody of her children. Therefore, participant one’s daughter often cared for her two younger children while she remained in inpatient rehabilitation. She described this situation as being driven by the fear of losing her children:

I used it [rehabilitation] to dodge jail. But it seemed to come at the right times when I’d be on my knees almost. And I’d… go to [rehabilitation centre]. I did a couple of stints there, one 5 months and one 6 months. And that was a great place to go because it was… downstairs was detox and once you felt okay you went upstairs to what they called rehab (transcript one, page 5).
And she [oldest daughter] was the second mother when I’d be out of action, she’d take over, and probably better than I did… And she did that for six months and her bloody school teachers didn’t even know, they didn’t even pick up on [eldest daughter], that she was doing all this stuff before school and after school and being fabulous at her school work (transcript one, page 6).

As discussed in the previous section, lifetime encounters with services that require a certain level of mistrust and deception tend to shape an individual’s ideas around help seeking, as demonstrated by the account of participant two, who would no longer attend general practitioners due to perceived judgement (Sorsa & Åstedt-Kurki, 2013). Further, as described in participant two’s background earlier in this chapter, his relapse profile tended to alienate community services who could assist him with his psychosocial needs, such as cooking, shopping and keeping his accommodation clean enough to avoid scrutiny and possible eviction due to his tendency to hoard and the squalid state of the premises. Additionally, his verbal threats made social engagement in groups outside of substance use difficult. As a result, he tended to move towards a group who accepted him and provided charity. This group provided both psychological support and material services that would be typically provided through a community provider. When asked if he still associated with this group, participant two replied:

Not as much as I used to, but yeah. I go and see [devotee] every now and then and have a talk with him… If I’ve got any worries or anything I go and talk to [devotee]. He loans me money sometimes (transcript two, page 10).

Five of the participants in this study all suffered from some form of social isolation, including living alone. Additionally, they were often disconnected from community groups, services and support, either due to symptoms of their mental ill health or substance use. As discussed earlier in this chapter, most friends and acquaintances often were involved in AOD use, adding an extra barrier to cessation, being the loss of social networks. Participant one described a
"shunning" of non-using peers as she felt that their lack of heroin use meant a loss of a common interest in the relationship:

Because you get, once you start using, you’re forced into a... a group of people or... you can’t mix with the people you used to go to university with and have a job with because you’ve got nothing in common with them (transcript one, page 3).

As she identifies, her use of heroin also forced her into a network of people who associated through drug use. This finding reinforces the notion of addiction as career as discussed earlier in this chapter and proposed by researchers in the addiction field. Participant one also expressed that her heroin use had a social cost, in that she felt that she could no longer associate with people who didn't use heroin. Further, as participant one aged, she became isolated from her friends due their deaths from the mortality associated with heroin use and associated chronic diseases.

Social isolation amongst the participants often also had an added layer of complexity, as discussed in the background of participant two. Not only did he isolate himself in his flat to consume cannabis for much of the day, his accommodation was in a squalid condition. When queried, he described having periods where he "collected" rubbish when psychiatrically unwell, often returning to his flat after hospitalisation feeling overwhelmed about where to start cleaning it out. When specifically asked what prevented him from cleaning his flat, participant two replied:

Um... just laziness. Look at this [gestures to flat]. I'm lazy. Most of everything that has happened in here happened last year when I had... I schizted [sic] out, freaked out, went mad. Had my brother's car and stuff, went out collecting junk... There's about four lawnmowers at his place that I found. That I will fix up one day. They're easy to fix, just springs and seals and shit. That are old and worn out and need replacing (transcript two, page 19).

In spite of identifying the difficulties associated with his living condition and collecting rubbish, participant two still identified his collected possessions as having intrinsic value, despite
the fact that he had received warnings from his housing officer about losing his property if he did not make efforts to remove the rubbish and attempt to clean up.

Participant five had also spent time homeless throughout his life. He highlighted an issue that is prevalent in Australia at present, that of housing affordability (Birrell et al., 2012):

Yeah, I've been homeless. When I was homeless. You know how many people are without a flat or accommodation? Thousands. And uh, that's why I had to stay here, because this is the only place I can afford on the pension. I tried to sleep on the marble in the city. I put cardboard… and laid down [laughs]. Can't sleep! Who can sleep on the cold, cold marble? (Transcript 4, page 9).

Stigma manifests in a number of ways, and the participants in this study identified difficulties accessing services and being provided with healthcare in a non-judgmental manner. Their AOD use was also often ignored, with them not being offered treatment or simply not addressed as part of a holistic approach to their medical care. These issues are particularly relevant in an older adult population, as explored in the following section.

A system not catering to older adults.

Arguably, AOD treatment services are not equipped to cater to the needs of older adults, particularly in the home state of this study, Victoria. While older adult mental health services may exist, the findings of this study indicate that they require improvement in identifying and providing care to individuals with dual diagnosis. For instance, services catered to younger individuals may require attendance at a clinic during set hours, or extensive travel. As identified in earlier sections of this chapter, both of these conditions may be problematic, and could result in non-adherence to treatment or relapse. Participant two, who had spent a period on a methadone maintenance program earlier in his life, identified this point:
Some days I didn't make it… [I’d be] hanging out. Go and get another taste. I missed the chemist, whatever, I'd go and use. Nothing else to do. Otherwise you just withdraw (transcript two, page 6).

Although this scenario was identified at a younger stage of participant two's life, with a methadone providing chemist with rigid hours and rules, he did identify that if he were to undergo any form of substitution therapy at the current point in his life he would likely be placed in this situation again due to a lack of motivation and organisational skills to keep appointment times.

Participant five's partner identified a point where his care changed, which coincided with a transition from an adult mental health service to the aged psychiatry service. She expressed that she felt that he was appointed a case manager who had more life experience, and employed a genuine strengths-based approach to his care:

He [participant five] should be dealt with someone in his age group, and then [MAPS case manager] came out of it which was fantastic. The [adult mental health service case manager] girl was too young to understand, and… I think you need someone in their late 40s, or someone that’s had life experience and such, where she just seemed like a young girl and wanted to know it all already. And maybe some things might help with the younger kids, or certain age groups, but… (Transcript five, page 22).

And [MAPS case manager] became like a good friend… And believed [participant five] when he was speaking to him, and didn’t treat him as if something that came out of his mouth was all just rubbish or something. That [participant five] is a genuine person, and a person that has something to give still in this world, small or big (transcript five, page 15).

Although it could be argued that the age of participant five's case manager is irrelevant in this situation, the interaction does highlight the necessity of investing time to achieve genuine rapport with consumers of mental health services, especially given the high level of complexity in the older adult cohort. Unfortunately, this may not be possible in busy publicly funded mental health services, or drug and alcohol services who often operate to a finite number of clinical sessions per consumer.
Four of the participants interviewed described wanting to either abstain from their substance use, or to make changes. As discussed further in the next chapter of this thesis, services were either not equipped to allow timely admission to act on the desire to take action, or clinicians lacked the skills necessary to support change. This was evident from the first participant, who advised that she had a long-term goal to cease methadone, through to participant three, who expressed bluntly:

Interviewer:  Do you ever run out of dope?
Participant three:  Yeah occasionally.

Interviewer:  How do you find that? It must be a bit stressful if you smoke every day.
Participant three:  Yeah, it is. I wish I didn’t do it.

Interviewer:  Are you thinking about quitting?
Participant three:  Trying to, but not succeeding (transcript three, page 5).

In terms of his cannabis consumption, participant three identified that the only help he had received in cutting down or ceasing use was from an acupuncture practitioner. Throughout his community health involvement his wish to reduce his cannabis use was not addressed by mental health practitioners, and arguably would have been more difficult to address within the older adult mental health service framework due to a lack of specialist advice for older adults with substance use disorders.

**The drug and the mental illness.**

The final section of this chapter presents the results of the participant's experiences of treatment, both from general mental health and AOD services, and MAPS specifically. The participants provided candid accounts of their interactions with clinical services over the years, and some offered insights into the improvement of care provision with individuals with dual diagnoses such as themselves.
Treatment experiences: mental health.

Given four of the individuals in the study had been involved with mental health services for a substantial portion of their adult lives, they had seen a large number of changes in the provision of mental health services, including treatments administered, settings, medications prescribed and legislative changes that transformed the landscape of mental health care in Victoria. A similar shift had occurred in AOD treatment settings, and although less pronounced than mental health service changes, participants described changes in the modality of service provision in this setting as well. These changes were explored in greater detail in Chapter Two of this thesis and were reflected in the semi-structured interview responses provided by the participants.

Four of the participants described lengthy interactions with mental health services, spanning their adult lives and continuing to the present day. The remaining two participants had some prior involvement with mental health services, however this was an adjunct to their core concern of AOD use. Participant two described long involvement with mental health services, commencing early in his life with several admissions to psychiatric hospitals:

Yeah. Since um, the 70s… I was in Royal Park [psychiatric hospital] for about 3 or 4 months at one time (transcript two, page 1).

Coerced treatment is at odds with the contemporary nature of AOD treatment services, which rely heavily on a system of voluntary presentation as discussed in Chapter Two. Participant two echoed this sentiment, describing his interactions with mental health services as being tantamount to him having no rights:

You say you're given rights but when it comes to the crunch you've got no rights… No rights to be treated like a human being. I got jumped on once, my sandals torn off, my shirt torn off… (Transcript two, page 1).
In this example, participant two describes restrictive interventions, being physical restraint. However, he associates removal of his possessions as a breach of his rights. Interestingly, it was thought that his only treatment for his heavy cannabis use occurred as an inpatient of the psychiatric facility, however he openly admitted to "stashing" smoking implements and cannabis nearby the hospital when an admission was pending, allowing consumption of cannabis when he was granted leave from the ward:

Yeah, it is a bit anxiety provoking [being prevented from smoking cannabis]. Like, um, there's a car park not far from the [psychiatric hospital] that I stash all my gear in. And I go for a walk in the park and then I go over to the car park [laughs], (transcript two, page 7).

This account seriously challenges the notion that inpatient psychiatric wards are places safe from drug use and calls into question the clinical management of drug withdrawal on these wards, which will be explored further in Chapter Eight (Phillips & Johnson, 2003). Participant three also described a long history with publically funded mental health services, having a number of admissions during his adult life: "I was in and out of hospital for 40 years," (transcript three, page 1). As discussed in the Onset section of this chapter, he commenced his use of substances while an inpatient of a psychiatric facility. After this, he had a number of admissions for drug-induced psychosis, which he described as not changing his drug use trajectory in any way:

No, I was diagnosed with drug-induced psychosis in 1986 and let's see… I last had the mushrooms back in 2009 so that's what, over 20 years after that I was still taking them (transcript three, page 3).

When queried, participant three reported that very little effort had been made to address his AOD use during psychiatric admissions, only being able to recall one instance where he was told to cease his use:

Back in about 1978 or thereabouts… one of the staff members said to me "I hope you realise you are slowly killing yourself," (transcript three, page 15).
In terms of his mental health treatment, participant three had experienced modalities of psychiatric treatment now considered inhumane: "... back in 1968 I had the shock treatment without anaesthetic," (transcript three, page 5). He had also experienced a long period of incarceration in a secure psychiatric asylum in his youth. In spite of these experiences, he recognised a positive change occurring in mental health treatment:

It seems to be improving overall, yeah. I reckon it really is improving. Like, you know the so-called advancements in psychiatry... what's the term again, a revolution, you know. And they take into account spirituality now, more than they have in the past (transcript three, page 6).

When interviewed, participant four echoed the sentiments of participant two, stating that he felt mental health treatment was an infringement on his rights and freedoms. He described being admitted during a psychotic episode, with police involvement, and summarised the issues associated since:

Unfortunately, I was arrested by police. Unfortunately, that is how I got there, with shrinks... I tried everything, I tried three different languages, nothing matters, nothing works at all. That's when the government got me, and they wouldn't let me go for ever, 35 years they've been injecting me. I got tardive dyskinesia, you know, from the injection. Tardive dyskinesia. It stopped five years ago but uh, got tardive dyskinesia... They're wrong when they think they're right... It's a great injustice what happened to me. I believe it is an injustice. And... what can I do? (Transcript four, page 1).

Participant four described being commenced on a depot antipsychotic injection due to non-adherence to his oral medications, which he described as poison:

Later on they started giving me an injection. Because I refused to take a pill. Poison, poison pills, they ruin my constitution poison pills, so I refused pills so they had to inject me (transcript four, page 1).

As presented earlier in the Onset section of this chapter, participant four attributed his heavy drinking as a means to offset the side effects of the depot antipsychotic medication. Further, he
denied ever having his alcohol use addressed or questioned until he was transferred to MAPS upon turning 65 years of age.

Participant five also described long involvement with public mental health services, which culminated in him being involuntarily admitted to hospital prior to his involvement with MAPS. Like participant three, this admission involved police attendance. He also questioned his diagnosis and it's relationship to this admission:

I've been diagnosed as paranoid schizophrenic. But that psychiatrist had fucked right up. In that he was referring to somebody else's file and not my file. And so, you know, when I was down here, just seeing my ordinary GP and that, and… sorry, I'll retrace a bit. Back in Lismore, they diagnosed me as bipolar. I agree with the bipolar aspect. But not the paranoid schizophrenic. Because I'm not paranoid about anything (transcript five, page 4).

As discussed earlier in this chapter, participant five described his AOD use as escalating with his elevated mood. He also recounted his admission, and his belief that it was unjust. Again, this belief seemed to be centred around the use of restrictive and coercive force, as expressed by participant four:

I was yelling out the back, you know, because I've got a bad back, and someone rang the ambo for us. The ambulance. And one gentleman here, Alan [neighbour], he heard us and climbed over the fence to see if I was okay. I said, "No I'm not Al, I need an ambulance." Then two ambulance guys turn up, and I'm about to go with them, and all of a sudden one of them starts throwing karate punches. And I'm thinking what the fuck is going on…. And then when I walked outside, you know, all of these policemen. And they said "Do you mind if we put handcuffs on you?" And I said, "No, I'm a volunteer patient anyway." And we get into the waiting room, and I said "No needles please." Well, due to my past history, I don't want a reoccurrence. And they come out with a needle and all the rest of it… Well it made me angry (transcript five, page 6).
In spite of this perceived ill treatment by mental health services, participant five could identify and area for positive change in mental health inpatient units. This suggestion was drawn from his own experiences, including what he found useful in his recovery, which will be explored further in the next section:

I believe they need more one on one counselling. That there is a terrific lack of face to face contact, like with the psychiatric nurses, they all seem to want to sit in meetings and discuss you, but without actually talking to you (transcript five, page 21).

This notion will be discussed further in Chapter Eight of this thesis, however it highlights the reactive nature of mental health services and a potential barrier to implementation of effective AOD treatment and harm reduction on inpatient mental health wards. This section also reinforces the differences between contemporary mental health and AOD treatment services, as discussed earlier in Chapter Two. The next section will further expand on this contrast by presenting the findings of the participant's accounts of AOD treatment.

**Treatment experiences: AOD.**

In addition to experiences with mental health service providers, four of the participants also had been the recipients of AOD treatment service care at some point in their adult lives. Although this has been explored briefly in previous sections of this chapter, it warrants greater investigation due to the distinct contrast with their mental health service experiences. As discussed in the Chapter Two of this thesis, the lack of care coordination between mental health and AOD services is a barrier to effective dual diagnosis service provision. Participant one illustrates this point saliently, describing little mental health service involvement but a reliance on AOD treatment services when required:

I used it to dodge jail. But it seemed to come at the right times when I'd be on my knees almost. And I'd go to [residential treatment service]. I did a couple of stints there, one 5 months and one 6 months. And that was a
great place to go, because it was… downstairs was detox and once you felt okay you went upstairs to what they called rehab (transcript one, page 5).

Elaborating on this point, participant one identified that ceasing drug use was something she preferred to do alone, relying on residential services when she felt all of her options were expended and the custody of her children was at risk:

Back when I was a girl doing it all I was happy to have no intervention at all. I didn't want anybody near the kids, or near my house. I was more connected to the doctor and the cops. The cops wanted me off the street and the doctor had the place to put me. So, it was just to avoid me going to jail, and the kids then would've been taken automatically (transcript one, page 13).

Analysing these responses, it is clear participant one seeking assistance from AOD treatment services was driven by a form of "secondary gain:" that being avoiding imprisonment and the subsequent loss of the custody of her children. As a result, she felt that she rarely obtained the results she sought (abstinence) from AOD treatment services and tended to attempt to quit "cold turkey" herself. She spoke somewhat poorly of her prior experiences with AOD treatment services:

It used to be terrible, I mean it was all based on the urine spec. We all became expert in false urines… No treatment, I mean you were just in there to sleep and eat back in those days. But nowadays, I don’t know, I really don’t know anymore (transcript one, page 13).

Participant five also described implementing his own plan to cease use of both injected and ingested morphine tablets, however he sought supervision from an AOD treatment service. Despite being an inpatient of the service and achieving his goal of ceasing use, he described immediately "adapting" his use to cannabis on his discharge from the facility:

Participant five: I was on a pretty high daily dosage [180mg daily].

Interviewer: Did they cut you down or… just go alright, we will support you to stop?
Participant five: Yes. Support me to stop. And then they got worried themselves, you know, because you can die from that.

Interviewer: Yeah, it's a big drop. From that to nothing.

Participant five: That took a week. Then they kept us for another few days and that. Then my mate picked us up.

Interviewer: How did you go when you got out? Were your friends involved in drug use?

Participant five: No, but um… he had a packet of reefers lined up for us [laughs]. He said "I think you'll need these" [laughs].

Interviewer: So you went back to smoking dope?

Participant five: Pot, yeah (transcript five, pages 12-13).

While demonstrating the importance of treating underlying mental health problems, which participant five described as unresolved grief and depression related to the death of his partner, this example also describes the need for follow-up care for AOD problems. Participant two also described a switch from heroin to cannabis after being treated with methadone, which he later stated he commenced toward the end of his methadone treatment, while attempting to titrate his dose:

Participant two: Yeah, that’s when I went on the methadone, when I was using more and more.

More than three hits a day.

Interviewer: When you went on the methadone did you keep using heroin? Some people use it to cut down I’ve found.

Participant two: Nah, I just… I gave up using heroin. Last hit I got was a dirty hit and I was sick for days.

Interviewer: How did you go with methadone? It can be tough to get off can’t it?

Participant two: Yeah, I got off it pretty quick. I just jumped off it. Decided I just didn’t want to be on this shit any more. Jumped off.

Interviewer: Did you find it hard, withdrawal from methadone?
Participant two: The last 5ml was the hardest.

Interviewer: Is that what you got down to before you stopped?

Participant two: Yeah. Like I know guys that will get down to 5 or 10mls and hang out and start using again. And, uh, you’ll see them 12 months later they’re still on their 10mls or 5mls. They can’t get off it.

Interviewer: Why did you find it so hard, the last 5?

Participant two: Well my bones started aching. All of my bones started aching.

Interviewer: Was it similar to withdrawing from heroin given they’re similar drugs?

Participant two: Yeah. [It] Was a withdrawal (transcript two, pages 12-13).

Participant two's history demonstrates the complexity inherent in individuals with dual diagnosis. It also again demonstrates the concept of adaptive use, in this instance the use of cannabis to ameliorate the withdrawal symptoms of a drug used as opiate replacement therapy (methadone).

This section demonstrates the difference between AOD treatment and mental health services, with participants generally describing their AOD treatment as brief interactions during their lives. Conversely, mental health services were often involved for a substantial amount of time, and often involuntarily. The next section of this chapter outlines the participant's experiences with MAPS, the older adult mental health service that is the focus of this study.

**Treatment experiences: MAPS.**

The final section of this chapter describes the participant's experiences of care being provided for them by the Caulfield Hospital MAPS, the service that is the focus of this study. This section forms a companion to the previous two sections, being treatment from other mental health
and AOD agencies, and is intended to complement these sections by comparing current experiences of treatment. Four of the participants described their experiences with MAPS as positive, with the remaining two expressing concern at coercive care, as indicated earlier in this chapter. Participant one, who was new to the public mental health system when referred to MAPS, stated:

Well I'd never met them before, but they've been wonderful. And totally non-judgmental about drugs (transcript one, page 9).

Participant one described this non-judgmental attitude as being important to her and a key reason for her engaging in mental health care from the service. Participant three echoed this sentiment, describing periods where abstinence was the default expectation for individuals with dual diagnosis:

They don't come down on you these days. They haven't come down on me like a tonne of bricks (transcript three, page 15).

Despite participant three expressing a dislike for a stern approach, participant five felt as though this was essential in his care. He reported his case manager using this approach, using the physical damage heavy AOD use was causing him as a pivotal reflection to aid him in changing his behaviour:

Interviewer: So it sounds like you've had positive experiences with [case manager] and MAPS. What has [case manager] done to help you change?

Participant five: Yeah, he helped me out with my sister and her hand in my finances. Yeah.

Interviewer: It sounds like he's helped you change your thinking around drug and alcohol use as well though.

Participant five: Yeah. Yeah, he's been pretty heavy with me on the alcohol.

Interviewer: Heavy?
Participant five: Saying that my liver is damaged and that I need to take more care of myself, rather than binge drinking and that.

Interviewer: Is that something that you feel has worked for you? Because some people… when people come down heavy on them, they don't want to know.

Participant five: Yeah (transcript five, page 14).

However, while participant two attributed a direct approach from his case manager to enabling change and reminding him of the negative consequences of his heavy alcohol consumption, participant six likened such a strategy as a misunderstanding of his reasons for alcohol consumption, namely being to control ruminating thoughts to allow sleep. He referred to his perceived belief that his case manager did not approve of his current alcohol intake, rationalising it as a misunderstanding of his belief that alcohol was therapeutic in his situation:

I don’t think he’s [case manager] told me directly, he has said you know what harm could come. And I say what harm, like Freddy Mercury, who wants to live forever? I don’t so much disagree with what he is telling me. The normal reaction to the alcohol, what I disagree is to the point that he doesn’t understand that I’m very healthy and it’s not as if I’m leading in to anything else. I’ll be honest with you, very honest with you. If you could give me temazepam of a night, and I knew I could go to sleep, I would stay with the temazepam. So what do you become addicted to, the temaz or the brandy? Yes, that’s right, okay it’s being dependent, but it is doing the job. There is nothing worse, I can tell you… than to just be lying there for hour after hour and not going anywhere (transcript six, pages 10-11).

This interaction demonstrates the skill needed to address problematic AOD use, particularly in providing feedback around ambivalence to change, support with use of medications that may cause dependency (such as benzodiazepines in this case), and to assist participant six to maintain a level of controlled drinking that is acceptable to both himself and mitigates the risks to his health.

This section has served to describe the experiences of the participants in seeking help and treatment from both mental health and AOD treatment services. It also identifies a changing
landscape in mental health services, however the absence of accounts of participants engaging in treatment with AOD services in their older years is telling.

**Summary**

The responses presented in this chapter indicate that the individuals who agreed to participate in this phase of the research were not a homogenous group as previously discussed in Chapter Three; rather, they were diverse individuals, with differing mental health problems, choice of substance, medical comorbidities and other complexities. Although drawn from a small pool of participants, these responses demonstrate the issues specific to the older adult dual diagnosis cohort. They were also a difficult cohort to access, namely due to the small sample available from those being case managed by MAPS at the time and issues associated with access as discussed in the fourth chapter of this thesis. The next chapter of presents the findings of the qualitative interview process conducted with clinicians who provide care to older adults with dual diagnosis.
Chapter Seven

Phase Three: Findings From Staff Interviews

Introduction

This chapter presents the results of the final phase of the study, which interviewed case managers and clinicians from Caulfield Hospital MAPS to ascertain their experiences in working with older adults with dual diagnosis. This chapter was inspired by the work of Deans and Soar (2005), who interviewed a number of clinicians working with dual diagnosis clients in rural Victoria, Australia. Their research found clinicians describing a number of frustrations and barriers present in providing care to individuals with dual diagnosis, and it was felt when planning this study that a critical appraisal of these issues should be conducted. In addition, the spirit of the explanatory sequential model guided the semi-structured questioning instrument utilized in this chapter (Mason, 2006). A number of themes emerged during the process of interviewing clinicians, with the themes involving the challenges and complexities involved in providing care for older adults with dual diagnosis. Additionally, clinicians were also asked to identify areas for improvement in providing care for this cohort. These findings are detailed throughout this chapter.

The Third Phase

As identified in the previous chapter of this thesis, this research was conducted under an explanatory sequential framework with each phase informed by its predecessor. In this instance, a qualitative chapter exploring the experiences of clinicians became essential to provide both depth and context to the previous two phases of the research. It became clear during both the file audit process and interviews with consumers that clinician experiences and influences on the care of older adults with dual diagnosis were an essential element of this thesis. Accordingly, this phase
was informed by the two phases preceding it as is required in an explanatory sequential design (Stange et al., 1994).

The participants involved in this phase of the thesis had a wide range of experience, ranging from two to approximately 30 years. This phase interviewed five registered nurses, two social workers, an occupational therapist, a psychologist and a carer consultant. MAPS employed all clinicians interviewed at the time of interview, and a semi-structured interview tool was utilised during the process.

**Content Analysis**

Content analysis for this section was conducted in a similar manner described in Chapter Six. Interviews were transcribed and imported into NVivo prior to content being examined for themes. Three key themes emerged during this process, being assessment and response, clinician experiences and service collaboration. Each of the three themes identified has a number of sub themes which are presented in the following sections.

**Assessment and response.**

Assessment of any potential presenting health concern is a cornerstone of care planning by healthcare professionals, both to recognise individuals presenting with the concern and to determine the severity of the problem (Sobell, Sobell, & Nirenberg, 1988). Alcohol and other drug problems are not immune from the need for screening, with several excellent screens available (Bright, Fink, Beck, Gabriel, & Singh, 2013; Dawe et al., 2003; Hirata et al., 2001). In addition to the use of formalised screening, clinicians typically employ clinical judgment and reasoning to identify clinical problems and apply clinical reasoning to formulate treatment plans. This section explores the issues associated with both assessment of older adults presenting to MAPS with dual diagnosis,
and once identified, the service response issues as identified by a number of clinicians of the service.

Assessment issues.

As indicated in the introductory paragraph of this section, assessment of alcohol and other drug use is a critical function for services to correctly identify and enact treatment planning in older adults with dual diagnosis. Despite the recognition of dual diagnosis and the relative uniformity of screening and assessment procedures for AOD use in this setting, many clinicians described either not being trained in using tools such as the ASSIST or being instructed to utilise brief approaches as part of an overall initial assessment package. Participant one, a registered nurse with a number of years’ experience in MAPS, felt that this issue had been apparent for some time:

And that’s been a long-standing issue. And if they do drug and alcohol, and yes there is an issue, but that is as far as it goes. So… it’s usually only those where [AOD use] is quite obvious. As to going the next step… even talking to them about, you know, what they’re doing, how they find it, have they ever done this, what’s their history with drug and alcohol. It’s very poorly managed. And not seen as enough importance. The mental state has always been the issue, but not relating it to the drug and alcohol (transcript one, page two).

In addition, when queried about the introduction of the ASSIST, participant one identified that it was rejected as an assessment tool with the preference being a short screening instrument embedded into a generalist assessment package. This is particularly concerning, given the parent health service identifies the use of the ASSIST as essential to dual diagnosis competency:

… It’s never been accepted as being what we use… the only one [screening instrument] we used here was a really short questionnaire… are you using or do you use, how often and how much, and do you think you have a problem. That was it, it was a four question thing that we tried to even bring in just for all case managers (transcript one, page one).
Further, participant one clearly articulated the issues associated with a piecemeal approach to asking about AOD use as opposed to the use of a uniform screening instrument. In the following passage, participant one expresses an opinion regarding the current state of identification of AOD use, being confined to instances where it is voluntarily disclosed or “obvious” visually during initial interactions with the consumer:

I think the main thing is to recognise that it’s something that we need to be aware of with everybody that we go and visit, and that everyone we visit… is assessed for it. To screen it, because it’s only when you actually ask when you find out. And most of the time most people don’t ask, it’s either the only time they ask is if it’s volunteered to them, or if it’s pretty obvious when you go and visit someone and they’re out of it. So I think just getting that off the ground would make a huge difference. So it has to be just a part of your initial assessment, your everyday assessments, always. And I think until then, it just won’t happen. It has to be seen as mandatory, as part of doing a mental state and doing a mini mental [state examination], (transcript one page seven).

Participant two felt that the lack of a standardised screening approach left clinicians in the situation where they were required to ask questions perceived as difficult or uncomfortable, providing an alternate explanation as to the apparent reluctance to discuss AOD with consumers. Participant two felt this was particularly evident with new graduate (“grad”) clinicians, and that assessment required training in discussing issues such as this with consumers:

We don’t even ask about their usage, let alone what they want to do about it. So I think as a service we really need to go back to basics and work out, and train us in how to have those conversations with people. Because I think that, I mean I’ve been working in this area for over 20 years, so I feel quite comfortable just having that conversation, but I know in my supervision of lots of new grads, but also reasonably experienced people they are still really uncomfortable asking about mental state and risk and suicide, and you know, relationships and drug use. There is lots of stuff we don’t talk about because people are personally uncomfortable (transcript two, pages 5-6).
In spite of the example of having a conversation around alcohol and other drugs being related to difficulties in neophyte clinicians, participant 10, who carried a number of years in both mental health and MAPS, identified instances where she felt she had ignored screening due to the lack of obvious cues towards AOD use:

I’ve caught myself a few times when I’ve just assumed that there is no history and then I may not even go into that section, that part at all, because I assume (transcript 10, page 1).

As mentioned in Chapter Five of this thesis, the section of the electronic assessment document participant ten is referring to is an arbitrary question related to the presence of AOD use. Participant ten also identified two key perceived issues which were echoed by other clinicians during the semi-structured interview process, being a feeling that assessing for AOD was just another burden in an already overwhelming assessment process, and a lack of rapport at the initial contact stage making asking questions about AOD use difficult:

I think part of the problem is the assessment because there is so many other things, it shouldn’t be too difficult to ask those questions, but I think that sometimes that is what stops me. Not having that rapport (transcript 10, page 2).

Participant ten also echoed sentiments present in the literature and explored in Chapter Three, being a perception that older adults simply don’t use illicit drugs:

Alcohol I will ask, heroin I would never ask about, no. Not in aged psychiatry (transcript 10, page 6).

Clearly, this finding also raises issues concerning exploration of an AOD use history, a pivotal function of tools such as the ASSIST (Humeniuk et al., 2008). Again, it should be noted that AOD use can often be fluid, with individuals moving in and out of use and changing substances over time, highlighting the importance of exploring historical AOD use. Not asking may mean ongoing use could remain covert, as identified by participant six:
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… It’s very easily overlooked when you have more psychiatric conditions you focus on, and then it may easily be forgotten if it is not in the forefront. But unless you really explore that bit you will not get to know unless it is very obvious and you fall over the bottles when you enter someone’s flat. The baby boomers are getting into the age range now… And they very often have dabbled in it, but some have hung on to illicit drug use (transcript six, pages 1-2).

Despite the notion that illicit drugs may be going undetected due to a reluctance to discuss use with consumers, participant seven felt that this was not the case due to the nature of illicit substances often being clearly observed or openly disclosed at the point of assessment. She felt discussions around alcohol were lacking in the service:

I don’t think we ask the question often enough. I think we kind of gloss over it a bit. I think alcohol is the one we fall down on. I think we’d be good if someone said they were on marijuana or heroin or something like that, but I think because booze is so acceptable, we don’t fully get the impact it has on people’s lives (transcript seven, page 1).

When considering assessment for AOD use, issues were identified regarding rapport and self-report, which often manifested as an assumption that individuals would not report AOD use. This often resulted in a reluctance to raise the issue of AOD use in assessment. For instance, participant five, when queried about the presence of a screening tool in the service, replied:

I think it was the ASSIST. How often would you use it, how many do you have, and then I think how does it affect you, does it stop you doing stuff. I forget to ask about that. But they are usually going to say no anyway (transcript five, page 1).

The final sentence of this response is discussed in Chapter Three, with the ongoing discussion around the validity of self-report. Participant eight, who worked as a carer consultant and spent much time with families, felt that this could be addressed through her ability to attain collateral history during the initial assessment. She also felt that this collateral would be difficult to
obtain for a case manager, echoing participant ten’s notion of attaining adequate rapport before attempting to discuss AOD use:

I think the carer consultant should come out to assessments… To meet as early on in the consulting process with the case managers, because there will be a lot of collateral that the family and carers will give the carer consultant that they wont think to give to a case manager (transcript eight, page 4).

Although this section demonstrates a lack of uniform, comprehensive screening, a reluctance to approach the topic, and perceived issues with self-report, it is worthy of completing this section with a quote from participant five, which is self-explanatory in terms of it’s worth in this clinical space:

We are not really having that conversation, and most of them aren’t going to bring it up themselves. So perhaps it’s the conversation that we need to take responsibility for starting (transcript five, page 2).

**Cultural considerations.**

In an organisational sense, culture can be defined as “… a system of interrelated and interdependent habit patterns of response,” (Wiley, 1929, cited in Kroeber & Kluckhohn, 1952, p. 61). In respect of the semi-structured interview process with clinicians, a theme developed where participants discussed the need to lead from above when it came to providing dual diagnosis competency. These comments echoed the 2007 *Key Directions* document published by the Victorian State Government, which suggested “While the dual diagnosis initiatives have raised awareness of the necessity for service development, the responsibility for further development now sits with the leadership in each mental health and alcohol and other drug service,” (p. 18).

In respect of the notion of leadership, participants felt that clinical leaders within the MAPS service should be driving dual diagnosis competency as a service priority. This was described by
participant two, who expressed that introducing a new line of assessment (and therefore work) needed to be driven by service leadership to become “core business:”

I mean if we are going to be pursuing a certain line of assessment, you are only going to seek out the ones that you have to do. There is so much paperwork as it is that we are not going to seek out, I want to do a whole extra tool for that when we don’t have to. So, absolutely, it’s a top down issue, if it’s a service priority it needs to be a service priority. It’s not going to come from the case managers on the ground (transcript two, page 2).

Although this paragraph raises workload concerns, which will be addressed separately in a later section of this chapter, it also describes the need for service priorities to be clearly defined. Participant two further elaborated on this statement, expressing a belief that the service was still preoccupied with definitions of mental health that tended to exclude AOD use:

And I think that is top down, that’s a service leadership issue… we are still focussed on just the mental health part of the person… I see that this service is very much still focussed on mental health and sees drug and alcohol as separate (transcript two, page 4).

In recognising an organisational culture shift in regard to dual diagnosis practice, participant three identified that attempts had been made in the past to identify areas of practice that were felt to require attention, with a feeling that these were merely a short term focus rather than a sustained change in competencies:

I think there is more emphasis on it [dual diagnosis], but I think it’s like sometimes you think these sorts of things they become the flavour of the month, like it might be dual diagnosis one year, and agoraphobia the next year and the importance of picking up that as related to people becoming depressed. I think in psychiatry things often come in and out of vogue, but having said that that is not to devalue the importance of it. Because it is important (transcript three, page 1).

Participant seven felt that a realisation that managing complex dual diagnosis would force a paradigm shift, resulting in recognition that dual diagnosis competent practice would reduce the
financial burden on healthcare services, as well as the burden on consumers who continue to use drugs and alcohol with devastating physical consequences:

I think it probably has to start at a far higher level. I think somebody one day, a bean counter, will wake up and think this is going to cost us a lot of money. And, you know, we need to target it. It has to be, even if it is not from the money, it is the quality of life. People lose everything, their dignity… it’s awful (transcript seven, page 9).

Further, participant seven described the difficulties in managing consumers with dual diagnosis and complex needs, and emphasised the value of support to clinicians in the service, in addition to recognising the efforts clinicians were making in working with this cohort:

I think education, I think support, I think it has to come from on high. You know, I think people need to be supported on it. I guess having somebody like you who has got focus in that area. And acknowledging the work that gets done with people (transcript seven, page 9).

While acknowledging the need for cultural change, participant nine also emphasised that change also needed to come from the bottom up, as in clinicians working directly with consumers:

I think there needs to be systemic change from top down and bottom up. I think that we could do more in terms of education and make it more of a focus of our assessment (transcript nine, page 2).

These comments emphasise those in the previous section, where hesitation, a lack of rapport, and a perceived level of discomfort made asking about AOD difficult. Interestingly, participant six related this to a fear of change, with a perception that many clinicians felt a level of comfort with their present abilities, and the introduction of new skills bringing a degree of resistance:

It’s only the theory the dual diagnosis stuff. It came from the top, but if someone has only been working in one field for many years… be honest, [people] don’t like that much change. They think they are good at what they
are doing, they’re doing it in a similar way, perfecting what they have been doing before (transcript six, page 7).

Perhaps the most pertinent comment was made by participant ten, who stated:

You have to have support of the management. Because otherwise it’s not going to happen (transcript ten, page 10).

The discourse in this section illustrates the need for systemic change to be supported by clinical leaders in the service, as opposed to being issued as a service directive with no active support or future evaluation. Consequently, these responses demonstrate the need for cultural change, incorporating an awareness of, and support for, dual diagnosis competency in MAPS. Cultural change also demonstrates a need to recognise that dual diagnosis is the work of a contemporary older adult mental health service, as discussed in the next section.

"Not our business."

The "no wrong door" policy was formulated to ensure individuals with dual diagnosis referred to either AOD or mental health treatment services received adequate assessment, treatment and/or referral rather than being told they were not appropriate candidates for the service in question (McDermott & Pyett, 1993). Despite this noble aim, clinicians described instances where individuals who presented predominately with AOD issues did not proceed past the referral stage to assessment and case management by MAPS. This appeared to be a case of older adults with AOD being "not our business," as described by participant two:

I think it's been very tokenistic in this service… this is a government directive that we are going to be no wrong door, we will accept anybody. But it hasn't really been taken up by this service. And certainly, if someone rang here on intake and I took a referral that was just centered around drug and alcohol issues it
would be knocked back in handover the next morning. There is no doubt in my mind. So it's quite tokenistic at this point I think (transcript two, page 10).

Further elaborating on this point, participant two described her predicted trajectory of a typical referral with a significant AOD component being rejected during a handover meeting:

I reckon if I took a referral this afternoon that was for someone who was presenting to their family aggro because they're taking ice, what do you reckon would happen in handover the next morning? I reckon they'd say, "That's not us, no way." I really think that the services still operate that you absolutely need to have a primary mental health diagnosis to get in the door (transcript two, page 10).

The concept of a requirement for a primary mental illness to not only be present, but be the chief complaint of individuals referred to MAPS for assessment was reiterated by participant one, who described dismissal of referrals due to consumers being seen as primarily AOD users, rather than needing mental health services to make substantive recovery gains:

It's sort of seen as two separate things, or they're just dismissed as "oh, well they've always been a drinker, so of course they're going to be, you know… sort of devalued a little bit I guess (transcript one, page 3).

Participant two went on to discuss her reasoning behind the apparent reluctance to accept referrals where AOD issues were predominant:

I think when the comment is "it's not depression or it's not this, it's because he drinks, and if he stopped drinking he'd be fine." So I think it's that either or, we drop the ball then, and I've seen that happen with a few people. And I don't know if it's because they're too hard, I guess (transcript two, page 4).

Participant eight described a story of working with a client's daughter in her role as carer consultant that underscores the reluctance of accepting individuals with predominant AOD issues. In this instance, the consumer had been abstinent from alcohol for some time, however both
participant eight and the consumer's daughter had discussed a perceived reluctance to provide case management:

At the time she [consumer's daughter] felt there was some resistance from the service for her taking on her father at home. And there was also the feeling at the time that he would fall off the wagon again pretty quickly, and that it was futile (transcript eight, page 3).

Participant seven, who reported that she felt that the use of alcohol often excluded individuals from further involvement with the service, also discussed this perceived reluctance:

I think there is an attitude that if somebody is drunk, or they've been drinking we won't see them. How often do we get people who are referred, and we just say well if they are drinking they're drinking and there is not much we can do about it. You know, if they're using substances there is not much we can do about it. And I think there is a reluctance to jump in (transcript seven, page 1).

Participant seven, who worked in the role of sole clinical psychologist for MAPS, went on to discuss addressing the causative factors of substance use disorders, particularly alcohol. She felt that investing time in treating the underlying mental health issues was a worthy use of service time:

Let's treat them and see what happens. Instead of putting our hands in the air and saying oh well, they were intoxicated, they were this and we can't do anything for them (transcript seven, page 10).

The idea of treating AOD as a mental health issue as opposed to a dichotomy was also discussed by participant nine, who felt that there was little to separate AOD and mental health issues. He summarises this statement by describing a lack of action to incorporate dual diagnosis practice into daily clinical activities:

I think that it is a significant mental health issue or has mental health sequelae so I think that perhaps we can be more proactive in working with these dual diagnosis clients. To keep them on the books. And not say look it is drug and alcohol, it's not our bag… But I don't think that we're actively changing our systems in order to make our assessments and clinical judgments better. We are not kind of pursuing education or anything (transcript nine, page 2).
As referrals for care are received by MAPS, the no wrong door approach indicates that those refused should be referred on to appropriate services; however, participant one expressed a lack of support around providing referral to services that may be better geared to accept individuals with primary AOD concerns:

But a lot of the time here, when you brought it up, it was well that's not really our role… it wasn't supported very much in our system either to facilitate links to those services (transcript one, page 4).

In summarising the issues associated with treating dual diagnosis as "not our business," participant two stated:

… When I first started working it was always mental health and drug and alcohol are separate. And, you know, one has nothing to do with the other, and if people have drug and alcohol issues they go away and do it somewhere else (transcript two, page 1).

The no wrong door policy attempts to provide care for individuals presenting to a service regardless of whether it is their core business or not. It is clear from the participant's discussions of the acceptance of referrals with an AOD component that individuals were not being assessed due to the presence of AOD use and a belief that these presentations are not the work of a contemporary older adult mental health service. This discussion also touches on educational preparation of clinicians working with the dual diagnosis cohort, which will be explored fully in the next section.

**Educational preparedness.**

Throughout the semi-structured interview process, participants spoke of feeling unprepared to provide care to consumers with complex dual diagnosis needs. Predominantly, this related to a perceived lack of educational preparation, both pre-registration and during their professional practice. This finding was similar to the work of Deans and Soar (2005), who found in their research that working with dual diagnosis clients was perceived by clinicians to involve a high level of knowledge and skill. Participant nine, who described attending various sessions of theoretical
education largely lacking in strategies he felt were practical, described the need for exposure to clinical situations to improve capability to work with older adults with dual diagnosis:

I've been to a couple of education sessions and you can hear the theory all you want, I think at the end of the day it's getting your nose in there and working with them that is going to improve [your practice], (transcript nine, page 5).

Participant nine expanded on this statement, describing his experiences of attending a workshop marketed as being specific to older adults with substance use disorders:

… Well one of the things that I wanted from going to the dual diagnosis education… was some assessment tools that were brushed over, we really didn't talk about them as much as I wanted so I felt disappointed by that and I think that is something that I would probably use if I had them available. Much like I routinely use the MMSE to test cognition if that was an issue, yeah, I think that could be used (transcript nine, page 7).

Participant two, who felt that one-off training sessions were inadequate without the requisite organisational change required to make dual diagnosis prominent in both clinical discussions and day-to-day clinical work, shared this sentiment:

I think that a day’s training… unless you are applying it, unless you’re using it in real situations, it is meaningless. And so I think someone [with a dual diagnosis focus] being in the clinical review, prompting and asking questions and supporting people, because I don’t think the management here are at all expert in this area. So it doesn’t come up from them. It’s not an issue for them. So I think having someone within the team being a reminder and being a prompt for people. And giving us tips and ideas of how to manage people. Because I don’t think we have that, we don’t have the core (transcript two, page 9).

The description of training whereby the focus was not on practicalities is linked directly to the first sub-theme of this section, being issues related to assessment. In fact, this was a common theme throughout discussions with case managers in the semi-structured interview process, with a realisation that a lack of educational preparation in applying sensitive and timely screening
techniques apparent. Participant one reinforced this observation, describing educational preparation as being essential to the recognition of substance use disorders in the initial assessment stage:

And I guess that's the other thing with case managers, education… And it has to be first of all on getting people familiar with it, like what do they assess for, what do they look for, what are the risks, you know, those sorts of things. And not seeing it as separate from physical and mental health, because you've got to do all three (transcript one, page 8).

Again, a theme in this discussion was a reflection of recognising substance use disorders as not distinct from mental and physical ill health, rather identifying that AOD use is integral to a holistic assessment of a consumer. The notion of holism was also discussed by participant seven, who identified the overall effect a substance use disorder could play in a reduction of an individual’s quality of life and the importance of being able to identify AOD use in treatment planning:

Assess better, much more education around assessing. Asking the question. And I think much more education to us about the impact it can have on people. People just think liver disease or whatever, it doesn’t matter. But I don’t know that people fully understand how badly it can affect somebody’s quality of life. Because you are not necessarily going to die, you could live for quite a while (transcript seven, page 9).

At times, a lack of educational preparedness manifested during discussions as a feeling of helplessness. This notion will be discussed further in the next section, however participant three described feeling as if the service was doing everything it could within the confines of its knowledge and skill base, yet expressed some helplessness in being unaware whether more could be offered:

I think we could probably manage them better. I don’t think we are as skilled up as we probably should be. Look, I think they’re identified and plans are made and we discuss them at reviews, but I don’t know if there is more that we could be doing. It might be, I guess I’m not availed to that knowledge I suppose (transcript three, page 2).
Participant three went on to elaborate further, recognising the need not only for ongoing education but a standardised approach to caring for the dual diagnosis cohort in the service:

Because we are not really armed up with anything at all, formally. And informally it’s what you pick up in your experience. It would be good to have better guidelines… just good education. Good practical education too, stuff you can use (transcript three, page 10).

Participant six also expressed the concept of past experience shaping ability to work competently with the dual diagnosis client cohort. This was also a frank statement that not everybody may be equipped with the experience to manage complex dual diagnosis:

Well, that would be depending on the individual clinician. I don’t think we have sufficient training in the area, or sufficient discussion... But I would say it’s really dependent on the experience, what you’ve had and been doing before you came into this job, [and] I think the experience may vary considerably within the team (transcript six, page 1).

While this statement may be considered somewhat dismissive of the power of educational preparedness to provide the skills necessary to both assess and manage substance use disorders in a mental health setting, it lends well to a statement made by participant five, who felt that discussion around how people worked successfully with the dual diagnosis cohort was an essential part of role modelling capability:

Just hearing about how different people work with people with these sort of issues would be useful. More of those, like when we have case discussions we’re not really doing that. We’re not really saying how do you do it, we are saying this is their problem, this is what’s happened, this is where they’ve moved on. But we are not really saying this is how we do what we do, even generally, even in other areas… I’d like more practical strategies and stuff like that (transcript five, page 8).

This section represents a group of clinicians who expressed a lack of practical education regarding both AOD use in older adults and dual diagnosis more specifically. These representations
are likely representative of the growing concern of a lack of training in AOD issues in both undergraduate education and non-specialist postgraduate programs tailored to clinicians (de Crespigny, 1996). The next theme explores specific issues arising during the semi-structured interview process related to the experiences of clinicians working with older adults with dual diagnosis in MAPS.

**Clinician experiences.**

Throughout the semi-structured interview process that formed the basis of this phase, clinicians described their experiences of working with older adults with dual diagnosis. This was encouraged through focussed questioning and allowing clinicians to reflect on their past experiences of working with consumers with co-occurring substance use disorders as a means to identify current working practices and to enable clinicians to outline potential areas of service improvement. The following section explores the sub themes that emerged from the content analysis process related to clinician’s experiences.

**Clinical experience.**

During the semi-structured interview process, clinicians identified a number of prior experiences they had working with consumers with dual diagnosis. In spite of a lack of formal training, these experiences often involved a measure of using initiative and clinical judgement in working with consumers with dual diagnosis. It was also apparent that a number of these former experiences shaped their methodology and future interactions with dual diagnosis consumers. Despite describing their clinical experiences with dual diagnosis consumers as being mostly positive, there was a measure of apprehension that working with co-occurring AOD issues as being “different” to clients without substance use disorders, as expressed by participant ten:
It’s a difficult area… in mental health we can be very paternalistic, you know, and tell people what has to happen. It’s a very different approach to drug and alcohol where you have to work with the client. It’s just the culture of working is very different (transcript ten, page 8).

The notion of a substantive difference between mental health presentations and those involving an AOD use component was reflected by participant six, who expressed a belief that this was an extension of the theory that motivation is a requirement to successfully treat individuals with dual diagnosis:

… You only succeed if they really want to make change, so it comes up to the participation of the patient themselves. Their desire, what they want to achieve. So… motivating them and trying to give them goals which are achievable (transcript six, page 3).

Throughout the interview process, clinicians reported using goal setting as a means of formulating treatment plans for consumers with dual diagnosis. They described a number of measures aimed at involving consumers in their treatment from the initial point of recognition of a substance use disorder, as described by participant nine:

I suppose just kind of developing a good rapport with the client from a harm minimisation approach, saying let’s work together to see what risks there are and what we can do to reduce them, or what you are interested in doing to reduce them. That’s I guess where I work from as a staging point, keeping that level of trust and openness going is important (transcript nine, page 6).

Of note is the reference made to a harm minimization approach, a model that was supported by a number of participants. Despite fleeting references to abstinence as a means to improve health, many participants approached consumers with co-occurring AOD use from a harm minimization perspective. This was expressed by participant two through recounting an interaction with a client during her clinical practice, which also describes the application of a strengths-based approach to treatment planning:
Like the time I told you about before when I was sitting in the front garden with the bloke smoking a joint…
the conversation I did have with him was first of all it was like “oh my god, that’s not a cigarette is it”
[laughs]. That was my first, but then it would be tell me about how much. I would have a conversation about
what he is doing and how much he is doing, and how it is impacting his life I guess. Because the other thing I
always think as an OT [occupational therapist] is people like this man, who is quite impaired through long
term mental illness, must have a whole heap of skills associated with sourcing and getting drugs [laughs]. So
that’s the other thing I always think about, like how and what and when and why and how that can be positive
for them in other areas of their life. Because that really fascinates me, that the occupation of sourcing and
getting drugs and paying for them, and managing to pay for them within the other constraints of your pension
shows a lot of skills. So I often have that conversation with people as well. And how you can use those skills in
other ways, rather than the harm that has been done (transcript two, page 7).

This narrative by participant two mirrors the notion of addiction as career, as discussed in
Chapter Four, recognising the transferability of skills associated with a career in AOD use to those
in so-called “normal” worlds. Participant two went on to elaborate:

So that’s one way I usually, that’s one conversation I have with people. Like… sourcing those drugs, you are
able to do this, this, this, this and this, how else can we use those skills with you. And then, yeah, just the
conversation about do you want to change anything, and if you do what do you reckon we could do? And even
cutting down, you know, once a day rather than three times a day, or twice a week rather than five times a
week, that sort of conversation. But that’s all just intuitive, I’ve never had any training in any of that (transcript
two, page 8).

A strengths-based approach to care is steeped in the clinical application of holism or seeing
an individual as a complex entity as opposed to a disease process (Gelkopf et al., 2016). It
recognizes that all individuals have skills despite mental ill health or AOD use and seeks
opportunity to integrate all aspects of care in the treatment plan. The notion of holism was
summarised well by participant one:
… Physical stuff, physical health, addressing all of those things. Diet, all of the complementary things that go around promoting their own wellbeing or health for a start. All those sorts of things. So you look at all of the different stressors that they are under, and you try and work with those. Alcohol wise, I guess… it depends on finances, so it’s looking at those sorts of things, things you can put in place to minimise access, to minimise capacity to get it, all that sort of stuff. Their support networks, who they’re with, those sorts of things. Because very often their social networks also revolve around drug and alcohol. So how do you… deal with that as well? That’s very difficult (transcript one, page 6).

Participant seven, who believed taking an approach of educating the consumer in regard to their AOD use was far more successful in motivating reductions in use rather than dictating advocacy, also described this:

And so I don’t think we provide enough education about what it [AOD use] does, and I think it comes across as judgment and we are spoil sports and we are taking away their fun. Whereas if it is just put in pure clinical terms, about this is it and this is why we care, then maybe people would be more open to it. And we should approach it that way, you know, we should see it that way as well. I think that would make it easier for people to ask the question (transcript seven, page 3).

Challenges specific to the older adult cohort had also been encountered by participants, with participant four describing a nursing home assessment she felt frustrating from a clinical perspective, with the situation apparently using alcohol as a tool to moderate problematic behaviours:

Participant four: Here’s an example, today I went out to do an initial assessment in a nursing home. The lady can’t walk, doesn’t leave and has no visitors, but is still smashing [drinking] a bottle of wine a day. It’s the staff there that are giving it to her, and she has her first one after breakfast.

Interviewer: Has she got a long history of drinking?

Participant four: No, this is new.
Interviewer: So what’s the reasoning behind that?

Participant four: Well, she’s now paraplegic, and has no social supports, no family and her husband has died. She had a significant suicide attempt and is now replacing this with alcohol. Self-medicating so is refusing to take any actual medication but is [drinking] a bottle of wine. That’s what we are up against [laughs]. Giving someone with borderline [personality disorder] a bottle of wine a day, and they wonder why there are behavioural issues (transcript three, page 6).

This example illustrates a number of complex issues in conjunction with problematic alcohol use, including a late onset of alcohol use disorder, grief related to loss and maladaptive coping to a number of significant life events. In spite of describing mostly positive interactions with consumers with dual diagnosis, there were a number of key issues emerging in the discussion. These issues are explored further in the next section describing clinical helplessness.

Clinical helplessness.

In spite of participants describing sound methodologies in working with older adults with dual diagnosis, particularly in relation to harm minimisation and a holistic approach to care, a prominent theme expressed during the semi-structured interview process was that of clinical helplessness: participants often described frustration at perceived slow progress, or a feeling that they should be doing more to help the consumer address the AOD component of their presentation while they were providing an active case management or clinical role. Participant ten expressed this during her interview:

There is this feeling of helplessness when you deal with people, because there is this expectation that it is going to be impossible to change the behaviours (transcript ten, page 10).
Participant seven elaborated further on this point, describing a process of judgement of consumers referred to the service with AOD issues, and a feeling that ongoing use of AOD was deemed a failure and led clinicians to feel as if their efforts were worthless:

I think people just judge them, I think it’s an automatic thing. I mean, you know, you talk about people will they drink, won’t they drink again, will they use, won’t they use again… you know, our automatic response is that they will, and I guess the likelihood is that they will. But there is also this kind of thing where, I guess, because the stereotype is that these people will always use and do they tell you the truth, or if somebody says they have five drinks they’ve probably been having double and all this kind of thing. So there’s that kind of, you know, you don’t want to be duped, you don’t want to be the idiot who is out there doing everything for this person and all of a sudden you find out that they are using, they are drinking (transcript seven, page 2).

Participant seven went on to describe a perception that dual diagnosis consumers were viewed as being difficult to treat and case manage, leading to a perception that clinicians were “admitting defeat” without appraising the impact of ill mental health on their presentation:

I do think there is a tendency again for us to put it into the too hard basket. And sometimes… their substance use seems to be the thing that comes to the surface more rather than looking at the mental health issue as well, and they often tend to get lost to the service (transcript seven, page 4).

Conversely, participant five described a feeling of helplessness when case managing individuals who were experiencing both the deleterious physical and cognitive effects of AOD use yet expressing little real motivation to make changes to their use:

It’s I suppose a lot of it’s ethical, like how much do you let people keep on poisoning themselves and so on. Sometimes we do say look you can’t go on doing this, and this is what it’s doing to you and sometimes you do need to say it that way (transcript five, page 3).

This discussion raises an interesting point around the conundrum associated with merely providing supportive case management and seeing an individual continue to use AOD as opposed to assertive, abstinence-based methods. Although this is a discussion beyond the scope of this section,
it is worth noting that it contrasts harshly with most healthcare disciplines, who base their profession on helping and treating disease (White & Evans, 2014). Often, in both mental health and AOD settings, this phenomenon is pitched as a lack of insight into the disease process or condition preventing the individual from making changes despite all of the evidence against continuing use or reluctance to undertake treatment. During the interview process, participant six described this:

But to get them to acknowledge that they should address that issue… remains a challenge. Like we have in only psychiatric patients when they don’t develop any insight into the need for treatment and stopping, starting treatment and therefore the outcome is compromised for them. That they see that they need treatment, it’s the same with dual diagnosis. To address your drug and alcohol issues you need to be having the insight that you would benefit from addressing the issue. And it’s not easy to achieve (transcript six, page 2).

Participant three spent some time during the interview process discussing a consumer he had case managed for a number of years who continued to use heavy amounts of alcohol despite the impact this was having on his mental and physical health. A high degree of clinical helplessness was observed in this interaction:

I don’t know whether he is managed well, but he’s surviving and doing the best he can. He remains alcohol dependent, but it’s basically harm minimisation with him. And that’s been more or less successful. But I think you’ve always got this feeling that you’d like to be able to do more with him, but it’s very difficult to instill that sort of self-motivation (transcript three, page 2).

Participant three’s expression of wanting to be able to do more emerged during another discussion concerning the consumer in question, who was described as spending time looking for remnants in discarded beer bottles on a busy nightlife street in Melbourne:

And I suppose it’s the whole there is nothing much I can do, but I still do think occasionally it is pretty awful. When he talks about “I had a really good night the other night, I found half a bottle of beer” you think poor bugger, no, this is… this is awful (transcript three, page 7).
Further, participant three described his efforts to date to attempt to both motivate the consumer to change his behaviour, in addition to providing a form of harm reduction and degree of safety around the consumer:

…We’ve tried [financial administration]. You get three lots of money… three separate payments over three times a week to minimise it so you don’t spend it in one hit, but I mean he still spends it in one hit over those three days. When it’s gone for grog and cigarettes, that’s it. And then you think what else can you do, and he doesn’t want to change it, so what can you do? And then I get his flat, I’ll get that cleaned up with [industrial cleaning service] twice a year with them. Completely done, and then it just starts to pile up with bottles and junk. You know, rubbish and stuff. Because you think if his environment is better, maybe he will respond to it. He does, but it just doesn’t last. So there are some people that you just can’t reach in that respect. He says he’s a vagabond, “I’m a vagabond… you know me. I’ve always been a vagabond.” And you think, oh, that’s a shame (transcript three, page 8).

In the aforementioned paragraph, it is clear that participant three has tried a number of methods to attempt to attain change of the consumer’s ongoing AOD use with little success, and is now employing a reactive strategy. Clinical helplessness in working with consumers with dual diagnoses does not only lead to frustration within clinicians, but also can lead to therapeutic nihilism (Alonzo, 1993). This will be discussed in the next section.
Therapeutic nihilism.

Therapeutic nihilism, defined by Starr (1976) as the notion that medical treatment is ineffective in certain situations and therefore more benefit is gained from doing nothing, is a logical outcome of the feeling of clinical helplessness expressed by participants in the second phase of this thesis. In terms of dual diagnosis, therapeutic nihilism often manifests as the provision of reactive case management that makes no real effort to address the co-occurring substance use disorder. This may arise for a number of reasons, including the lack of skills to address AOD use, a view that the behaviours may be longstanding and therefore not modifiable or as a result of the theme of the previous section, clinical helplessness. The view that AOD can often not be modified due to entrenched use was expressed by participant ten:

I think in aged psychiatry it can be difficult because it is such a long history. I think we make assumptions about motivation to change their habit… I think we just accept that it is a longstanding problem and there is not much more that we can do (transcript ten, page 2).

Participant four expressed perceived difficulty in working with consumers in the service with alcohol use, chiefly due to fluctuating motivation. She went on to describe this frustration as being present in clinical interactions, a potential source of therapeutic nihilism:

I’ve always found it strange working with people with alcohol dependence, I mean you can have all the best intentions of helping them, but until they want to help themselves it’s too hard, and their insight fluctuates so much. Today they want help and tomorrow they want nothing to do with you. And that can be in your head as well, when all you want to do is help somebody and they continuously throw it back in your face (transcript three, page 8).

In fact, participant nine described a degree of therapeutic nihilism when discussing a consumer he had been case managing for some time. The consumer had a complex psychosocial history, heavy cannabis use, and with relapse often characterized by threatening and aggressive behaviour and had been transferred from an adult community mental health service to MAPS a few
months prior to the third phase of this thesis. When queried as to whether there may be a tendency to manage consumers such as this at “arm’s length,” participant nine replied:

You are exactly right, and I do have thoughts every time I drive back from South Melbourne visiting him… whether I need to, or could be more involved or assertive in helping him… I know that he has expressed from what I read in the notes that there is some motivation to cease. However it seems to me to be such a big part of his life, and I suppose I’ve kind of had that attitude where well, you know, that’s one problem that I can’t solve. Let me focus on things that I perhaps can help with… But I guess it depends on where you set the bar, doesn’t it? And I don’t know if that sounds pessimistic to say so, but I suppose it is just pragmatic and realistic, and I don’t expect that I am going to be able to save [consumer] from his substance use or from himself. You know, he’s had a pretty rough upbringing, and he still lives in a pretty dire social situation. So… I kind of accept that his substance use probably contributes to his mental state and his poor functioning I think. It’s an underlying issue that might actually be a support for him, and a very strong support for him, not only in terms of the pharmacological effects of the drug, but also in terms of the social networks that it provides for him. While I don’t know it from an objective sense if they are the most supportive and functional social networks, they are social networks nonetheless, and without it he wouldn’t have them (transcript nine, pages 4-5).

It is interesting to note in this discussion that the participant describes preservation of networks involved in drug use as a social support for the consumer in spite of perceived impacts on cognition and mental health. Participant seven, who echoed the opening sentiments of this section, being that dual diagnosis is often seen as being too hard to address, also mentioned this:

I think it will just be seen as being too hard. You know, it’s a bit soul destroying, what can you do, it’s their choice to drink, it’s their choice to do whatever they want to do. But their quality of life… and there is no effort to find out why [they do it], (transcript seven, page 2).

Other participants frankly described a degree of therapeutic nihilism in their interactions with consumers with dual diagnosis, as evidenced by participant two who felt this occurred more frequently in her practice with illicit drug users:

Perhaps not alcohol, because alcohol issues are more obvious, and… people are used to older people drinking, they’re not used to older people taking other substances. They are starting to trickle in, and I’ve noticed on
intake and we’ve spoken about, you know, ice featuring here and there… I think even there was someone in the waiting room earlier today that’s got a long and colourful drug history, and I used to case manage him and I never really attended to that. Although one time I turned up for a usual case management visit and he is smoking a joint in the front garden of the SRS he lives in. So, really there and in my face, and I was aware of it, but never really attended to it in a structured way as part of the case management. At all (transcript two, page 2).

Therapeutic nihilism is an ever-present clinical challenge in the care of individuals with dual diagnosis, and older adults are no exception. Therapeutic nihilism leaves alcohol and other drug use unaddressed, virtually treating mental ill health and substance use disorders as two separate entities rather than attempting integrated treatment, widely viewed as current best practice in treating dual diagnosis (Ouimette et al., 2007).

**Family and carer issues.**

During phase three of this thesis, participation was sought from the carer consultant at MAPS. The carer consultant role aims to facilitate linkage and open communication to consumer’s families by MAPS and achieves this aim through an individual with lived experience of a family member with mental ill health. In this case, participant eight served as the carer consultant for MAPS and was interviewed during the process to obtain a “family-centric” perspective of the issues relating to families of consumers with dual diagnosis. Participant eight described her understanding of the genesis of the carer consultant role, which she felt was born out of frustration from careers:

From not being recognised as carers, as the primary carer. Not being heard, not being asked what their knowledge of the person is and the history. It’s better now, particularly with the new mental health care act of 2014 because carers are more involved. And there is a sense of failure, that they are embarrassed because they feel they have failed their relative with a mental illness so they don’t want to talk to the case manager because they feel they will be blamed. So that’s where the carer consultant will come in having the lived experience and say well hang on, I know what you mean, but that’s not what they would think. They’re non-judgmental, and they are there to get the best for your loved one. So it gives another perspective (transcript eight, page 4).
Participant eight, whose own lived experience was caring for her daughter with dual diagnosis, was able to relate to the frustration evident in interactions with clinicians and the service in general, and felt that an open, transparent approach in communication with families was essential in her role:

... Families will give up. And yet, if they understood, for instance if I’d have know really early on with my daughter... that this was going to be longer than just one inpatient admission it would’ve been really useful. For me, we weren’t told that this was actually going to be as long. They didn’t have to say definitely, they could’ve said there is a possibility that this is going to be a bit of a journey, a life journey. And that would be useful, because then having said that then we’ll say well what do we do? So then that’s where you would kick in with strategies, I would kick in with strategies of how I’ve managed it. And we may have been able to keep my daughter well, as well as she can be. And I think for a lot of carers, need to know that they need to look after themselves. For instance in this cohort of carers a lot of them gave up their jobs years ago to look after their unwell relative. Which we do not advocate at all, we say do not give up your life. You do them as much as you can and you draw on the services. So things like that, this should not alter your life, you still deserve a life. You’ve got to... if your [relative] ends up in aged psychiatry you do not visit every day. You take care of yourself because the lead up to admission would’ve been exhausting for you. So these are things I think would be really useful (transcript eight, pages 7-8).

Despite the vital role the carer consultant played in the MAPS service, it was still felt to be perceived as a fringe role rather than as a clinical one. This was evident with participant eight’s description of being told not to attend clinical reviews, where initial assessments, new consumers and ongoing discussion around longstanding consumers occurred:

Well, I think it would be great, because a lot of the time families of these people with dual diagnosis have burnt their bridges. But there is some part of the family that is trying to hold on often. For example [consumer], his brother tries so hard and I think we can connect well. I think I keep saying to him just hold on there, it’s great, and I think it gives them hope that, you know, they are not being ignored, that their needs are being understood. That they are not just being looked at as being families that don’t care, it’s more that I can really relate to them that yeah it is hard, but it’s great if you keep being involved. So I think that’s really
important. So where I think I would step in, is if I came to the review every Thursday… I would hear about families (transcript eight, page 2).

Participant eight also felt she could perform a valuable role during assessments, introducing herself to families early and assisting with gathering vital collateral history from significant others:

I think the carer consultant should come out to assessments when there is a family involved, regardless of whether… and introduced, that’s a big thing for me. To meet as early on in the consulting process with the case managers, because there will be a lot of collateral that the family and carers will give the carer consultant that they wont think to give to a case manager. So I think that would work well (transcript eight, page 4).

During the interview, participant eight went on to describe her work with a family of a consumer with dual diagnosis. The discussion has been included here to provide context and indicate the importance of providing liaison to families in older adult mental health settings:

Interviewer: What are some of the issues he has faced?

Participant eight: So what [the brother] has faced is verbal abuse to his partner.

Interviewer: From [consumer]?

Participant eight: From [consumer]. And possibly non-consideration about when he turns up to the house, there are no boundaries from [consumer’s] side. So he will turn up and ask for money, not that [brother] resents that, but it’s more the entitlement, I think. You know, he’s my brother, I’m going to do this and I’m going to do that. So yeah, I think it’s more often the person with the mental health, the dual diagnosis lacks any understanding of boundaries, and that can often drive families away. And I think the verbal abuse, which hasn’t been more lately I don’t think, having been in contact with [brother] has been useful I think, because it has kept some sort of involvement with [consumer]. At least I can say yeah I know what that’s like, have you tried this strategy.

Interviewer: Has he ever mentioned what keeps him involved?

Participant eight: A sense of loyalty, a sense of family. [Brother] grieves a lot for what his family… he grieves a lot for the past, and I think he remembers [consumer] as being a beaut young boy, as a
brother. I think siblings, because siblings know each other the longest of any relationship, I think there is a lot of loyalty there. And sadness, because I think their background was pretty tough going, so I think that also [brother] knows that [consumer] had a bit of a rough go in some ways. So yeah, those sort of things.

Interviewer: Okay. So what would you provide for [brother]?

Participant eight: Yep, well for [brother] I just say to him if you, we struck this sort of deal that if went and took say [consumer] out for lunch to one of these lunches in St Kilda, and [consumer] was particularly difficult. And if we worked out a day that I was here, he could come straight over and he could debrief with me. That’s one that I think is really important, so he can just go I don’t see why I bother, and I would just listen. And that’s half the time all that people need. I give him contact, I gave him Mind, Carers Vic, free counselling, the six free counselling [sessions] that you can get. GP mental health care plan, things that… [brother] didn’t realise existed. I also say to him you ring me any time, and I’ll ring you back, and if you are having a particularly difficult time I will either pass it on to [case manager] or whoever is involved. Or we can talk it out (transcript eight, pages 2-3).

This section indicates the vital role a consumer consultant plays in working as a team providing care for older adults with dual diagnosis. It also indicates a number of concerns, such as access being blocked and ultimately making referral to the role significantly more difficult. This situation needs urgent remedy given the current awareness of family involvement in caring for individuals with dual diagnosis (Menicucci, Wermuth, & Sorensen, 1988; Mueser & Fox, 2002).

**Service collaboration.**

The final section in this paragraph describes issues arising from the semi-structured interview process related to service collaboration, being the ability of the service to work with other services to achieve suitable treatment for consumers with dual diagnosis. It discusses issues arising from referral processes, a pressure to discharge consumers felt to be “AOD only,” and collaboration
with AOD treatment services to achieve suitable outcomes. It concludes with analysis of responses from participants relating to their suggestions to improve the dual diagnosis capability of MAPS.

*Discharge pressure.*

During the semi-structured interview process underpinning the third phase of this thesis, there was a predominant theme related to dual diagnosis consumers being “not our business.” This theme was that of pressure to discharge consumers with substance use disorders from the MAPS caseload quickly due to an overarching feel that they were not appropriate for mental health case management. This was described succinctly by participant seven, who stated:

> Because what can we do for them? You know what I mean, [it’s] that kind of attitude, what can we do. It’s their choice, their decision (transcript seven, page 1).

The notion that there is a choice in being dual diagnosis resonates strongly with the themes of clinical helplessness and therapeutic nihilism, where clinicians can justify reactive approaches to case management and making little attempt to address AOD use by describing consumers as poorly motivated, lacking insight or persisting with entrenched behaviours. This also appeared to translate to those consumers making incremental gains, as described by participant nine:

> In fact there has been this flavour of managing this particular client… that we have to rationalise keeping this person on our service. Because their recovery goal is a substance use issue, and even though they’ve had a career of 50 years of substance use she is arguably making small gains. But I guess we feel like there is some resistance for keeping her on for that reason, I guess from a medically driven psychiatric service there has been some resistance (transcript nine, page 3).

When exploring the perception of pressure to discharge, participants in this phase did not agree with discharging consumers quickly. Conversely, they felt consumers should be given time to address goals and provide space to work towards sustainable change, leading to the conclusion that
discharge pressure was being driven at senior levels of the service. Again, participant nine describes the benefit of being able to work with this consumer long term:

I think that we have been able to stay in there for the long term with this lady, and I think that has been valuable for her as well because we are making small gains. I suppose at the end of the day, as much as I talk about resistance from the service, we have been given enough rope to do what we believe is good for the client, what we want to do. If we are able to, and if the client is engaging and they are kind of showing even… they are showing motivation, even though they might be fluctuating. Yes, and I think that from what I do know from drug and alcohol it is a fluctuating picture and you do need to work in the long haul (transcript nine, page 4).

Participant seven affirmed this point in her interview when discussing this consumer. Both participant nine and participant seven had provided joint clinical services (case management and psychology) to this consumer:

Oh yeah, lots of pressure to discharge. Where is the end point, you know? I wasn’t letting go (transcript seven, page 5).

Of note is participant seven’s reluctance to “let go,” which demonstrates that clinicians were prepared to advocate for their consumers to remain on their caseload. Further, when discussing pressure to discharge consumers from the service, participant two was asked directly if she felt that presenting a consumer with strict AOD goals, for example reducing alcohol consumption from three standard drinks daily to one, would be supported in continuing to be case managed by MAPS:

Depends on the team. This team, not necessarily. Not necessarily… I don’t think we’d be encouraged to just for that purpose. If there were other mental health goals and recovery goals associated with pure mental health yes, but if you said this is my only goal with this person I’m not sure whether that would be supported (transcript two, page 8).

This was supported by participant one, who when questioned about the presence of discharge pressure related to consumers perceived as having predominantly AOD issues replied:
If you’re trying to reduce their alcohol, yes I think so, and if they’re compliant with that. But I think as soon as there is, you know, there’s backwards and forwards movement that is typical, I don’t know how much it would be tolerated by a service like us holding them on as a case management [consumer], (transcript one, page 5).

In spite of recognition that dual diagnosis involves two components that need to be treated as interrelated, there was still evidence that this was not occurring in MAPS. Consumers were felt to be “not our business” even after being accepted by the service and were then discharged accordingly. This was also discussed by participant ten, who stated:

We often will try to treat, engage the person to treat depression, but if… we look at which is the more likely problem. And if it is that alcohol is the predominant issue then it often happens that we will say that it is not appropriate for us (transcript ten, page 4).

This statement is in direct conflict with the aims of the Victorian Government Key Directions (2007) document, which aimed to make dual diagnosis core business. Given the evidence of the pressure to discharge clients from MAPS, it is apparent that this is not occurring. During this phase, it also became evident that consumers were not being provided with referral to AOD treatment services, as discussed in the next section.

**Referral difficulty.**

As described in the previous section, pressure to discharge consumers from the MAPS caseload was evident during attempts to provide care for individuals with dual diagnosis. Additionally, further questioning around this topic during the semi-structured interview process reflected what was found during the first phase of the project: a distinct lack of knowledge of AOD services, leading to no outgoing referrals even if they were in the best interest of the client. Participant one also felt this was the case, stating:

I don’t think people are aware enough of the referral pathways. And I know in the past we’ve had problems with accessing the Dandenong [inpatient detox unit]. It was always an issue. And I don’t know if that still
exists. But I know in the past it was very difficult to get people there, and very difficult to even get them assessed (transcript one, page 3).

This response demonstrates a perception that AOD services may be unhelpful with the dual diagnosis consumer cohort, as indicated by participant one’s description of a previous interaction and attempt to secure care for an individual. This may also be a reflection of the issues associated with age, particularly given the perception that it is difficult to attain services for individuals once they reach age 65. This seems to be discerned from the mental health system, where plentiful services exist for those under 65, however aged psychiatric services become the sole “owner” of individuals once they reach this age. Participant six described this phenomenon as follows:

The problem is with the age group. So for example, withdrawal services often have age limits of 65. I find that probably inappropriate given that people with drug and alcohol can easily be over 65, so what service and linkages post MAPS involvement… I think that is a service difficulty in general which is not really addressed. I think the service model that we have in Victoria leaves that too unaddressed (transcript six, pages 2-3).

Although this was felt to be a barrier to referring to appropriate services, clinicians also felt at a loss to describe the referral process and which service they would refer to for ongoing AOD support if required. This finding was despite attempts at improving access in a significant service reform in Victoria (Department of Health, 2013d), and was expressed by participant four when queried if she knew where to consider referring a consumer with AOD issues who required ongoing care:

Well not really, because I haven’t referred anybody to those services yet. But I feel pretty confident that if I bought it to the team that other people would know and be able to support me in that (transcript three, page 2).

Again, although this passage indicates deficiencies in the referral process, it does demonstrate that clinicians were prepared to collaborate with their peers and discuss ongoing referral within the wider team for advice. Although this would assist with actually making a
referral, participant five reinforced the need for research to determine the most appropriate service for the consumer:

> It’s hard, you have to kind of remember which ones they are and work out which is the most appropriate, so that would… take a little bit of finding out which is the best one. And I’ve since got on to, what’s it called… South City [AOD clinic], that one, and [consumer] didn’t want to go so that didn’t work very well. Because they want people who are really motivated, but… I think so (transcript five, page 5).

This conversation also echoes statements discussed in the previous section related to motivation, or more specifically the perception of clients being motivated to want to make changes to their AOD use. Even if motivated, a lengthy wait list may stand in front of a consumer in need of AOD treatment (Redko, Rapp, & Carlson, 2006), or an appropriate service simply may not exist. Participant nine illustrated this conundrum when describing one of his consumers who he felt would benefit from the Older Wiser Lifestyles program described in Chapter Two of this thesis. This program, like MAPS, operates in a finite geographical catchment area and therefore excludes MAPS consumers:

> I really feel that we are at a loss not to have someone like the [Older Wiser Lifestyles] program here, in this area. And I have a bloke who has an alcohol use disorder and he… he was contemplative and he actually made some good efforts to reduce his alcohol after the diagnosis of cognitive decline. I gave him some materials from [Older Wiser Lifestyles] that he said were very interesting and helpful. But I got the sense that he didn’t qualify to receive their services from the clinician, I feel he would do well (transcript nine, page 6).

This section demonstrates ongoing problems with the referral process, which ultimately resulted in very few ongoing referrals for AOD treatment as found during the file audit process conducted in Phase One of this thesis. A lack of awareness about referral pathways was evident through analysis of the discourse surrounding this topic in the semi-structured interview process and will be discussed further in the next section dealing with intersectorial collaboration.


**Intersectorial collaboration.**

This section describes intersectorial collaboration, more specifically cooperation between mental health and AOD treatment services. During the interview process, clinicians bemoaned the lack of cooperation between both services, which were felt to work in isolation rather than in any attempt at integrated treatment. As discussed in both Chapter Two and Three of this thesis, this split in service provision appears to have occurred during the process of deinstitutionalisation, which resulted in services becoming “specialised” and effectively limiting their target groups. Participant one described this as follows:

> It was always integrated when I did my psych training, it was just seen as normal to do drug and alcohol, and everyone knew where to refer, where to get someone detoxed and you'd pick them up again once they were detoxed for casework. You worked hand in hand with drug and alcohol services. And it was part of our rotation when we were training. I worked at the Smith Street clinic at Collingwood as my placement. It was part of it, you just did drug and alcohol placement (transcript one, page 3).

The value of reciprocal rotations was highlighted earlier in this chapter by participant six, who spoke of clinicians bringing varied experiences from a variety of sources and workplaces. Participant six elaborated further on sharing knowledge between services:

> I think we should have more exchange in education and case presentation… I think the drug and alcohol service can contribute to educating and helping our dual diagnosis challenges and vice versa, the psychiatric challenges. So I think to get everybody comfortable in addressing dual diagnosis issues we need to work close together (transcript six, page 3).

He went further to discuss reciprocal rotations and the benefit to both the clinician and service, which directly supports the narrative of participant one at the beginning of this section. It is noteworthy that this was a goal of the Key Directions document (Victorian Government Department of Human Services, 2007), and has been described as a method to obtain true dual diagnosis competency by other authors (Australian Healthcare Associates, 2011; Kenneth Minkoff & Cline,
2006). As discussed in Chapter Two, secondments of this nature have been largely unsuccessful, leading participant six to recommend they be made compulsory:

> We need to have compulsory secondments, I think, in different areas. That would be beneficial, okay you have to work three months in a drug and alcohol service to get more exposure to that issue and then you can bring that expertise, what you’ve learned back to your psychiatric service and vice versa (transcript six, page 4).

Short of compulsory secondment arrangements, participants lamented the lack of intersectorial collaboration between services and felt that an opportunity to discuss roles, modes and methods of operation would be a good start to attain better working relationships, as expressed by participant four:

> It would be helpful as well if people from those services came in and spoke to us, and explained the protocol for the referrals and what they actually do there, and who is appropriate for the service (transcript three, page 5).

Interestingly, participant four directly mentions referrals, which are noted to be a source of difficulty for clinicians. This was described by participant two, who stated:

> … As an intake worker I don’t know enough about the services that are available (transcript two, page 7).

This statement goes some way to add context to the results of the first phase of this study, where it was noted that no referrals for ongoing care were documented at the point of assessment. Clinicians may have been unsure or unaware of appropriate services. This issue was discussed in the previous section; however it is clear that formalised linkages between services would not only make the referral process easier, but assist with the sharing of knowledge and allow clinicians to build trust in both their colleagues and services decision making capability. Participant three lamented the lack of linkages between MAPS and AOD services as follows:

> … We certainly need some links. Because we don’t have any links whatsoever really, we’ve only got what we learn from each other I reckon. You hear have you tried this, have you tried that (transcript three, page 5).
Not only would linkages allow a form of “facilitated” referral, but also knowledge sharing. However, participant seven felt that AOD services had a distinct lack of knowledge and clinical interest in caring for adults over 65, as the majority of their work had been with people younger than this age:

And I think the other thing is though to be honest, I don’t think they are very knowledgeable about our age group. Because the focus, why has the focus always been on people under 65 drinking and… why do services think that somebody when they hit a certain age, I mean this is the time when a lot of people take it up. And it is when it is most, just as dangerous. And it’s going to, in fact the health burden and the cost to society will become greater and greater, because they have all these cognitive issues. All these people who will be living longer, because physically they are healthier, and… they are just going to cost more and more. And I’ve seen I don’t know how many people on the wards recently with hepatic encephalitis because of booze. A man just recently [and] a young woman not 50, and they are in hospital for weeks. They go home and they will be back in. Their quality of life is stuffed (transcript seven, page 7).

This conversation adds context to the urgency required in addressing the issues associated with dual diagnosis in older adults, and although this section describes the participant’s discussion of the merits and virtues of better linkages to AOD services, it also demonstrates that older adults may not present via means associated with traditional AOD services. They also may lack the capacity to meet consumers where they require care. The following section, the final theme of this chapter, presents the participants’ suggestions for service improvement.

*Improvements to service delivery.*

The final section of this chapter presents discourse surrounding improvements to service delivery. During the interviews comprising the third phase of this project, clinicians often described ways they felt MAPS could be improved when considering the care of consumers with dual diagnosis. These suggestions for improvement largely mirror the issues arising through the course of this research project, and are presented here.
The concept of clinical supervision is one that has attained much research interest in mental health nursing circles. Clinical supervision provides a forum to discuss issues arising in clinical practice and gives the opportunity to formulate strategies to provide care to consumers (Roche, Todd, & O'Connor, 2007). Participant one felt that clinical supervision was lacking, and outlined her perceived benefits:

I think that [clinical supervision] would be really good, because if you don’t… because it is, it’s just building confidence in case managers to have skills. Because a lot of people don’t know how to manage it or the only way to manage it is they have to stop them. That there is nothing in between, you know, like it’s either you can’t do anything, or… There’s no understanding of harm minimisation, there’s no understanding of those current sort of ways of managing (transcript one, page 8).

This paragraph raises some interesting questions related to building skills in clinicians to utilise harm minimisation approaches rather than dictating abstinence as the default stance on AOD components of a consumer’s presentation. Additionally, there is an ideology here that the support of an experienced clinician in this setting would build confidence in clinicians. Following on from this statement, MAPS potential to handle an influx of consumers with dual diagnosis was discussed with participant one, who replied:

We would only go alright if people were given the right tools to do it, and that is assessment tools. The knowledge and support to manage people like that. Otherwise it will just fail. Fail miserably. And because people with dual diagnosis pick up if people aren’t interested, you’ve got to have people who have an interest in it as well. Because a lot of people don’t feel comfortable working with people with dual diagnosis. A lot of people have got fairly biased attitudes or prejudices against people with dual diagnosis too. Which comes across [laughs]. You hear it all the time, and I think that’s a problem. Huge problem. And until that’s addressed too, yeah (transcript one, page 9).

Participant seven also raised the need for support and a team approach, which is in contradiction to the current MAPS model of one case manager to one consumer. Given the acuity
and complexity of consumers with dual diagnosis, this brings into question whether a sole clinician can actually achieve satisfactory outcomes without the support and assistance of a team approach:

I mean, you have to have a team of people to work with somebody like that. Because as well as that it is difficult for the person, because it is slow and you do need that kind of debriefing and that ability to go and talk to somebody and say “oh, you know, this happened or that happened or am I doing the right thing,” or whatever. You need that, you need that support. Because… if my best efforts have, you know, I think am I being duped, heroin, oh what are these addicts. You still have prejudices. I have to work very actively to make sure I keep them in perspective. Because it’s very hard not to. But it’s a team, I think it’s a team approach, you need support, ideally (transcript seven, pages 5-6).

In addition to a one case manager to one consumer approach, there was also a push at MAPS to ensure case managers were exposed to every type of presentation to maintain skills. This model of generic case management was questioned by participant two, who felt that it led to a loss of skills due to attempts to try and maintain competency in every possible presentation to the service:

I think that you lose it in these generic roles. And I’ve been guilty of that in the past, I’ve been guilty of losing my discipline in trying to manage everything that you’re trying to manage as a case manager. But I also think that before we get to that point you also need to have some… Yeah, I think that the way mental health has gone a lot of the positions are generic so you can lose your discipline let alone pursue specifics, like alcohol… particularly if you’ve got a caseload where people can be quite acute. You’re just dealing with what’s in your face a the time, so you really don’t have time to deal with, you know, recovery focused OT practice or really focus on the alcohol and drug issues. You’re just dealing with what’s in your face at the time. So I reckon that’s a real problem with… the way the system is going, that everyone is generic (transcript two, pages 3-4).

This passage raises not only the issue of generic roles being a danger to discipline specific skills, but also raises the possibility of a specialist worker providing both support and specialist skills to those with dual diagnosis. This role may also assist to cultivate competency in dual diagnosis, a concern expressed by participant six when questioned about the readiness of MAPS to accept a potential influx of new dual diagnosis consumers:
I wouldn’t describe us as a competent dual diagnosis service. So any increase of anything will be a challenge. So if we are not doing the few ones who are easily identified not really making it an integral part of our discussion, when things become more difficult and the baby boomers with a lot of drug and alcohol issues we get through, I don’t think we are that well prepared. Only theoretically prepared (transcript six, page 6).

Echoing the concerns surrounding an ageing baby boomer cohort and their potential to create significant service pressure, participant ten stated:

This issue, and it is going to become bigger, there are so many people that the culture of wine drinking… and you know, people drink it at dangerous levels. And daily. And not realising, you know, and after so many years of doing that they are going to come to us (transcript ten, page 9).

In respect of problematic drinking, the cause is often left unaddressed while administering treatment, instead focussing on physical measures such as safe detox and pharmacological methods to manage craving, anxiety and low mood. Participant seven felt it was imperative that treatment involved efforts to address the root causes of AOD use when working with consumers with dual diagnosis:

From people’s wellbeing, and I think a lot more awareness of asking the why question, you know, why do you, especially I think with drink more than other drugs. But why, why do you drink heavily? What’s going on underneath that maybe we could help you with? You know, and I guess it’s a little bit like if we get someone in who is quite forgetful that we think is depressed, we treat the depression. In the same way we should be looking at people who are drinking and thinking, you know, there is a strong chance there is depression underlying this (transcript seven, page 10).

Finally, participant eight, who functioned in the carer consultant role, felt it would be beneficial to include families through education. She described a format of providing information evenings at another service she was employed by, and felt this would be beneficial for families of MAPS consumers:
I could start to hold support groups, or information days from a carer’s perspective. Here in MAPS. Have an afternoon, it might work, it might fail. I think information nights are fantastic. At Orygen [mental health service] we have what we call family and friends. They are run about four times per year… We attend most of them, the family peer support workers, so we go along, and it is all for family and friends that have got either people in the inpatient unit or in the outpatient clinics. And the first one is where the case manager just talks about what would be dual diagnosis, what it means, how it impacts. Second one a doctor comes in, or could be the case manager who talks about medications and ways of managing the medications where the families fit in. We are there, and at break we always talk to the clients. Then the third night is simply for carer support, we just run the whole thing. And then on the fourth night, which was new and very popular, SUMMIT came in and talked to these families about drug and alcohol use. Which we’ve been dying for them to do because it’s so big. So I think something like that here might start off slowly but I think it would be fantastic. So that’s one, information night support group, that I think not so much for… I think you’d have to be careful, because families, although with the older age group they are retired so it could be a good thing with the carers, whereas with the young people the carers tend to work. So that would be an evening thing. But here I think it would be worthwhile trying, support groups (transcript eight, pages 6-7).

**Summary**

This chapter has presented the results of the third phase of this research project, where clinicians were asked to describe their experiences of providing care to consumers of MAPS with dual diagnosis. The clinicians involved in the third phase of this research project formulated worthwhile and valuable suggestions to improve the provision of care to older adults with dual diagnosis. Their ideas, which mainly revolve around collaboration, support and education, would be cost effective to implement and would improve the care of dual diagnosis consumers immensely. These suggestions, and other recommendations for service improvement, are discussed further in Chapter Nine.
Chapter Eight

Discussion and Implications

Introduction

This research project has explored the complex phenomenon of dual diagnosis in older adults. The first phase of the project sought to determine the prevalence of dual diagnosis in older adults assessed by the Caulfield Hospital MAPS community mental health service. The second and third phases of the project sought to narrate the experiences of both consumers with dual diagnosis and the clinicians who provide care to them respectively. This chapter aims to discuss these results in the context of the implications of the findings of this study, both to inform contemporary practice and provide evidence for further research.

Discussion

During the analysis of the results emerging from both the quantitative and qualitative phases of this study, four key points emerged. These points were the deficiencies in screening and assessment of older adults with dual diagnosis, older adults with dual diagnosis being a poorly understood population, the notion of complexity, workforce readiness and system response. These points will be discussed separately in the following sections.

Deficiencies in screening and assessment.

Chapter five of this thesis sought to determine the prevalence of dual diagnosis in the MAPS service through the use of a file audit methodology. This process reviewed two years of initial assessments conducted by MAPS clinicians, and as a result, provided a succinct overview of the assessment process being conducted by the service. This overview revealed substantial deficiencies
with the nature of the assessment process for alcohol and other drugs; the lack of a standardised screening tool for AOD may go some way to explain the substantial prevalence gap between this study and the work of Blixen, McDougall and Suen (1997), who found a prevalence rate of 37.6% in their sample of older adults admitted to three psychiatric hospitals in the United States. This will be explored further in the following section.

**Exploring the difference between this research and other studies.**

Blixen, McDougall and Suen’s (1997) work differs from this study in a number of ways, most notably geographically. Additionally, a higher proportion of dual diagnosis in older adults was identified, requiring an exploration of the results of the initial phase of this study, which found a much lower prevalence of 15.5%. There are a number of potential explanations for this discrepancy, most notably the difference in study methodology and the lack of a formalised screening instrument. Blixen et al’s work used a retrospective analysis of the entire clinical file, whereas phase one of this study only examined assessment documents. Moreover, the discrepancy is likely caused by the haphazard approach to screening identified earlier in this thesis; a lack of a standardised approach to enquiring about AOD use, the absence of a mandated screening tool and the propensity for comprehensive AOD assessment to be left to the clinical judgment of interest of clinicians.

The absence of a comprehensive screening approach is concerning not only in respect of comparison to the higher prevalence of dual diagnosis found in Blixen et al’s work, but also raises concerns when considering prevalence rates of co-occurring AOD use and depression in non-mental health cohorts. For instance, Satre, Sterling, Mackin and Weisner (2011) found 53% of men and 40% of women presenting to a psychiatric outpatient service in San Francisco had alcohol use in the preceding 30 days. Of those, 35% of men and 35.5% of women attained scores suggesting lifetime alcohol problems after being administered the SMAST test. In addition, 12% of men and 4% of
women reported cannabis use with a mean age of onset of 23 years of age, further demonstrating the importance of screening for AOD use in mental health settings.

Other studies exploring populations of older adults who have undergone comprehensive screening demonstrate higher rates of AOD use than this study. For instance, Ompad et al (2016) used the Alcohol Use Disorders Identification Test (AUDIT) in addition to a structured interview to screen for AOD in 95 individuals aged 50 and over seeking HIV treatment in New York and found medium risk for alcohol use disorder in 81.1% of participants and high risk in 17.3%. In addition, 23.2% were reported as being drug dependent. Although this is a younger sample than the consumers presented in this study, it demonstrates that screening markedly changes the reporting of both problematic and potential substance use disorders in older populations.

These figures are reflected in Chaput, Beaulieu, Paradis and Labonte’s (2011) study of older adults visiting a psychiatric emergency service department. This study found a 27% prevalence of AOD use in adults 65 and over in Quebec, Canada. The study had a larger pool of participants (n=1349 aged 65 and over) but does bear relevance to this project in that it examines a population of older adults referring to a mental health emergency service, not unlike the referral process undertaken by MAPS. Again, the higher prevalence found in Chaput et al’s work calls into question the prevalence found in this study, which has been found to be substantially lower than other published prevalence rates in similar mental health service providers globally.

Although described as a limitation of the study later in this chapter, the approach chosen to examine only assessments over the two-year period of time applied to the retrospective file audit provides opportunity to examine the assessment process itself in terms of AOD screening and assessment. For instance, best practice in identification of AOD use dictates screening be conducted as early as possible to enable ongoing treatment planning (Cleary, Sayers, Bramble, Jackson &
Lopez, 2017; Queensland Health, 2010; Sobell et al., 1988). The results of the first phase of this study indicate that this was not likely to be occurring, especially when considering the discrepancies between this study and contemporary research aiming to discern the prevalence of dual diagnosis in specific populations. Accordingly, repeating the study with the mandated utilisation of an AOD assessment tool would likely reflect a higher percentage of dual diagnosis. This suggestion for further research is discussed later in this chapter.

*A lack of assessment tool use.*

Although no screening tool is a substitute for experienced clinical judgment, the results of the third phase of this study demonstrate that even experienced clinicians are often hampered when considering how to raise the issue of AOD use without providing perceived offence. Likewise, responses to the semi-structured interview process also raised questions around clinicians believing it was not a core function of older adult mental health services to explore substance use; accordingly, clinicians described not asking about AOD use with consumers who did not fit their perceived “profile” of a heavy drinker or substance user or abuser. These findings demonstrate the need for screening to be uniform in its approach and uniform in its application to all referrals to the mental health service. This contention is supported by Derry (2000), whose review of both prevalence and assessment research found atypical presentation and a reluctance to self-report unless directly questioned common in the older adult population.

Self-report is a common mechanism for assessment in many health services, and despite best practice suggesting the use of collateral, this may not be available for older adults who have experienced partner, friends or family losses, or whose dual diagnosis behaviours have resulted in fragmented family relationships. The validity of self-report has been questioned in the literature (Del Boca & Darkes, 2003), and throughout the third phase of the study was reported as being treated as suspect by clinicians. It also raises questions of gender. For instance, it may be possible
that males are more likely to report their behaviours with alcohol, whereas females may choose to minimize or avoid reporting at the time of assessment. Lower proportions of females self-reporting alcohol use as quantity of drinks increased was reported in a large cohort study examining alcohol use in falls sustained by older adults (Mukamal et al., 2004), and while this may be a trend towards male dominance of heavy drinking, it raises the possibility that females may in fact under report their use of alcohol.

There may also be a reluctance to report the use of illicit substances, which remain illegal at law in the state of Victoria, the setting of this study. Fear of prosecution often remains a challenge to accurate assessment of illicit substance use and associated activities, particularly in research settings (Sandberg & Copes, 2013). Alcohol remains legal, socially acceptable and affordable in Australia, which may make it easier for consumers to disclose their use to healthcare professionals attempting to provide care. It may also make use appear more overt during home visits, with less effort required to conceal alcohol as it would not result in prosecution for possession. This distinction may also go some way to explaining the high prevalence of reported alcohol use in similar studies.

Several studies have explored the reliability of brief screening instruments, finding high degrees of specificity and sensitivity (Dawe et al., 2003; Hinkin et al., 2001; Johnson-Greene et al., 2009). For example, Bradley et al (2007) found the AUDIT-C to be an effective screening tool for problematic alcohol use among older adults in Veteran’s Affairs clinics in the United States of America. The AUDIT-C is a three-question screen, addressing the concerns expressed by clinicians in Phase Three of this study in regards to adding more paperwork to their self-described heavy workloads. Incorporating the AUDIT-C into the workload of clinicians working with older adults would enable a brief screen for alcohol use to be incorporated at the point of assessment.
When considering illicit substance use, brief screening becomes somewhat more difficult to implement. Considering the responses garnered in the third phase of this project where clinicians reported feeling some hesitancy at asking about lifetime illicit substance use, incorporating questioning of current illicit substance use may be difficult. Again, this reflects on the presence of the attitude that older adults are not users of illicit substances (Beynon, 2008). As discussed in the literature review section of this thesis, this may not necessarily be the case with the ageing of the baby boomer cohort, who are noted to have different attitudes to illicit substance use and higher prevalence of usage of illicit drugs.

Addressing this issue may require the use of simple screening cues, as suggested by clinicians in the third phase of this study. These cues should be simple questions or prompts aimed at ascertaining the presence of illicit substance use or problematic alcohol consumption, and positive answers to these questions or prompts should generate a comprehensive assessment for AOD use using tools that discern not only current use, but lifetime patterns (Sorock et al., 2006). It would be essential to gather collateral information from family members if possible to corroborate reported levels of alcohol or illicit substance use as a means to address the potential issues associated with self-report.

The presence of screening instruments to assess for AOD use would make incorporation of screening a simple measure for any mental health clinician who was willing to apply them during an assessment process, however assessing for problematic licit substance use may be somewhat more difficult. The nature of problematic use of licit substances, for example benzodiazepines or opiates, would by definition be difficult to detect; these substances are obtained by a number of methods not limited to purchase on the “black market” as identified by a participant in the second phase of this study, or through diversion from other sources (for example family or friends) or through the process of “doctor shopping,” where an individual spends an amount of time visiting
different clinics or hospitals in order to procure prescriptions for medication (Sansone & Sansone, 2012). Assessing medication charts may not necessarily ascertain problematic use of benzodiazepines or opiates, requiring sensitive questioning and the development of a screening instrument to detect the inappropriate use of these medications. Some promise for this type of instrument was shown in a study by Voyer, Roussel, Berbiche and Preville, (2010), who found high specificity and sensitivity in a two-question benzodiazepine detection screen in a sample of 707 community dwelling older adults.

Ultimately, screening should be uniformly conducted with all individuals referred to the service. Extending this philosophy, older adults should be screened at all points of contact with healthcare providers given that presentations may not necessarily be due to primary AOD use or mental ill health. Uniform screening would also go some way to address the concerns raised by clinicians in the third phase of this thesis; when every consumer of mental health services is asked about the presence of AOD use or inappropriate medication use, this methodology becomes commonplace and incorporated into day to day assessment tasks. Furthermore, as suggested by clinicians in the third phase of this study, a decisive culture of screening led by senior clinicians in the service would go some way to making screening an expected component of every assessment conducted by the mental health service.

Can clinicians rely on clinical judgment?

Clinical judgment, defined by Tanner (2006) as "An interpretation or conclusion about a patient’s needs, concerns, or health problems, and/or the decision to take action (or not), use or modify standard approaches, or improvise new ones as deemed appropriate by the patient’s response", is underpinned by clinical experience and the ability to make assessment decisions based on decisions or observations made in prior situations similar to the one at hand (p. 204). Clinical judgement is often mentioned in the nursing literature, frequently as a positive attribute at the core
of the nursing profession (del Bueno, 2005). In respect of this research project, clinical judgement was frequently mentioned by clinicians as a means to determine the presence of AOD use. One participant described observation, for example noticing an extraordinary amount of empty alcohol bottles or drug paraphernalia present during an assessment in an individual’s home. Further, some clinicians reported that they felt that observation alone was a skill that would enable them to determine the presence of problematic alcohol consumption, illicit substance use or inappropriate medication use.

Mental health nursing literature commonly discusses observation as a process embedded in minimising risk in inpatient wards (Buchanan-Barker & Barker, 2005; Holyoake, 2013; Rooney, 2009). In fact, it is considered a learned skill and a clinical attribute often present in the most experienced nurses (Mackay, Paterson, & Cassells, 2005). Personally, I have often joked while working in inpatient mental health units that the best nurses would casually observe the scene and be able to describe in great detail where each patient and staff member was when asked at a later stage. This level of observation is thought to preclude aggression or other issues by recognising overt signs and providing an opportunity to act in a pre-emptive manner as opposed to reacting when the crisis occurs, and although is considered the status quo in mental health inpatient settings, is poorly supported by evidence (Manna, 2010). However, when considering the study at hand, it is apparent that observation alone may miss AOD use in older adults with dual diagnosis.

Stage one of this research project examined the assessment narrative entered by clinicians when doing the initial intake assessment of older adults referred to MAPS. During this process, a number of observations were made. Perhaps the most concerning when discussing clinical judgement and observation is that of recording that an individual consumes “one or two” glasses of wine per night, with no quantification of the actual amount being consumed. Revisiting Wilkinson et al (Wilkinson et al., 2011), who asked older adults to pour alcohol into their standard drinking...
vessel before quantifying the actual amount poured versus an Australian standard drink, overpouring was found to be common. Accordingly, two glasses of wine may equal six standard drinks in this context, well beyond the Australian guidelines for healthy alcohol consumption (National Health and Medical Research Council, 2009).

Further, this raises questions related to clinical judgement when considering what clinicians may describe as an alcoholic or illicit substance user. Relying on unquantified notions of problem drinking or describing in terms of “only a couple of glasses” raises the possibility of recording individuals with problem drinking patterns as negative in the assessment tool. Arguably, the notion of “sub-threshold” drinking, where frequent consumption of alcohol beyond guidelines yet not meeting contemporary definitions of alcoholism or alcohol use disorder is one of the most pressing issues confronting clinicians working with older adults at this time (Wilson, Knowles, Huang, & Fink, 2014). This type of drinking is noted to be frequently injurious to health and a common comorbidity of depressed mental states (Fink et al., 2002).

Addressing this issue would require a concerted effort to determine the actual amount of alcohol consumed by asking an individual to demonstrate a usual pour into their usual drinking vessel, as per the methodology employed by Wilkinson et al (2011), or to ask the consumer to measure their drinks over a period of time and record them in a diary as is common practice in AOD treatment settings (Wallace, Cutler, & Haines, 1988). When considering illicit substances, it becomes somewhat more difficult to determine exact quantities due to differences in terminology and weights between substances. Using observation to recognise the presence of illicit substance use is a good start, however it then becomes imperative to discuss frequency and quantity in order to formulate a treatment plan that is relevant and appropriate to the individual in question.
Arguably, the greatest application of clinical judgement is in the initial screening process itself. Screening tools allow a rapid dissemination of questions designed to ascertain the presence and severity of AOD use, yet many clinicians are able to ask these questions without physically holding a sheet of paper in front of them during assessment. Placing most focus on a piece of paper contravenes good assessment practices, including active listening, eye contact and actually being present for the consumer during their time of need (Beck, Daughtridge, & Sloane, 2002). A clinician echoed this sentiment during phase three of this study, lamenting that a perceived burden of paperwork made him feel like a “clipboard clinician.” Although this is a valid concern, perhaps the greatest utility in screening tool application would be to provide a degree of capability to novice clinicians, who are often expected to complete comprehensive assessments while relatively inexperienced. The use of structured screening tools or prompts in this instance may ensure that every individual assessed is asked about their AOD use.

Not only does good clinical judgement allow screening to occur in a more organic process than simply reading verbatim from a screening tool, but it also opens the door to ongoing discourse surrounding AOD use during future interactions with consumers of mental health services. This allows a number of positive interventions, including harm reduction and ongoing assessment of the readiness to make changes to substance use. This is especially important given that research reports that many people who use AOD often make positive moves to change or cease their use when offered these opportunities during clinical interactions (Ogle & Baer, 2003). Unfortunately, reading screening tools verbatim is a key component of their reliability and therefore may effect the specificity and sensitivity reported by each tool (Humeniuk et al., 2008; WHO ASSIST Working Group, 2002).
Complexity.

Complexity is a high driver of healthcare expenditure, with multiple chronic conditions being recognised as a substantive financial burden on healthcare providers (Mapel, Dutro, Marton, Woodruff, & Make, 2011; Wolff, Starfield, & Anderson, 2002). In addition, complexity is recognised as being difficult to manage, often with many services performing many different roles for the consumer; at times, this care is often not coordinated, leaving the consumer in the midst of many services who often do not communicate well if at all (Chumbler et al., 2005).

In spite of the results of phase one of this study, which present the older adults with dual diagnosis as a largely homogenous group of predominantly male, depressed consumers of alcohol, this was not reflected in the second phase of the study which described a small cohort of individuals with dual diagnosis; diverse substances, different illness trajectory and mental health diagnoses. This finding is curious, as studies examining older adults with dual diagnosis often demonstrate similar findings of comorbid depression and alcohol abuse (Blixen et al., 1997; Coulson et al., 2014). This will be discussed further in the following section.

A poorly understood population.

The participants in the second phase of this study, although mostly male, tend to differentiate from this homogenous model, being distinctly different in respect of the substances they choose to use, their mental illness history and medical and psychosocial complexity. Although a small pool of participants, this group raises questions of the idea that older adults with dual diagnosis prefer alcohol, and also hints at the complexities inherent in skilful clinical assessment. The historical synopses outlined in Chapter Six illustrate the lifelong complexity involved in dual diagnosis, and older adults are no different. In fact, as illustrated in the second qualitative phase, these complexities are often carried throughout life and become more pressing during older age where it is likely that a higher number of medical presentations and age related issues associated
with AOD use, such as falls and cognitive impairment, may compound underlying issues and make holistic care very difficult to apply.

Despite these issues, older adults with dual diagnosis remain a poorly understood population due primarily to the distinct lack of research into this cohort. This may be due to the nature of presentations, as has been discussed earlier in this thesis; many older adults with dual diagnosis may be isolated and only present secondary to physical comorbidity or injury. Accordingly, it appears difficult to provide a comprehensive account of the needs of older adults with dual diagnosis as a cohesive group when there are a multitude of variables that affect each and every individual fitting this broad diagnostic umbrella. Although this is not limited to older adults with dual diagnosis, it is apparent that they often have substantially differing needs to their younger counterparts, as discussed in Chapter Three of this thesis.

Also impacting on the understanding of this population is the belief held in some camps that older adults simply do not use illicit substances. This is complicated to an extent by some clinicians who believe that “taking” away “one last vice” is inappropriate and detrimental to rapport in the mental health setting. This was evident to an extent in the third phase of this study, with clinician participants reporting that it should not be the task of a mental health service to discuss or address problematic alcohol or substance use. Unfortunately, this opinion appears to have crept into research funding arenas, with a cursory search of the literature finding few published studies of substance on older adults with dual diagnosis.

Further, when discussing the literature, it appears that a significant limitation is that of cohorts. For instance, older veterans, the homeless, injecting drug users, those who binge drink in retirement communities, inappropriate benzodiazepine users, isolated older adults with alcohol use disorders and “late adopters” of AOD who commence use after late life losses are all quite diverse
populations, with different needs and levels of complexity. Drawing together a comprehensive strategy to undertake research into the needs of these individuals would be a large task, and one requiring heavy funding and support from Government bodies. This goes someway to explain the dearth of research into this area, however the absence of quality data makes moving from describing the older adult with dual diagnosis to investigating treatment difficult, if not impossible.

Complicating these issues is that of presentation. As mentioned repeatedly in this thesis, this research project examines a single setting whereas older adults may present to a wide variety of settings where they may receive screening and treatment for their comorbid mental ill health and substance use disorder, or they may receive none. Withdrawal management, particularly concerning alcohol, is a key focus of many healthcare settings however there are still instances where not asking about alcohol or drug use may lead to unmanaged withdrawal, a potentially fatal situation (McKeon, Frye, & Delanty, 2008). Likewise, the pressure for throughput in modern healthcare systems means referral for issues that are not central to the key complaint may not be completed due to fears that the patient’s stay will become longer and block access for others needing hospital care (Chou & Chen, 2010).

It is clear that there are a number of cohorts and settings that concern older adults with dual diagnosis, and research interest has not kept pace leading to a poorly understood population. Further research recommendations are listed later in this chapter and are based on the research gaps identified throughout the course of this research project.

**Perceptive simplicity of the term “dual diagnosis.”**

Weiss, Mirin and Frances (1992) lament the term dual diagnosis as being “… used in a way that implies homogeneity in this group of patients, as if such an identification will facilitate treatment planning. On the contrary, the typical dual diagnosis patient is a mythical creature,” (p.
Herein lies the perceptive simplicity of the term dual diagnosis, whereas the reality is often fraught with a large number of interrelated issues as demonstrated in the participant backgrounds outlined in the second phase of this study. By its very definition, dual diagnosis describes two disorders. These disorders have historically been understood to be mental ill health and substance use disorder. However, in the older population there are often significant comorbidities present with dual diagnosis, including poor physical health, psychosocial factors and multiple medical conditions. These factors are also evident in the histories of the participants presented in Chapter Six. By labelling older adults as having dual diagnoses we also relate them to their younger counterparts, who also carry a high degree of complexity but lack many of the issues specific to the older cohort. Echoing Weiss et al (1992), it is a deceptively simple term which does not do justice to the myriad of problems accompanying the core features of mental ill health and substance use disorder.

Additionally, clinicians often express a reluctance to work with individuals who have been labelled with dual diagnosis. Frustration is evident, as is the notion of clinical helplessness discussed in the third phase of this study. This frustration has been shown in the work of Deans and Soar (2005), whose phenomenological study of clinicians working with individuals with dual diagnosis described high levels of stress when managing this cohort. Rather than being seen as “core business,” (Victorian Government Department of Human Services, 2007), dual diagnosis instead becomes the diagnostic classification that arguably no clinician wants on their caseload.

Revisiting the second phase of this thesis demonstrates the differences between six individuals who have all been diagnostically labelled with dual diagnosis. All of the participants in this phase have diverse mental illness and AOD use trajectories. All have diverse medical conditions. Some have forensic histories, and diverse psychosocial situations. The previous section described complexity as a term, however these participants demonstrate true complexity. Although
they are all technically dual diagnosis, no uniform treatment plan exists, and perhaps this goes some way to describe the uncertainty that clinicians feel when providing case management, inpatient treatment or any other form of support to this cohort.

Given the wide spectrum of AOD use and mental ill health in older adults with dual diagnosis, it may be prudent to revisit the nomenclature used to describe this population. Many older adults present with some degree of comorbidity between mental health and AOD use, and to describe them as dual diagnosis consumers seems to imply what their younger counterparts have experienced for some time: that dual diagnosis is usually reserved as a label for those with the most severe mental ill health and substance use disorder. Although both may exist in the older adult, they are often accompanied by a number of interrelated factors that impact on the overall health and social wellbeing of the individual, especially when considering ageing as a construct unique to the older adult cohort.

*Siloed care.*

Contemporary discourse surrounding healthcare services often speaks of siloes. In respect of healthcare, siloes are considered to be both invisible barrier and container; invisible barrier in fragmenting parts of an organisation, and container of like-minded individuals operating within the aforementioned barrier (Cilliers & Greyvenstein, 2012). Siloes have been shown in research to disrupt the continuity of care individuals receive during healthcare encounters (Mann, 2005). In addition, siloed care frequently results in a lack of coordinated care between services; as mentioned earlier, when considering complexity, it is not unusual for individuals to be receiving care from a number of medical or health teams. Considering provision of care as compartmentalised, for example one service providing only mental health care, frequently results in a stream of referrals and “handing over” of consumers with no real endpoint. Unfortunately, according to Kilbourne,
Fullerton, Dausey, Pincus and Hermann (2010), this style of care seems to be prevalent in modern healthcare, especially where co-occurring disorders are concerned.

Siloed care is evident when examining the histories and discourse in the second phase of this thesis. It is also inherent when considering the responses of clinicians to the semi-structured interview process conducted during the third phase of this research project, whereby addiction was seen to be a sub-speciality to mental health. In reality, both mental illness and substance use disorders are closely intertwined processes, as evidenced by the success of integrated treatment programs that aim to address both of these issues concurrently (Granholm, Anthenelli, Monteiro, Sevcik, & Stoler, 2003). Separation of responsibilities for care, for example describing mental illness as “our” treatment domain and either neglecting or attempting to “refer out” care for addictive behaviours is neither a cohesive clinical approach nor is it evidence based best practice in caring for individuals with dual diagnosis.

The true danger of siloed care is the propensity for individuals to fall into gaps between services, as described by McDermott and Pyett (1993) and discussed extensively in Chapter Three of this thesis. In this case, individuals may not be accepted by mental health services due to a belief that the problem is “not acute” enough for the service in question or an idea that the issue was solely related to addiction, and therefore not suitable for the service; certainly, this issue was described by clinicians in phase three of this research project where it was stated that referrals would likely be refused if the sole problem was considered to be related to alcohol or other drugs. Conversely, individuals may not be accepted to AOD treatment services if their mental health or medical needs are considered too acute to be managed by the service, an issue that is prevalent in the older adult population (Johnson, Brems, & Burke, 2002; Speer, O'Sullivan, & Schonfeld, 1991).
It can be argued that due to the nature of siloed care, contemporary mental health and AOD treatment services are not addressing the complexity inherent in older adults with dual diagnosis. For example, siloed care may result in poor connection with medical services who may be providing care to individuals with dual diagnosis. Likewise, a focus on treating mental ill health may neglect the psychosocial or medical issues apparent in an individual’s current situation. Older adult mental health services such as MAPS, who operate on an outreach model are better placed than services who work on a clinic model as they have the opportunity to truly assess an individual holistically, assessing their living situation and function outside of a hospital or community-based clinic. Unfortunately, Victoria is home to only one older adult specific AOD treatment service that operates on an outreach model: The Older Wiser Lifestyles (OWL) program, which was described in Chapter Two of this thesis. Requiring individuals with high levels of complexity to attend clinics is fraught with the danger of them not attending and therefore being discharged from a service with their needs failing to be met (Raynes & Warren, 1971).

Finally, siloed care exists within clinicians themselves. As evidenced in the third phase of this thesis, clinicians did not consider themselves adept at managing dual diagnosis presentations. A variety of reasons were given for this, including a perceived lack of knowledge or skill. A recommendation presented in the next chapter of this thesis is to develop specialist positions for dual diagnosis in older adult mental health services, however this can result in clinicians detaching themselves from the provision of dual diagnosis care, instead delegating it to this specialty position. This phenomenon has been documented by Myors, Cleary, Johnson and Schmied (2015), who found that in spite of specialty perinatal and infant mental health clinicians believing they were operating in a collaborative manner, collaboration was described as being hard work with little actual collaborative work substantiated in the research. Addressing this issue will be discussed further in Chapter Nine, however it demonstrates the difficulties in implementing truly integrated dual diagnosis care in contemporary mental health services. It also demonstrates the change from
earlier mental health services, with clinicians describing them as taking all presentations and providing care for addictive behaviours, as discussed in Chapter Two of this thesis.

Siloed care remains a significant challenge to contemporary healthcare services and may be an inevitable result of the drive to specialisation, particularly in the nursing profession. Nurses are frequently driven to specialise in ever narrowing fields of nursing care. Perhaps the best demonstration of the issues arising as a result of this approach is the growing body of work concerning physical health in individuals undergoing mental health care. This has long been recognised as a neglected area of treatment in mental health, particularly with the poor physical health and high rates of cardiometabolic disease in this population (Galletly et al., 2012). The recognition of shortened life spans and high mortality associated with these factors has led to the creation of many innovative programs addressing poor physical health among many consumers of mental health services (Druss et al., 2010; Shiner, Whitley, Van Citters, Pratt, & Bartels, 2008). It seems that a similar push for integrated dual diagnosis care is imminent and should be included as part of a holistic approach to patient care in mental health services.

**Workforce readiness.**

As described in the third phase of this thesis, many clinician participants felt that a lack of educational preparation hampered their ability to provide comprehensive care to older adults with dual diagnosis. In addition, a number of other factors were described that indicated a poor workforce readiness to address dual diagnosis in older adults, including a lack of collaboration with other service providers and a belief that training seemed to be an exercise designed to “tick boxes” rather than provide practical, useful strategies in working with older adults with dual diagnosis. These issues will be discussed in the following section.


**Educational preparation.**

As described in the opening paragraph of this section, clinicians participating in phase three of this research project described a lack of educational preparation in caring for individuals with dual diagnosis. While this is not a new finding, having been described by other researchers in the field of addiction (Deans & Soar, 2005), it is concerning in a participant group with a diverse range of experiences. Leino-Kilpi, Solante and Katajitsko found that educational preparation regarding AOD use was lacking in graduate nurses in Finland (2001), who reported low preparation and education in caring for this cohort, and likewise deCrespigny (1996) who described poor knowledge in alcohol consumption guidelines and assessing AOD use in registered nurses.

During the semi-structured interview process, clinicians expressed a desire for further education in the use of assessment tools and asking around AOD use in general. A prevailing theme was the need for education to be practical, rather than providing copious amounts of theory. Many of the participants described the need for educational preparation to be able to be delivered and taken to real world situations immediately, a desire for strategies to manage dual diagnosis with the consumer. Again, this is echoed by the work of Deans and Soar (2005), whereby their participants described a high level of skill and knowledge required to work effectively with individuals with dual diagnosis.

Further, participants in the third phase of this study went on to describe the power of sharing information on how they managed older adults with dual diagnosis as a means to further their learning. While many scholars have advocated for sharing of clinical experiences as a means to enhance learning and clinical judgement (Murphy & Timmins, 2009; Tjoflåt, Razaonandrianina, Karlsen, & Hansen, 2017), the modality for MAPS was to describe consumers in a case review format that one participant felt was too focussed on the problem and the longitudinal progression of their episode of care. This participant then went on to describe a need for these discussions to
involve more of how particular problems were addressed, again reflecting the desire for education and knowledge sharing to be practical and applicable to everyday clinical work.

Some went further to describe the desire for greater recognition of AOD within the MAPS service, for example setting an expectation for every consumer or individual assessed that AOD use would be asked and discussed accordingly. One participant described this in accordance with the administration of the Mini Mental State Examination (MMSE), which was expected to be administered with every individual assessed by MAPS. Also expressed was the belief that having clinicians with AOD experience or interest would make conversations around AOD use during clinical reviews the status quo, as opposed to these discussions being incidental to the finding that AOD use was present.

Despite this research project investigating experienced clinicians, the nature of education provided in pre-registration undergraduate settings needs to be considered when discussing educational preparedness. As mentioned earlier, the lack of education around addictive behaviours in undergraduate health programs is concerning (Rassool, 2007). However, given the nature of older adults with dual diagnosis to present in settings other than mental health and AOD treatment, it is imperative that future clinicians are provided with at least a fundamental grounding in the prevalence of dual diagnosis, assessment strategies and the critical importance of referral for specialist input and treatment. It must be pondered that a future workforce possessing this knowledge and skill would negate the need for an exploratory study such as this, providing neophyte clinicians with the skills and knowledge to assess for AOD use in older adults, an issue becoming more important with the ageing baby boomer generation and the issue of sub-threshold alcohol consumption, both of which are described earlier in this chapter.
The issue of a lack of educational preparation in mental health settings raises concerns that nurses and other health professionals in other, more generalist settings are simply not assessing for AOD use or identifying the need to do so. Again, this reflects on observation: when AOD use is overt, it is easy to detect and manage. However, it is not often overt in the older adult population, requiring uniform assessment to be conducted with every encounter of older adults with healthcare providers. With health professionals in generalist or primary care settings, conducting AOD assessment may not be a priority or be considered at odds with the goal of treating acute medical issues. Perhaps with greater knowledge of the issues associated with dual diagnosis in older adults, nurses would be able to detect these issues prior to them escalating to the point where individuals become high consumers of healthcare resources. This will be discussed further as a recommendation in the next chapter of this thesis.

**The utility of training.**

Following on from the previous section is a discussion of the actual utility of training provided to clinicians caring for older adults with dual diagnosis. While a lack of educational preparation was identified, participants in the third phase of this research project identified attending training aimed at rectifying knowledge and skills gaps in the provision of care to older adults with dual diagnosis. For example, one clinician described attending a training session that was geared towards older adults with substance use disorders, however found that this did not provide practical skills relating to assessment or management of AOD use in this cohort. Echoing the discussion provided in the previous section relating to educational preparation, the desire for practical, immediately applicable training was described by a number of responses from clinicians in the third phase of this project.

As it stands, education sessions, in-service training and short course formats are the mainstay of training and skills provision in the healthcare workforce. Although there is much
literature discussing the efficacy of this method of knowledge dissemination (Forsetlund et al., 2009), there is a widely varying nature and quality of these educational approaches that needs to be considered. These training sessions are often provided “in house” by the health service itself or may employ external providers.

One participant in the third phase of this thesis described a feeling that while useful, training sessions were an adjunct to actual clinical experience and expertise. Others spoke of learning from more experienced colleagues or discussing the approach to dual diagnosis cases in an informal setting, as explored in the previous section. While a wide variety of suggestions were discussed during the semi-structured interview process, it is apparent that the contemporary training being delivered was felt to be inappropriate for MAPS, and therefore this calls into question the training provided to mental health clinicians working with older adults statewide.

Again, clinician participants clearly stated their requirements for practical education; assessment and asking questions around AOD use, alcohol guidelines and quantifying AOD use. They also asked for strategies to assess readiness for change. Although the use of specialist clinicians’ role modelling competent AOD practice was suggested by many, it is clear that this role would be required to continually provide training and support to clinicians working with older adults with dual diagnosis.

In spite of the desire to have a clinician with a dual diagnosis focus on the multidisciplinary team, participants in the third phase recognised that training could be meaningless without ongoing exposure to individuals with dual diagnosis. This is a recognition that training should be an adjunct to clinical practice rather than a prescriptive formula applied to every situation, mirroring the work of Weiss et al described in the beginning of the complexity section of this chapter (1992). Again, this demonstrates the utility of a specialist AOD role to mentor and provide support to clinicians
working with consumers with dual diagnosis, and likely high degrees of complexity. Recommendations for changes to training methodologies are outlined further in the next chapter of this thesis.

_A lack of intersectorial collaboration._

Also identified in the third phase of this thesis was a distinct lack of intersectorial collaboration. As demonstrated in the semi-structured interview process with clinicians, understanding of where to refer consumers with dual diagnosis and the need to discuss this referral from the initial point of care was poor. Clinicians reported relying on conversations with other clinicians or simply not making AOD referrals due to a belief that the behaviour was longstanding and resistant to change. As research indicates, integrated treatment of mental health and addictive behaviour in addition to early treatment planning is current best practice in any dual diagnosis cohort, these responses indicate that MAPS was not operating within the current evidence based guideline for care of this cohort (McGovern, Lambert-Harris, Gotham, Claus & Xie, 2014; Drake, Mueser, Brunette, & McHugo, 2004; Barrowclough et al., 2001; Drake, Mercer-McFadden, Mueser, McHugo, & Bond, 1998).

The poor understanding of the referral process to AOD treatment services may be somewhat explained by the recent restructure of the AOD treatment sector in Victoria. Widely criticised, this restructure aimed to “centralise” services within geographic catchment areas, much like the structure publically funded mental health services currently operate under (Department of Health, 2013d). A core aim of this process was to reduce access blockages by reducing “gatekeepers,” however clinicians and consumers alike report that this is not the case. A report by Berends and Ritter showed that access was more difficult, with clinicians in this study reporting finding understanding the referral process difficult (2014). The report also found that many clinicians were told to have consumers call services directly to complete the referral process, leading to a procedure
whereby individuals expressing an interest in engaging in AOD treatment were simply handed a card and advised to call the service themselves. At the time of writing, a draft proposal to alter this process is being considered by the Victorian Government Department of Health, allowing clinicians to make direct referrals for AOD treatment.

A consequence of this system is that consumers often begrudge having to undergo many assessments, often describing repeating their history and concerns as a burden and barrier to contacting services. Certainly, once a mental health clinician conducts a comprehensive assessment often with a secondary assessment conducted by either a psychiatrist or psychiatric registrar, one can only wonder whether this cumbersome system is actually necessary in order to commence treatment. Likewise, the state of change of AOD treatment services in Victoria has led to confusion within the clinicians interviewed for the third phase of this thesis; some described old services and assessment processes that predates the service reform in Victoria as opposed to the newer process.

A suggestion made by one of the participants was that representatives from AOD services maintain open dialogue with MAPS, visiting and conversing with clinicians to explain the assessment and treatment process for their service. Likewise, it was felt that this arrangement would also work with mental health services visiting AOD treatment services, and although this research project is based at a mental health service alone, issues with managing mental health in AOD treatment have been reported frequently in the literature (McGovern, Lambert-harris, Gotham, Claus, & Xie, 2014). This idea somewhat reflects the concept of reciprocal rotations between services as discussed in Chapter Two of this thesis, which although was found to be somewhat of a failure when attempts were made to implement it, had proven to be beneficial for my own practice as described in Chapter Two.
Navigating both systems of care may be made easier by the advent of recovery coaching. A concept described by LePage and Garcia-Rea (LePage & Garcia-Rea, 2012) in the United States of America, this system uses a clinician to advocate and converse with various services an individual is involved with, providing one key point of contact for the individual in question and an experienced clinician to liaise with services directly. Coaching may also encompass a number of holistic and lifestyle domains to prevent relapse, as described in other models. Early indications in other healthcare domains indicate that this methodology is successful in actually getting individuals involved in treatment and keeping them engaged (Lashley, 2007). Notwithstanding, this is a model that could be employed within MAPS, allowing a secondary goal of building collaborative relationships with AOD treatment providers and other healthcare networks to enable smooth transition of individuals into differing services.

**System response.**

The systematic response to dual diagnosis in older adults is critical to evaluate for a number of reasons; the growing body of research suggesting an ageing baby boomer cohort with a higher degree of AOD use, the nature of an ageing population and the costs associated with providing care to a growing number of older adults with complex health needs in the future. Combined, these factors indicate a potential increase in the number of older adults with dual diagnosis requiring care by both mental health services and AOD treatment services, with growing costs indicating the possibility of services having to provide care to a greater number of individuals with less resources. This section will discuss issues associated with the current system response to older adults with dual diagnosis.
"Not our business."

McDermott and Pyett’s (1993) report identified the notion that individuals with dual diagnosis were “not welcome anywhere,” due to both mental health services and AOD treatment services believing them to be inappropriate to their service. This report suggested a “no wrong door” policy, whereby all referrals would be accepted and either provided care or assisted to attain care from a service that suited their needs. Further, the Victorian Government’s Key Directions (2007) document called for services to treat dual diagnosis as “core business,” suggesting a raft of measures to ensure individuals received appropriate, timely care for co-occurring mental ill health and AOD use disorders. These documents should ensure that this section of discussion ends here, however it is apparent that neither “no wrong door” or dual diagnosis being “core business” is applicable to the results garnered from all three phases of this research project.

As described by clinicians who frequently took initial referrals as requests for MAPS care, discussing individuals who were considered to have issues related to AOD use alone were often not taken for further assessment and treatment. Examples of this are provided in Chapter Seven, whereby a clinician participant identifies the reluctance to assume care for an individual with behavioural issues secondary to methamphetamine use. Likewise, other participants discussed a high degree of pressure to discharge consumers who were felt to be “stuck,” or making no progress with their AOD use and likewise their mental state. As shown in the first phase of this research project, the likelihood that these individuals would be discharged from the care of MAPS with no ongoing AOD treatment was high.

This issue is not necessarily unique to MAPS, with reports in the literature showing that care for AOD use disorders is frequently lacking or absent in mental health treatment settings (McGovern et al., 2014). This issue was identified as a key component in many mental health unit inpatient deaths examined in the Chief Psychiatrist’s report (Department of Health, 2012),
describing absconding from mental health units and overdosing as causes of death in a number of cases. These findings in themselves point to a lack of comprehensive AOD treatment, particularly in the withdrawal stage, and led to a provision of the Mental Health Act (Parliament of Victoria, 2014) dictating that all individuals receiving mental health care have their AOD use addressed.

Despite all of this evidence and recommendation for integration of dual diagnosis care into mental health service delivery, the discourse provided by clinicians shows that this is not the case. Further, it appears that “top down” leadership in both advocating for adequate care provision and treating dual diagnosis as “core business” was lacking according to responses from clinician participants. In fact, the pressure to discharge consumers described by the participants appears to point to a reluctance to maintain care for this cohort; participants reported feeling that even small gains in consumers with dual diagnosis were felt to be trivial, and also that there was a need to continually advocate to provide ongoing care to the dual diagnosis cohort.

As described in the first phase of this research project, although a prevalence of 15.5% may appear to be small, this number accounts for 92 individuals with complex needs and a high need for clinical input whilst part of the caseload of the mental health service. Likewise, this prevalence may indeed be higher due to the lack of a cohesive screening approach when compared to the results of other similar studies discussed earlier in this section. Therefore, failing to provide care for individuals with dual diagnosis, or attempting to keep consumers engaged in the service appears to be a failure to provide care for some of the most complex consumers the mental health service is likely to encounter.

The need for leadership in caring for individuals with dual diagnosis will be discussed in the recommendations outlined in the next chapter of this thesis, however it should not be understated that a clear service vision is required. As one of the clinician participants stated, dual diagnosis
must be made a service priority in order to become adept at caring for individuals with co-occurring mental ill health and AOD use disorders. It is apparent that this is an essential prerequisite to meet the potential high demand for care for this cohort that is likely to follow a changing demographic profile.

**A rigid service delivery model.**

Given the demonstrated high degree of comorbid mental ill health among older adults with substance use disorders (Urbanoski, Kenaszchuk, Veldhuizen, & Rush, 2015) the lower prevalence of dual diagnosis raises the question of whether older adults with substance use disorders present to mental health services. For instance, this cohort may not come to the attention of community mental health providers or crisis services due to the nature of their addiction, which as discussed in Chapter Three, tends to contrast with the younger dual diagnosis consumer who is typified by methamphetamine and other stimulant use and chaotic mental health presentations (Chaput et al., 2011; Moos et al., 1995). As discussed earlier in this thesis, the likelihood of incidental finding of dual diagnosis in general medical settings is high. Accordingly, this raises the question of whether the current older adult mental health system is actually appropriate to older adults with dual diagnosis.

As a service, MAPS operates on arguably a rigid service delivery model. Referrals are taken by facsimile or telephone, screened by a referral clinician and presented at a team meeting where they are vetted before progressing to a formalised assessment with a mental health service clinician. Accordingly, the service relies on self-report as a form of referral, or referral by health professionals or family, friends or significant others. Arguably, this rigid service delivery model fails in meeting the consumer where they need service, for example at the location of their presentation. This may be community health clinics, general practise and primary care or general hospital settings.
The service delivery model of MAPS is based on the way adult (aged under 65) community mental health services operate, with some minor differences incorporated to provide more enhanced care to age-specific needs, including a model of outreach where the consumer is met in the community (Loi & Hassett, 2011). Although this modification goes some way to address the issues associated with this model of service delivery, it is clear that there needs to be a comprehensive examination of the applicability of the older adult community mental health model now and into the future. Meeting the individual where they present, rather than relying on an antiquated system of referral and response may indeed be a prerequisite to meeting demand; likewise, providing rapid assessment and treatment planning without the need to plead a case for assuming care of an individual should be facilitated as opposed to rejecting referrals based on a telephone screen.

Likewise, clinicians participating in the third phase of the study described a sense of isolation when providing care to older adults with dual diagnosis, describing a desire for a collaborative team approach within a case management model. Historically, MAPS has operated along the caseload model: a clinician is allocated a certain number of “cases,” and required to provide care for those on his or her caseload alone. Moving to a team-based model of case management has a number of advantages, not least allowing a continuity of cover given clinicians may work varying days, a better ability for crisis management given most of the team will have worked with an individual and have some form of rapport and an ability to truly work in a collaborative, multidisciplinary team. This moves from the “generic” role identified by one clinician and allows team members to maintain and participate in line with their discipline. Day et al (2012) found acceptance by clients and reduced wait times associated with case management access in a study of the team-based approach amongst opiate treatment program recipients in New South Wales.
A rigid service delivery model also fails to recognise the concept of adaptive substance use in older adults, both comprehensively examined by Levy and Anderson (2005) and shown in the second phase of this thesis. Additionally, the notion of fluidity, where individuals move in and out of AOD use over time, between substances and with various periods of abstinence, does not necessarily accord with the traditional community based mental health service delivery model.

While beyond the scope of this thesis, the model underpinning contemporary community mental health service delivery in respect to older adults requires examination and a potential rethink in order to meet the criteria of meeting the consumer where they present. This would require the creation and cultivation of professional partnerships with other service providers, both within the health service itself and other community and healthcare organisations. Accordingly, examining the model of a sole case manager providing care to an individual “on their books” may indeed assist in true integration of multidisciplinary roles, with the outcome being better provision of care for older adults with dual diagnosis.

Setting.

Throughout this discussion, the notion of setting has been mentioned frequently. In respect of older adults with dual diagnosis, setting refers to where individuals present, are assessed and case managed. The contemporary literature abounds with reports of older adults with dual diagnosis presenting in various settings (Bartels et al., 2005; Carter & Reymann, 2014; Speer et al., 1991). Settings are many and varied, and in the vein of the previous section, not necessarily in accordance with where contemporary older adult mental health services would operate.

There are some linkages between various mental health disciplines where older adults with dual diagnosis are identified and referred back to the mental health service itself, the most notable being a consultation-liaison psychiatry service (Devasagayam & Clarke, 2008). Under this model,
clinicians assess individuals referred to their service by a home medical team, with these individuals usually being inpatients of some form, admitted to an inpatient hospital ward. However, this method again relies on referral, with the traditional form of vetting administered when referrals are presented to the multidisciplinary team. Also, community mental health clinicians, due to referral timing and potential lack of links with the home medical team may be in no position to influence the care of the consumer nor the discharge planning process, both of which are fundamental to ensuring comprehensive care in individuals with complex medical needs (Southern, Berger, Bellin, Hailpern, & Arnsten, 2007).

Although painted as a negative in respect to MAPS, the community outreach setting does offer some substantial advantages to a mental health service that is willing to embrace the concept of taking the provision of their service to the consumer, rather than waiting for the consumer to be referred to them. Flexible delivery also allows the implementation of ideas such as novel screening approaches, whereby generalist clinicians employ short screening instruments with a supported linkage to a mental health service for more comprehensive screening and treatment planning (Edlund et al., 2004).

In addition to these benefits, meeting the consumer where they present also allays staff anxiety around providing care to mental health consumers on medical wards. Research shows that inpatients in generalist hospital settings with mental ill health often experience stigma and negative attitudes (Ross & Goldner, 2009). Accordingly, allowing a mental health clinician to advocate for the consumer and provide input into the treatment and management process may allow staff to feel supported, as documented by Chikaodiri who described a tendency for healthcare workers to express fear regarding the treatment of psychiatric inpatients in a general hospital environment (2009). Additionally, it is also likely to help the consumer achieve optimum outcomes in respect of their medical treatment and ongoing care.
The setting of older adult mental health services requires further research, as discussed in the next chapter of this thesis. However, it does indicate some benefits when compared to a traditional case management model, the most notable of which is a reduction of resource consumption in an intensive model. Additionally, it allows for brief intervention, which has been shown to reduce healthcare consumption (Ballesteros, Duffy, Querejeta, Ariño, & González-Pinto, 2004). Further, it allows community mental health clinicians to become a key component of a multidisciplinary team, providing input into management of an individual’s complex conditions while an inpatient of a general hospital ward, and to provide expertise in respect of discharge planning and ongoing community care.

Limitations of the Research

There are a number of limitations inherent in the design of this study that must be considered when interpreting the results. The primary limitation is the service-based nature of the project. It was conducted within one health service in Melbourne, Australia, which operates within a finite geographical catchment area. Accordingly, and although this is not the intent of this study, it cannot be generalised to other mental health populations both nationally and internationally. Having said this, MAPS is a major Australian older adult mental health service, providing services to a large population in Victoria.

The first phase of the project is limited in that only assessments were viewed and included in the statistical analysis, meaning individuals who disclosed their AOD use after the initial assessment were recorded as a negative. This may also go some way to explaining the results of this study when compared to those of Blixen (1997), who found a much higher rate of dual diagnosis by conducting an audit of the entire clinical stay. As discussed comprehensively in this section, the lack of a uniform screening tool may also have influenced the results, requiring a revisit of the process with a mandated screening tool to ensure relative accuracy.
Further, the first phase is also limited by the data collection methodology itself. Research indicates that clinical notes may not entirely be accurate, with omissions common (Cradock, Young, & Sullivan, 2001). This may be due to time constraints placed on the individual clinician, or in the recording process or system itself. As such, it was only possible to examine the data presented. Missing data is assumed to be not collected, however it remains a possibility that it was collected and not recorded.

The second phase of the study is limited by the small numbers, which were largely a product of the difficulty of recruitment. These difficulties are elaborated further in Chapter Four. Additionally, only one female volunteered to participate in this phase, leading to an imbalance of genders. Other potential female participants approached to participate declined. This phase is also cross sectional, in that it captures the experiences of the participants at a set point in time as opposed to a longitudinal approach which would provide for follow up interviews after the initial contact. Again, this is discussed in the suggestions for further research section of this chapter.

As discussed in the ethical issues section of Chapter Four, interviewing families and other service providers would enable a more comprehensive picture of the histories of each participant in the second phase of the study to be presented. Advice from the health service ethics committee was sought in regard to this process, and it was felt that the nature of seeking consent from both the participant and all family members would be difficult and limiting in nature. Hence, although each participant provided a candid account of their histories in respect to mental illness, AOD use and the care provided to them, it could not be corroborated with their family or other care providers.

Likewise, returning to complete a second, or potentially third interview was initially considered during the conception of the methodology for the second phase of the study. Unfortunately, all six participants stated that they would only like to complete one interview after
being explained the method on the plain language statement. Completing subsequent interviews would allow for the transcript to be analysed and further questions to be formulated. Although each interview spanned an adequate amount of time to allow the entire semi-structured interview schedule of questions to be administered, the inability to return for follow up interviews to both clarify and provide depth to the original data may have enabled a more comprehensive description of the accounts of the participants.

The final phase of the study achieved a relatively high number of participants; however it does not represent every clinician available at MAPS at the time due to unplanned leave or long-term absence due to illness or accrued holiday leave; so too only those with interest in the study topic may have participated. Additionally, interviews were required to be conducted in the MAPS office in order to meet the demands of a clinical workload. Accordingly, these interviews were limited in time in order to be included in each participant’s work schedule. Although a focused semi-structured tool was used (see Appendix D) meaning much useful data was garnered from the clinician interviews, this remains a limitation of this methodology of interview.

As with all qualitative research, the findings documented in the final two phases represent the subjective opinion of the participants. In exchange for the depth provided in this research process, as mentioned in the opening paragraph of this section the ability to generalise these findings to wider mental health settings or other mental health consumers is limited. In addition, different results may be found in other mental health services in Australia or internationally. As a result, this study remains exploratory in nature, providing a foundation for further research that will be identified later in this chapter.
Strengths of the Research

This study remains the only study in Australia to comprehensively examine the issue of dual diagnosis in older adults in the setting of a community mental health service. Accordingly, it addresses the issues associated with AOD use disorders in mental health services in relation to older adults. It has also comprehensively described the published literature to date regarding dual diagnosis in older adults. As strength, these attributes go some way to address the dearth of research in this cohort in Australia.

As an exploratory study, this research project has built a foundation of evidence regarding dual diagnosis in older adults. It remains somewhat of a seed study, in that it allows the knowledge base surrounding this cohort to build on the exploratory nature of the findings. For example, the study has determined that a population of older adults with dual diagnosis does exist within an inner Melbourne community older adult mental health service, addressing the primary research question posed in the introductory chapter of this thesis. Although there are some limitations to the prevalence figure revealed, as described in the previous section, the file audit conducted as part of phase one of this study demonstrates that a substantial number of consumers with complex needs exist in MAPS.

The explanatory sequential nature of the study serves to add strength to the mixed methodology framework employed in the formulation of this study. Each phase has informed the next, for instance the results of the initial file audit served to influence the semi-structured interviews of the second phase, and the responses of consumers to these questions formulated the semi-structured questions posed to clinicians. As a result, the strength of the explanatory-sequential framework serves to further expand and explain the findings of each phase of this research project, in accordance with the fundamentals of the model as explained by Cresswell (2014).
As described in the next section, a number of suggested research directions are a key strength of this study. The second research question concerning the experiences of older adults with dual diagnosis has been addressed, demonstrating the potential that the figures demonstrating that older adults with dual diagnosis are largely a homogenous group of males who drink alcohol with depression are not representative of the entire spectrum of older adults with dual diagnosis. Again, this highlights the danger of homogeneity in treatment planning as discussed in the early stages of this chapter.

Additionally, the second phase of this thesis provides an in-depth account into the lives of six participants with complex dual diagnosis. It allows an understanding of the day-to-day challenges these individuals face, in addition to demonstrating the frustrations and successes that they have faced in their interactions with mental health services, AOD treatment services, and healthcare providers in general.

Finally, addressing the third research question and considering the foundation of this study is the very nature of the project itself: a service improvement project. The clinicians involved in the third phase of this study had been empowered to suggest both shortfalls in the care provided to the dual diagnosis cohort at MAPS and to suggest improvements in the care of these individuals. Arguably, the greatest strength of this research is the power to enact change at a clinical level, as discussed further in the next section of this chapter.

**Recommendations for Future Research**

The purpose of an explanatory-sequential framework is to explain a concept, and more specifically, to provide context to a quantitative explanation using qualitative exploration (Kettles et al., 2011). The results of this process of explanation lend themselves to provide a solid foundation for further research to build greater knowledge in the concept under investigation. As a result, this
research project becomes somewhat of a seed study, providing the impetus for a number of further investigations that are outlined in the following section.

Screening tools.

It is imperative that further research attempt to ascertain the benefit of contemporary screening tools in respect of clinicians who may have competing assessment priorities and limited time to conduct clinical interviews. It is a recommendation of this thesis that future research aims to develop a screening tool that is timely and easy to administer. Additionally, the results should be easily interpreted in the context of a holistic assessment. In respect of experienced mental health clinicians as interviewed in the third stage of this study, this may take the form of a series of clinical prompts that remind an assessor to ask around AOD use, with positive indicators requiring a more comprehensive assessment at a later stage.

Additionally, it is recommended that a brief screening tool for dual diagnosis be developed for settings other than mental health and AOD treatment. For instance, this may form a brief questionnaire administered to older adults admitted to generalist hospital wards, or during encounters with primary care. It is essential that this instrument is quick to administer and has a supported referral pathway, as opposed to being a long screen that is rarely used, with an arbitrary score that is entered and filed with no further action. This is an opportunity for MAPS or another service provider to assume the screening and treatment planning for older adults who screen positive to this instrument, in addition to incorporating brief intervention and health information regarding sub-threshold alcohol consumption or problematic medication use.
**Specific cohort studies.**

As mentioned earlier in this chapter, the contemporary literature surrounding mental ill health and AOD use in older adults indicates that a number of distinct cohorts exist. An example of this is demonstrated in the second phase of this study, with a participant indicating that a number of her peers along with herself were undergoing methadone maintenance therapy and simultaneously having occasional heroin use. Other cohorts include veterans, injecting drug users, sub-threshold alcohol consumers living in retirement communities, socially isolated older people, those with chronic pain who misuse pain medications, individuals who present to hospital with AOD related injuries such as falls and the homeless. Repeating the second phase of this study with a recruitment process targeting these specific cohorts may go some way to explaining their specific needs and complexities in terms of treatment provision.

Considering recruiting to a longitudinal study may also go some way to demonstrate the true cost of the combined complexities of mental ill health, AOD use and medical conditions. Ideally, this longitudinal study should follow a key group of individuals at set intervals over a set time period; similar studies have been completed with injecting heroin users (Darke et al., 2014) and those who consume alcohol (Clemens, Matthews, Young, & Powers, 2007) and add much to the knowledge base concerning these cohorts, in addition to shaping treatment methodologies.

**Exploring adaptive use.**

As demonstrated in both the second phase of this research project and prior work by Levy and Anderson (2005), adaptive substance use is a concern among older adults. The propensity for addiction careers to be fluid in nature, meaning periods of relapse and abstinence, in addition to changes in substances used due to tolerance and availability are all cited as key factors in adaptive substance use. Although adaptive use as a concept is apparent in the second phase of this thesis and
is identified by clinicians participating in the third phase, the understanding of the experience of adaptive use in contemporary literature is poor.

It is a recommendation for further research that the notion of adaptive substance use is comprehensively explored, specifically addressing and exploring changes in usage patterns over time and better screening for inappropriate prescription medication use. Recognition that older adults may adapt their use is essential in the provision of adequate treatment, and understanding this process is essential to further knowledge regarding ongoing AOD treatment in the older adult cohort. Further, exploring adaptive use may help clinicians to better understand points at which older adults change their use, allowing them to implement strategies to assess readiness to change, harm reduction and treatment engagement.

**Cognitive impairment.**

Cognitive impairment has long been recognised as an inevitable consequence of heavy alcohol consumption (Sullivan & Pfefferbaum, 2005), however links to other substances, including prescribed opiates and benzodiazepines are tenuous (Mintzer & Stitzer, 2002; Rapeli, Fabritius, Kalska, & Alho, 2009, 2011). While research continues into the deleterious effect of these substances on the ageing brain, clinicians require guidance in how to manage the effects of cognitive impairment with those who continue to use AOD. This is especially pertinent when co-occurring symptoms of mental ill health are present, making diagnosis and management of a triad of issues extremely difficult.

It is a recommendation of this research that further work is done to explore screening for cognitive impairment in older adults with dual diagnosis, in conjunction with work to discover strategies for early intervention. Likewise, collaborative partnerships with acquired brain injury, dementia or memory services should be explored; alcohol use should not preclude an individual
from investigation into their cognitive function, as has been experienced by this author and clinicians working with older adults.

Specific treatment services.

Currently, virtually no treatment options specific to older adults exist (Hunter et al., 2010). This leads to a system whereby complexity inherent in the older adult cohort is often not manageable at the AOD treatment level. As described in Chapter Two of this thesis, Australia is home to one single community AOD treatment service for adults aged 60 and over. Inpatient detoxification and rehabilitation services may be loath to accept older adults due to this complexity, leading to a substantive gap in service provision to older adults with dual diagnosis who require specific AOD treatment.

Accordingly, the default option for treatment may fall to older adult mental health services, or in the case of detoxification, general hospital wards. In fact, these settings may be the only appropriate place to manage older adults who are withdrawing from substances due to a multitude of medical complications requiring management. Further, the question of where to treat older adults with significant complications of their AOD use arises; they may find themselves hospitalised after injury and unable to return to their home, resulting in a form of treatment and accommodation in a supported accommodation service that meets their level of care needs.

It is a recommendation of this research that specific treatment options for older adults are investigated, not only in terms of specific settings, but protocols for managing dual diagnosis in the general hospital setting. Given the costs involved in hospital treatment of older adults with dual diagnosis, this research is urgently needed, particularly if predictions of a higher number of presentations from the ageing baby boomer population eventuate as predicted (Colliver et al., 2006; Johnson & Sung, 2013).
**Comprehensive interventions.**

A nurse participant mentioned in response to a question regarding their knowledge of harm reduction in the third phase of this thesis that it should be a holistic approach: lifestyle, diet, exercise and psychosocial. Accordingly, a range of comprehensive psychosocial interventions for physical wellbeing have been trialled in the adult (aged under 65) consumer cohort, with some promising results (Hasson-Ohayon, Kravetz, Roe, Rozencaig, & Weiser, 2006; Richardson et al., 2005). For example, Wynaden, Barr, Omari and Fulton (2012), conducted an exercise physiology program with inpatients of a forensic psychiatric inpatient program in Western Australia, with positive consumer feedback regarding psychiatric symptom control and subjective levels of physical fitness and wellbeing. Additionally, in an older adult specific setting, a water exercise group for people with dementia shows promise and subjective improvement across a number of domains, albeit requiring scientific testing to determine efficacy (Neville, Clifton, Henwood, Beattie, & McKenzie, 2013).

It is therefore a logical recommendation of this research that holistic interventions are investigated. This becomes pertinent when investigating the issues associated with substance use disorders, including poor nutrition and poor cardiovascular health. As illustrated in the first phase of this study, many of the older adult mental health consumers at MAPS carried medical comorbidities. Research should be conducted along the lines of that mentioned earlier which examines the efficacy of community lifestyle groups incorporating exercise and skills such as cooking healthy meals, both to provide older adults living independently with “recovery capital,” and to provide a means of socialisation to address the isolation found in this cohort (Best & Laudet, 2010).
Adapting harm reduction.

The final recommendation of this research involves harm reduction. As a concept, harm reduction was initially geared towards injecting drug users, both as a means to reduce the prevalence of blood borne viruses and to increase the take-up of opiate replacement therapies as a means to mitigate the mortality in this group (Kellogg, 2003). Harm reduction has expanded to include overdose treatments such as naloxone, and continues to push into new ground, including novel ideas such as “pill testing” for individuals taking ecstasy at music festivals.

However, harm reduction seems to neglect older adults. For example, harm reduction in older adults may encompass domains such as safety to drive, particularly with alcohol dependent older adults whose baseline alcohol concentration may exceed that allowed for safe driving. It may also address the risk of injury in the home from falls, financial vulnerability and injuries as a result of misadventure. There is also scope to expand take home naloxone to older adults who misuse prescription opiates (Kim & Nelson, 2015). Therefore, the final recommendation of this research is that further study be conducted to expand contemporary harm reduction to strategies specific to older adults with dual diagnosis.

Summary

This chapter has presented a comprehensive discussion of the issues identified during the three-phase mixed methodology forming the research component of this thesis. It has aimed to discuss these in line with the initial intent of this research project, being a service improvement project designed to influence the practice of a community mental health service providing care to older adults with dual diagnosis.

A number of recommendations for future research have also been presented in this chapter, placing the current study as an exploratory “seed study;” in this respect, this document has provided
the evidence for future research to improve the care provided to older adults with dual diagnosis. A number of future research directions are evident, and as argued in this chapter, imperative given the potential for older adults with dual diagnosis to present in healthcare settings other than mental health services. The final chapter describes recommendations for service improvement in line with this aim, and the concluding statements of the thesis.
Chapter Nine

Recommendations for Service Improvement and Concluding Statements

Introduction

The final chapter of this thesis presents recommendations in line with the overarching aim of this research, being a service improvement project aiming to improve the care provided to older adults with dual diagnosis who are receiving care from a community mental health service. Accordingly, these improvements are structured at a service level, however are not limited to the service discussed and researched in this thesis; similar research conducted in other mental health services may find that areas where practice gaps exist may be improved by the implementation of these recommendations.

Recommendations

The following seven recommendations have been formulated from the discussion and areas requiring improvement evident during the three research phases of this thesis. They will be discussed in the following section, including their implementation and potential limitations to the recommendations. These are the major recommendations of the study, which may not necessarily be applicable to other community mental health services that provide care to older adults with dual diagnosis. They do, however, address a number of issues associated with providing care to older adults with dual diagnosis and therefore are likely to improve the provision of care to this cohort in other services with the issues identified in this study.

1. Screening

The first, and primary recommendation for practice arising from this research study is that of screening. It is imperative that all individuals coming into contact with mental health services are
screened for co-occurring alcohol and other drug use; in fact, this edict was included in the Victorian Government’s Key Directions (Victorian Government Department of Human Services, 2007) document, and forms a key criterion for services to be truly responsive to dual diagnosis. Additionally, this recommendation should be expanded to screening all older adults for dual diagnosis, no matter the severity, on all occasions of contact with healthcare providers. Research has shown a propensity for a proportion of Australian older adults to consume alcohol in excess of the guidelines for safe drinking (National Health and Medical Research Council, 2009), and screening in this manner provides an opportunity to implement brief intervention in the form of feedback tailored as a health improvement model. To this end, informing an individual that reducing their alcohol consumption would be a positive benefit to their ongoing health is a non-threatening manner of brief intervention (Leuenberger, Fierz, Hinck, Bodmer, & Hasemann, 2017; Schonfeld et al., 2010).

Likewise, screening for illicit substances should be uniform. The outdated notion that older adults simply do not use illicit drugs is a great disservice to those presenting to healthcare providers and contributes to issues such as undetected withdrawal and delirium in general hospital settings (Mayo-Smith, Beecher, Fischer, & et al., 2004). As mentioned in the recommendations for further research section, initial screening for AOD use does not need to be comprehensive but the question needs to be asked. A positive response should trigger referral to an appropriately skilled clinician to further assess AOD use, determine the individual’s motivation to change and implement a treatment plan prior to discharge from hospital. Case reports, including one arising from the creation of this thesis, have shown good outcomes in implementing integrated treatment for dual diagnosis in individuals who are hospital inpatients (Searby, van Swet, Maude, & McGrath, 2017).
2. Expanding practice domains

In accordance with the discussion on Setting contained in Chapter Eight, it is a recommendation of this research that impetus be placed on expanding the practice domains of contemporary older adult mental health services. In accordance with meeting the consumer where they present, older adult mental health services should have a prominent presence in the treatment and discharge planning of older adults with dual diagnosis in addition to providing specialist assessment and support to staff who may not hold the skills or knowledge to provide care to this cohort. This is particularly pertinent when considering nurses, who are often encouraged to specialise and receive little mental health or addiction training during their undergraduate education (Rassool, 2007).

Recognising that older adults with dual diagnosis may not necessarily be referred to mental health services is key to expanding practice domains. A presence in community health services and primary care is essential, and following on from the first recommendation in this section, allows a speedy assessment and referral from the clinician who initially detects problematic AOD use and mental ill health through screening. Time to treatment engagement has been shown to improve ongoing treatment retention rates, and the literature demonstrates that older adults who use AOD typically do very well in treatment (Oslin, Pettinati, & Volpicelli, 2002; Outlaw et al., 2012). Likewise, treatment for mental ill health should be instituted in a timely fashion in order to ensure favourable outcomes (McGorry, Yung, Phillips, & et al., 2002).

Expanding practice domains may mean the end of the traditional clinic model in older adult mental health services, with clinicians becoming a more visible presence in the community. It may also mean that they are required to liaise and consult closely with community organisations and healthcare providers, participating in clinical meetings and providing secondary consultation in order to be seen as a supportive and responsive presence. This form of collaborative partnership has
been demonstrated to lead to superior clinical outcomes (Craven & Bland, 2006; Dewa, Hoch, Carmen, Gusscott, & Anderson, 2009), and will be discussed in greater detail in the next recommendation.

Finally, in respect of expanding practice domains, it must be recognised that older adults with mental illness who are managed by mental health services are simply not those who “graduate” from adult community mental health services. The definition of mental ill health in older adults is somewhat broader, encompassing organic disorders such as dementia, and a complex situation in itself when compared with those under age 65 (Niederehe, 1998). This notion has been discussed comprehensively throughout this thesis, however it is important to highlight that a system designed to cater to younger adults may not necessarily be effective for their older counterparts.

3. Collaborative service linkages

The third recommendation for service improvement presented in this chapter is closely intertwined with the second recommendation. Collaborative service linkages are essential to provide competent, cohesive care for complex consumers such as older adults with dual diagnosis. Perhaps the most pressing need to create collaborative service linkages is between mental health services and AOD treatment services. Cultivating trust between clinicians is arguably a key component of seamless referral, and aids in timely integration of treatment from the outset of the individual’s episode of care. To achieve truly integrated treatment, as is recognised as the “gold standard” in dual diagnosis treatment, it is essential to involve all stakeholders in the consumer’s care from the point of assessment.

Developing collaborative service linkages enables timely information sharing and communication. For instance, each service can communicate information about the state of their treatment engagement and implementation as it occurs, as opposed to sending a referral form or
letter at the end of their episode of care. As evidenced by the first phase of this research project, consideration of AOD treatment often did not occur in the initial phase of assessment and planning for ongoing treatment. A collaborative service linkage could go some way to rectify this issue, particularly given the third phase of the research project had clinicians identify that being able to converse with AOD treatment services around appropriate referrals and treatment options offered would likely increase their intention to refer to these services.

Collaborative linkages may also enable a streamlined assessment process. Contemporary Victorian AOD assessment involves a large document, with many questions asked that are similar to those asked by mental health clinicians (Department of Health, 2013b). Sharing of information may reduce the burden on consumers, who are likely to be asked to repeat their symptoms, their path to the mental health or AOD treatment service, their intention to change and their medical history several times over multiple episodes of care. It would be easy to conclude that this is not only a burden to consumers, but a deterrent to seeking ongoing treatment, however there is no research specifically addressing this practice on treatment engagement and retention.

Finally, collaborative service linkages would allow a sharing of skills between mental health and AOD treatment services. Although this thesis discusses a mental health service specifically, literature indicates that AOD treatment services are frequently in need of support with complex mental health presentations. A collaborative service linkage would allow this support and sharing of knowledge to occur, with the ultimate benefit being to consumers who would be the chief recipients of the advanced skills provided by both sets of clinicians.

4. Streamlining referral processes

Closely interrelated to the previous two recommendations, recommendation four of this research project refers to streamlining referral processes. In some ways, this is a counterpoint to the
advantages of collaborative service linkages identified in the previous recommendation, however it
involves removing barriers to service entry for individuals felt to be in need of specialist mental
health care.

As described through the third phase of this thesis, the referral process for MAPS remains
cumbersome and often results in referrals for issues considered to be AOD related to be rejected.
This recommendation suggests that the referral process is streamlined, with provision for clinicians
to complete assessments with the sole goal of linking individuals with more appropriate services.
To some extent this model of care is practiced in other community-based services, including
Hospital Admission Risk Programs (HARP), who link individuals with ongoing care needs to
services in a brief case management model. Likewise, it would be prudent for MAPS to provide this
service to those who are deemed “not appropriate” for mental health services.

In the same vein, it is essential that older adult mental health services are seen as responsive
to referrals, rather than gatekeepers where it often appears that the sole aim is to reject as many
referrals as possible; this is a common complaint experienced by clinicians having to deal with
mental health services, and is supported by McEvoy and Richards (2007), whose qualitative work
with 29 clinicians responsible for gatekeeping in mental health services identified individuals with
AOD problems being triaged as least important and frequently denied service. As opposed to
rejecting referrals, it may be prudent to provide some support to clinicians that are struggling with
older adults with dual diagnosis through providing joint visits and making the referral process as
easy as possible.

Accordingly, the referral process should be streamlined for clinicians who are detecting dual
diagnosis in settings other than mental health. For instance, if the first recommendation of this
thesis is followed, then responding to reports of an older adult screening positive to dual diagnosis
or either mental ill health or problematic AOD use alone should trigger a comprehensive
assessment with a minimum of effort required for the referrer. Like screening, referral processes should be simple and able to be completed in a minimum of time. Nursing, like many other health professions, suffers from “mountains of paperwork,” with the end result being referrals not being completed and screening tools either rushed through or not completed at all (Porter, Raja, Cant, & Aroni, 2009). Therefore, streamlining this process removes a significant number of barriers to nursing staff who have competing demands on their time. A supportive approach to community clinicians who require assistance with older adults with dual diagnosis also results in a collaborative approach, and ultimately better care for the individual in question.

5. Clinical specialisation

As discussed in Chapter Eight, the concept of clinical specialisation can potentially be a double-edged sword in mental health services. On the one hand, it provides a team with a key resource and contact who has the knowledge, qualifications and skill to manage older adults with dual diagnosis. However, it can result in siloed care, with other clinicians referring all consumers with dual diagnosis to the dedicated clinician for ongoing care, leading to a loss of skill and a frustrated dual diagnosis clinician who feels that the work is simply “handballed” to them.

In spite of this issue, several clinician participants in the third phase of this research project expressed a desire for the presence of a specialised clinician when discussing AOD issues in clinical meetings and felt that this clinician would be of great support in both day to day management of consumers with dual diagnosis and to provide ongoing education and training in the area. One way of mitigating the danger of clinicians “siloing” their work is to employ a clinician in a consulting role, which also addresses the issue of lone clinicians working with individuals with a high degree of complexity by providing a skilled team member to assist. This method has reported success in respect of the Clinical Nurse Consultant role (Humphreys, Johnson, Richardson, Stenhouse, &
Watkins, 2007), and therefore a recommendation of this research is that this role be explored in terms of older adult mental health services.

Some healthcare services have gone as far as to develop addiction medicine teams who provide a consultative approach within the entire hospital (McDuff et al., 1997), however the risk with this approach is that they lose the immediate availability inherent in a team member who operates locally with the multidisciplinary team. This position may have other responsibilities and could logically operate as a support to enhanced screening as outlined in the first recommendation of this chapter, however a key responsibility would be to provide support and consultation to the older adult community mental health team. This could involve specialist assessment, brief intervention and treatment, referral to AOD treatment services, advocacy and liaison with other healthcare providers.

Regardless of the model that a service chooses, it is clear that some level of specialist input is required when caring for older adults with dual diagnosis. The complexities inherent in their presentations, coupled with the need for team based approaches and a degree of support in caring for consumers with dual diagnosis as identified in the third phase of this research project makes the recommendation that a clinical specialist be available to the mental health team easy to make.

6. Investigating appropriate treatment options

As discussed in Chapter Eight of this thesis, very few treatment options specific to older adults exist in Australia. It is not only a recommendation of this research that ongoing investigation be conducted into the viability of treatment options, but a recommendation for practice. Given the service involved in this research, MAPS, has an attached 15 bed inpatient mental health unit, it is recommended that this be explored as an option for inpatient detoxification for older adults with dual diagnosis. Being attached to a medical hospital, it would allow medical supervision of those
admitted for this purpose, however the primary motivation in making this recommendation is the current state of play of detoxification and rehabilitation facilities in Victoria.

At present, the waiting list for a treatment bed in a publically funded detoxification or rehabilitation facility is lengthy, with many providers closing their doors to new applicants for months at a time (Carr et al., 2008). This is at odds with the nature of addiction, where an expression of a desire to change needs to be acted upon to allow an individual the greatest success at modifying their AOD use and allowing treatment of mental ill health without the complication of intoxication. Further, considering setting, it is likely that a number of older adults referred to MAPS from the hospital itself have spent some time abstinent from AOD, thus putting them at risk of relapse, and in the case of illicit substances, overdose leading to death (Tagliaro, Battisti, Smith, & Marigo, 1998).

This research recommends investigating novel alternatives to long wait lists for treatment services by utilising existing resources to allow older adults with dual diagnosis some “time out” from their usual routines of AOD use, in turn allowing clinicians to implement appropriate therapies and treatment to assist the individual to make changes to their substance use. Fortunately, many consumers often contemplate ceasing or changing their AOD use in times of crisis, particularly in the face of medical issues (Kirouac, Frohe, & Witkiewitz, 2015). As a result, utilising current resources to allow them to make this change may pay dividends in the form of reduced service utilisation and costs of care in the longer term.

This recommendation does not replace the call for research to determine the feasibility of older adult specific treatment options, however it does recognise the current situation regarding AOD treatment providers in Victoria and offers a solution to assist in the interim.
7. Upskilling the workforce

The final recommendation of this research project, and arguably the most essential, is the need to upskill the healthcare workforce who provide care to older adults with dual diagnosis. As discussed previously in this chapter, contemporary research indicates a lack of undergraduate education regarding AOD use in the healthcare context, and likewise, a number of studies have identified experienced clinicians lamenting a lack of formal education in this area (Harling et al., 2006; Novak & Petch, 1994; O'Gara et al., 2005). This research project has also identified this issue among clinicians, with many of the participants in the third phase describing a lack of educational preparation for working with older adults with dual diagnosis, and a need for practical, applicable training.

Failing to provide clinicians with appropriate training is even more concerning given the identified potential for older adults with dual diagnosis to present to a wide range of clinical settings, therefore a key recommendation of this research project is that undergraduate nurses are provided with education in order to at least consider the potential of co-occurring AOD use and mental ill health in older adults in their chosen practice setting. This need not be formalised and may take the format of novel approaches incorporating new technologies such as social media or new devices to deliver relevant knowledge to enable neophyte clinicians to at least detect and make appropriate referrals for older adults with dual diagnosis.

Likewise, it is essential that practising clinicians in mental health are provided with the adequate ongoing education, training and support to enable them to provide competent, timely care to older adults with dual diagnosis. Research has shown that providing a number of key training elements increases the competency of dual diagnosis practice in clinicians in conjunction with appropriate clinical support (Ford, Bammer, & Becker, 2009), and accordingly, truly making dual diagnosis “core business” will not occur until this fundamental knowledge gap is addressed. In
addition, the consideration of a formalised supervision model, both to enable clinicians to discuss their decision-making process and receive support for what is effectively a highly complex clinical cohort should be integrated into mental health services. This effectively integrates with Recommendation Five, whereby a key clinician may be appointed to provide this support to members of the multidisciplinary team who are required to undertake case management of consumers with dual diagnosis.

Concluding Statements

Dual diagnosis is a complex issue, poorly researched and shown to result in higher rates of psychiatric relapse, more repeat admissions to hospital and ultimately higher financial costs of care. In spite of these concerns, little contemporary research has examined dual diagnosis in older adults. This is a concerning knowledge gap given the potential for an increase in co-occurring mental ill health and AOD use in this cohort secondary to changing demographics and the ageing of the baby boomer cohort. Additionally, the complex factors inherent in this cohort of individuals increases their ongoing care needs, and is likely to cause a significant drain on the resources of healthcare providers.

To date, many of the studies examining older adults with dual diagnosis have examined specific populations in the United States of America, making these results difficult to apply to the Australian situation. Blixen, McDougall and Suen’s (1997) study of older adults with dual diagnosis in three inpatient psychiatric hospitals in the USA found a prevalence rate of co-occurring AOD use in over a third of patients. This figure, representing over a third of patients in the mental health service examined, is concerning given the current state of capability to provide competent care for older adults with dual diagnosis identified in this thesis.
Although this study did not find as high a prevalence rate in Caulfield Hospital MAPS, the figure described in phase one of this research project demonstrates that in a two-year timeframe 92 individuals presented to this mental health service with complex needs that may not have been met. Reiterating a key limitation of this study, this figure may be relatively conservative due to the lack of comprehensive screening for alcohol and other drug use. The third phase of this project demonstrates that this is not a satisfactory situation, with some clinicians describing asking about AOD as a uniform practice and others relying on observation or their judgement on whether it was appropriate to address the issue with a specific client. Despite these limitations, this finding has addressed the initial research question guiding this study by demonstrating that a population of older adults with dual diagnosis do exist within Caulfield Hospital MAPS.

The second phase of the study allowed consumers with dual diagnosis to describe their experiences with mental ill health, alcohol and other drug use and interactions with mental health and AOD treatment services. It achieved the aim of the second research question, being an examination of the experiences of consumers with dual diagnosis in the mental health service. Although limited by a small sample, these individuals were selected in conjunction with case managers who identified them as being particularly challenging to work with due to their complexity. Accordingly, this sample provides an opportunity for learning and has challenged other research findings, including those from the first phase of this study, that older adults with dual diagnosis are largely a homogenous group of males who consume alcohol with an affective disorder such as depression.

This research project remains the only known study exploring dual diagnosis in Australian older adults in the context of a specific mental health service in Melbourne. Although this limits generalisation of the findings, it provides an in-depth account of the experiences of both consumers of the mental health service with dual diagnosis, and the clinicians providing care to them.
Accordingly, this thesis is able to offer a number of recommendations at the service level to improve the care to this cohort, addressing the third research question posed in the introduction to this study. The clinicians participating in this study identified a number of key factors impeding the provision of care to older adults with dual diagnosis and were able to make a number of suggestions for the improvement of this care. Perhaps the most pertinent of these suggestions was a desire for service leaders to embed dual diagnosis in their organisational culture, ensuring that clinicians were encouraged and supported to consider dual diagnosis as part of their assessment and ongoing care.

This research project has a number of policy implications for local health services, including service changes as discussed above. Reflecting on the Victorian Government’s Key Directions (2007) document, it is clear that the service that is the focus of this study has not made dual diagnosis “core business,” nor has it met a number of principles outlined in this document. Similarly, this thesis demonstrates the potential for older adults to present in a wide variety of healthcare settings, truly challenging the contemporary service model of provision of mental health care to older adults with dual diagnosis; this is shown in the second phase of this thesis, where the consumer participants described a wide range of interactions with healthcare providers. Of most concern, the question must be raised that if a mental health service has difficulty identifying and managing individuals with dual diagnosis, how severe are the service gaps in other areas of healthcare?

A number of recommendations were made in both Chapter Eight and the current chapter of this thesis, aimed at improving treatment outcomes for older adults with dual diagnosis. As an exploratory study, this research project provides a solid foundation to embark on broader research and indicated in Chapter Eight. This research is fundamental to enhancing the understanding of older adults with dual diagnosis, and ultimately improving the care provided to them in contemporary healthcare settings. However, as a standalone document, this project has achieved its
ultimate aim of providing suggestions for service improvement, namely the implementation of uniform screening procedures, altering the service delivery model to meet the consumer at the point of presentation and improving both knowledge and practical skills amongst the clinicians who provide care to the older adults with dual diagnosis who present to the healthcare service.

Finally, as a clinician, this research project has influenced my practice in a number of ways. Following Leeman and Sandelowski’s (2012) vision of “practice-based evidence” has allowed me to identify an area of clinical practice that I felt was lacking, explore it in depth and formulate recommendations that fit in the contemporary model of healthcare, which requires solutions that are cost effective and involve clinician “buy in” to have a chance of success. To this end, the results of this study have allowed me to move into a role which allows me to implement some of the recommendations in this thesis in a wider healthcare context and provide education to clinicians in both identifying and caring for older adults in the general hospital who have dual diagnosis. Likewise, this service is largely supportive of ongoing research into the care of older adults with dual diagnosis and AOD use generally, allowing me to truly achieve the vision of building an evidence base on the foundation of exploratory discourse contained in this thesis.

To conclude, dual diagnosis in older adults is a complex issue, and one that is likely to increase in contemporary healthcare services due to an ageing baby boomer cohort and changing demographics. Therefore, now is the time to both devise solutions to improving the care of older adults with dual diagnosis and increasing the knowledge base and practical skills of clinicians providing care to this cohort. Beyond the service involved in this study, it is imperative that this process commences in neophyte clinicians, in order to reduce the tendency for older adults with dual diagnosis to become a hidden epidemic.
References


DUAL DIAGNOSIS IN OLDER ADULTS: A HIDDEN EPIDEMIC?


McDermott, F., & Pyett, P. (1993). *Not welcome anywhere: People who have both a serious psychiatric disorder and problematic drug or alcohol use.* Fitzroy: VICSERV.


Severe Substance Dependence Treatment Act, Victoria (2010).


Appendix A: Ethical Approval Statements

ETHICS COMMITTEE CERTIFICATE OF APPROVAL

This is to certify that

Project No: 110/14

Project Title: Dual diagnosis in older adults: A hidden epidemic?

Principal Researcher: A/Professor Phillip Maude

Protocol Version 1.3 dated: April 2014

Participant Information and Consent Form (Clients) Version 1.3 dated: May 2014

Participant Information and Consent Form (Staff) Version 1.3 dated: May 2014

was considered by the Ethics Committee on 1-May-2014, meets the requirements of the National Statement on Ethical Conduct in Human Research (2007) and was APPROVED on 27-May-2014

It is the Principal Researcher’s responsibility to ensure that all researchers associated with this project are aware of the conditions of approval and which documents have been approved.

The Principal Researcher is required to notify the Secretary of the Ethics Committee, via amendment or progress report, of

- Any significant change to the project and the reason for that change, including an indication of ethical implications (if any);
- Serious adverse effects on participants and the action taken to address those effects;
- Any other unforeseen events or unexpected developments that merit notification;
- The inability of the Principal Researcher to continue in that role, or any other change in research personnel involved in the project;
- Any expiry of the insurance coverage provided with respect to sponsored clinical trials and proof of re-insurance;
- A delay of more than 12 months in the commencement of the project; and,
- Termination or closure of the project.

Additionally, the Principal Researcher is required to submit

- A Progress Report on the anniversary of approval and on completion of the project (forms to be provided);

The Ethics Committee may conduct an audit at any time.

All research subject to the Alfred Hospital Ethics Committee review must be conducted in accordance with the National Statement on Ethical Conduct in Human Research (2007).

The Alfred Hospital Ethics Committee is a properly constituted Human Research Ethics Committee in accordance with the National Statement on Ethical Conduct in Human Research (2007).

SPECIAL CONDITIONS

None

SIGNED:

R Frew
Secretary, Ethics Committee

Please quote project number and title in all correspondence
17th June 2014

Phillip Maude
Building 201 Level 7, Room 16
School of Health Sciences
RMIT University

Dear Phillip,

ASEHAPP 39-14 MAUDE SEARBY Dual diagnosis in older adults: A hidden epidemic?

Thank you for submitting your application for consideration by the Science, Engineering and Health College Human Ethics Advisory Network (CHEAN) of RMIT University.

Your application was considered at the meeting 05 – 14 on, Wednesday 2014. The CHEAN notes that this project has been approved by the Human Research Ethics Committee from The Alfred Hospital

With research projects that involve applications to more than one Human Research Ethics Committee (HREC), the Science, Engineering and Health College Human Ethics Advisory Network (CHEAN) adopts the following policy:

Where a research project is submitted to more than one HREC, one of those HRECs will be designated the primary HREC. The primary HREC will be the HREC associated with the organisation that has the primary ethical duty of care over the research participants.

In the event that the Science, Engineering and Health CHEAN is not the primary HREC, its role will be to endorse and affirm the decision of the primary HREC, provided the primary HREC is properly constituted under Australian Health Ethics Committee and National Health and Medical Research Council guidelines.

To do this, the Science, Engineering and Health CHEAN requires a copy of all documentation associated with the application to the primary HREC, including letters of approval. The Science, Engineering and Health CHEAN reserve the right to request changes to the ethical conduct of the research in order to meet RMIT University requirements.

In the case of your research project, the Science, Engineering and Health CHEAN has received a copy of all of the documentation related to your application to the human research ethics committee noted above; therefore, the Science, Engineering and Health CHEAN is able to endorse and affirm the decision of that committee.

If you have any questions about this letter or about any ethical issues that arise during the conduct of your research, please contact the Chair of the CHEAN directly.

Yours sincerely

Linda Jones
Chair, Science Engineering & Health
College Human Ethics Advisory Network

Cc Other Investigator/s: Ian McGrath School of Health Sciences RMIT University
Student Investigator: Adam Searby 49669047A School of Health Sciences RMIT University
Appendix B: Participant Information and Consent Forms (PICFs)

Participant Information Sheet/Consent Form
Non-Interventional Study – Adult providing own consent

Caulfield Hospital Mobile Aged Psychiatry Service (MAPS)

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<tr>
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<td>Associate Professor Phil Maude</td>
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<tr>
<td>Associate Investigators</td>
<td>Dr Ian McGrath</td>
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<td></td>
<td>Adam Searby</td>
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<tr>
<td>Location</td>
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Part 1 What does my participation involve?

1 Introduction

You are invited to take part in this research project, Dual diagnosis in older adults: A hidden epidemic? This study aims to explore the experiences of a small number of individuals who use MAPS services in depth, by describing their stories of drug and alcohol use, their experiences of using services like MAPS and examining their medical histories that are held by MAPS. This research project is aiming to improve the service experience of individuals case managed by MAPS who use alcohol and other drugs.

This Participant Information Sheet/Consent Form tells you about the research project. It explains the research involved. Knowing what is involved will help you decide if you want to take part in the research.

Please read this information carefully. Ask questions about anything that you don’t understand or want to know more about. Before deciding whether or not to take part, you might want to talk about it with a relative, friend or local doctor.

Participation in this research is voluntary. If you don’t wish to take part, you don’t have to. You will receive the best possible care whether or not you take part.

If you decide you want to take part in the research project, you will be asked to sign the consent section. By signing it you are telling us that you:
- Understand what you have read
- Consent to take part in the research project
- Consent to research that is described
- Consent to the use of your personal and health information as described

You will be given a copy of this Participant Information and Consent Form to keep.
2 What is the purpose of the research?
Currently, there is very little research exploring the experiences of older adults who use alcohol and other drugs in Melbourne. The aim of this study is to use these individual experiences, along with detailed case histories, to identify better ways to care for MAPS clients who use alcohol and other drugs. The student researcher, Adam Searby, will also use the results of this research to obtain a Doctor of Philosophy degree from RMIT University.

3 What does participation in this research involve?
The initial steps in this project will involve case managers identifying participants who do, or have used, alcohol or other drugs and who are willing to participate in this project. If you agree to take part in this project, you will be asked to participate in 1-3 interviews with up to two of the investigators from the study team. These interviews will be of 1-2 hours duration, and will ask you a number of questions to help you tell your story of your experiences of MAPS, using drugs or alcohol and your mental health. These interviews will be recorded using audio recording equipment for the purposes of transcribing your interview onto paper, and the interviews themselves will take place in your home, the MAPS clinic or another private place agreed to by yourself and the research team. All identifiable information, such as your name, address and hospital identification number, will be removed from the published research.

You will also be asked to consent to researchers examining your medical history as held by the hospital. This is to help build a clinical picture to go with the answers you provide to questions during the interview process.

This research project has been designed to make sure the researchers interpret the results in a fair and appropriate way that avoids study researchers or participants jumping to conclusions.

There are no costs associated with participating in this research project. You will be reimbursed $25 per interview in line with Alfred Health research policy.

4 What do I have to do?
Your only requirement to participate in this study is to provide 1-3 interviews with the research team, of 1-2 hours duration. There will be no restrictions on your lifestyle, diet or medication, and your care with MAPS will proceed as usual.

5 Other relevant information about the research project
The project involves reviewing MAPS records to identify a percentage (the prevalence) of individuals case managed or assessed by the MAPS team using alcohol or drugs, individual interviews with 6-10 individuals and finally, an interview process with MAPS staff. It is anticipated that this process will both identify shortfalls in the current care of individuals case managed by MAPS who use alcohol and drugs, and guide future care to be more responsive to the needs of the individual.

6 Do I have to take part in this research project?
Participation in any research project is voluntary. If you do not wish to take part, you do not have to. If you decide to take part and later change your mind, you are free to withdraw from the project at any stage.

If you do decide to take part, you will be given this Participant Information and Consent Form to sign and you will be given a copy to keep.

7 What are the possible benefits of taking part?
We cannot guarantee or promise that you will receive any benefits from this research, however possible benefits may include the opportunity to participate in a process where clients of MAPS have the opportunity to identify – and suggest remedies to rectify – concerns, problems and failings with the care provided to those who use drugs and alcohol.
8 What are the possible risks and disadvantages of taking part?

The major risk of participation in this project is that you are providing information to the researcher that could potentially be incriminating. This information, or your participation, will not be disclosed unless a court order or mandatory reporting obligation exists. In the event that Alfred Health is required to disclose this information, it may be used against you in legal proceedings or otherwise.

If you become upset or distressed as a result of your participation in the research, the study researcher will be able to arrange for counselling or other appropriate support. Any counselling or support will be provided by qualified staff that are not members of the research project team. This counselling will be provided free of charge.

9 What if I withdraw from this research project?

If you do consent to participate, you may withdraw at any time. If you decide to withdraw from the project, please notify a member of the research team before you withdraw. A member of the research team will inform you if there are any special requirements linked to withdrawing. If you do withdraw, you will be asked to complete and sign a ‘Withdrawal of Consent’ form; this will be provided to you by the research team.

If you decide to leave the research project, the researchers will not collect additional personal information from you, although personal information already collected will be retained to ensure that the results of the research project can be measured properly and to comply with law. You should be aware that data collected up to the time you withdraw will form part of the research project results. If you do not want your data to be included, you must tell the researchers when you withdraw from the research project.

10 What happens when the research project ends?

When the research project ends, your care by the MAPS team will continue. MAPS case managers will be provided with de-identified results, which will be available for you to read if you wish to find out about the success of the project.

Part 2 How is the research project being conducted?

11 What will happen to information about me?

By signing the consent form, you consent to the research team collecting and using personal information about you for the research project. Any information obtained in connection with this research project that can identify you will remain confidential. Information that may contain confidential information, such as your name, age, and hospital identification number, will be kept in a locked office at RMIT University, Bundoora. It will also be encrypted and password protected when kept on computers associated with this project. Likewise, audio recordings will remain encrypted and password protected, and only available to the research team and audio typist for the purpose of transcription.

Your information will only be used for the purpose for this research project and it will only be disclosed with your permission, except as required by law.

Information about you may be obtained from your health records held at this and other health organisations for the purpose of this research. By signing the consent form you agree to the research team accessing health records if they are relevant to your participation in this research project.

Your health records and any information obtained during the research project may be subject to inspection (for the purpose of verifying the procedures and the data) by authorised representatives of the institutions relevant to this Participant Information Sheet, Alfred Health and RMIT University, or as required by law. By signing the Consent Form, you authorise release of, or access to, this confidential information to the relevant research personnel and regulatory authorities as noted above.
This information will be de-identified as best as possible. This means your name, hospital record number or any other information that may identify you will be removed. Despite every best effort being made to de-identify your information, it may be possible that you may be recognised through your responses. This is a small risk of qualitative research, although it is one you should be aware of when making your decision to participate.

It is anticipated that the results of this research project will be published and/or presented in a variety of forums. In any publication and/or presentation, information will be provided in such a way that you cannot be identified, except with your express permission.

12 Who is organising and funding the research?
This research project is being conducted by Adam Searby. It is being funded by an Australian Postgraduate Award research scholarship provided by both the Australian Government and RMIT University.

13 Who has reviewed the research project?
All research in Australia involving humans is reviewed by an independent group of people called a Human Research Ethics Committee (HREC). The HREC of Alfred Health has approved the ethical aspects of this research project.

This project will be carried out according to the *National Statement on Ethical Conduct in Human Research (2007)*. This statement has been developed to protect the interests of people who agree to participate in human research studies.

14 Further information and who to contact
The person you may need to contact will depend on the nature of your query. If you want any further information concerning this project or if you have any problems that may be related to your involvement in the project, you can contact either of the following people:

<table>
<thead>
<tr>
<th>Research Contacts</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Associate Professor Phil Maude</td>
</tr>
<tr>
<td>Position</td>
<td>Principal Researcher</td>
</tr>
<tr>
<td>Telephone</td>
<td>9925 7447</td>
</tr>
</tbody>
</table>

| Name              | Adam Searby |
| Position          | Registered Nurse/PhD Candidate |
| Telephone         | 9076 6627 |
| Email             | a.searby@alfred.org.au |

If you have any complaints about any aspect of the project, the way it is being conducted or any questions about being a research participant in general, then you may contact:

<table>
<thead>
<tr>
<th>Complaints contact person</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Emily Bingle</td>
</tr>
<tr>
<td>Position</td>
<td>Research Governance Officer</td>
</tr>
<tr>
<td>Telephone</td>
<td>9076 3619</td>
</tr>
<tr>
<td>Email</td>
<td><a href="mailto:research@alfred.org.au">research@alfred.org.au</a></td>
</tr>
</tbody>
</table>

You will need to tell Ms Bingle the following Alfred Health project number: 110/14.
Consent Form - *Adult providing own consent*

**Title**
Dual diagnosis in older adults: A hidden epidemic?

**Short Title**
Dual diagnosis in older adults

**Principal Investigator**
Associate Professor Phil Maude

**Associate Investigators**
Dr Ian McGrath
Adam Searby

**Location**
Caulfield Hospital

**Declaration by Participant**

I have read the Participant Information Sheet or someone has read it to me in a language that I understand.

I understand the purposes, procedures and risks of the research described in the project.

I have had an opportunity to ask questions and I am satisfied with the answers I have received.

I freely agree to participate in this research project as described and understand that I am free to withdraw at any time during the project without affecting my future care.

I understand that I will be given a signed copy of this document to keep.

<table>
<thead>
<tr>
<th>Name of Participant (please print)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Signature</td>
<td>Date</td>
</tr>
</tbody>
</table>

☐ Please tick this box to indicate your consent to audio recording during interview.

☐ Please tick this box if you would like a summary of the research at the end of the research project.

**Declaration by Researcher†**

I have given a verbal explanation of the research project, its procedures and risks and I believe that the participant has understood that explanation.

<table>
<thead>
<tr>
<th>Name of Researcher† (please print)</th>
<th></th>
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<td>Signature</td>
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† An appropriately qualified member of the research team must provide the explanation of, and information concerning, the research project.

Note: All parties signing the consent section must date their own signature.
Participant Information Sheet/Consent Form
Non-Interventional Study – Adult providing own consent

Caulfield Hospital Mobile Aged Psychiatry Service (MAPS)

Title Dual diagnosis in older adults: A hidden epidemic?
Short Title Dual diagnosis in older adults
Principal Investigator Associate Professor Phil Maude
Associate Investigators Dr Ian McGrath
                                Adam Searby
Location Caulfield Hospital

Part 1 What does my participation involve?

1 Introduction
You are invited to take part in this research project, Dual diagnosis in older adults: A hidden epidemic? This study aims to explore the experiences of a small number of individuals who use MAPS services in depth, by describing their stories of drug and alcohol use, their experiences of using services like MAPS and examining their medical histories that are held by MAPS. This research project is aiming to improve the service experience of individuals case managed by MAPS who use alcohol and other drugs.

This Participant Information Sheet/Consent Form tells you about the research project. It explains the tests and research involved. Knowing what is involved will help you decide if you want to take part in the research.

Please read this information carefully. Ask questions about anything that you don’t understand or want to know more about. Participation in this research is voluntary. If you don’t wish to take part, you don’t have to.

If you decide you want to take part in the research project, you will be asked to sign the consent section. By signing it you are telling us that you:

• Understand what you have read
• Consent to take part in the research project
• Consent to research that is described
• Consent to the use of your personal and health information as described

You will be given a copy of this Participant Information and Consent Form to keep.

2 What is the purpose of the research?
Currently, there is very little research exploring the experiences of older adults who use alcohol and other drugs in Melbourne. The aim of this study is to use these individual experiences, along with detailed case
histories, to identify better ways to care for MAPS clients who use alcohol and other drugs. The student researcher, Adam Searby, will also use the results of this research to obtain a Doctor of Philosophy degree from RMIT University.

3 What does participation in this research involve? What do I have to do?

If you agree to participate in this project, you will be required to participate in one or more semi structured interviews exploring the themes associated with dual diagnosis in older adults. A semi structured interview involves the researcher asking a number of open-ended questions related to the topic of investigation.

Interviews will be recorded using audio recording equipment to assist with transcription at a later time. The student researcher or a qualified staff member of RMIT University will perform transcription.

4 Other relevant information about the research project

The project involves reviewing MAPS records to identify a percentage (the prevalence) of individuals case managed or assessed by the MAPS team using alcohol or drugs, individual interviews with 6-10 individuals and finally, an interview process with MAPS staff. It is anticipated that this process will both identify shortfalls in the current care of individuals case managed by MAPS who use alcohol and drugs, and guide future care to be more responsive to the needs of the individual.

5 Do I have to take part in this research project?

Participation in any research project is voluntary. If you do not wish to take part, you do not have to. If you decide to take part and later change your mind, you are free to withdraw from the project at any stage.

If you do decide to take part, you will be given this Participant Information and Consent Form to sign and you will be given a copy to keep.

6 What are the possible benefits of taking part?

The benefits associated with participation include the opportunity to participate in a process where case managers and clinicians have the opportunity to identify - and suggest remedies to rectify - concerns, problems and failings with care of the dually diagnosed client. Participants in the project will be invited to discuss suggestions to improve client management and contribute to the recommendations of the research.

7 What are the possible risks and disadvantages of taking part?

As previously mentioned, the major risk of participation is that of embarrassment and conflict of opinions and values. However, the risks are small given the informal debriefing process health professionals engage in when managing stressful incidents. It is likely that you have discussed these incidents with your peers previously.

There may be a possibility that you are upset, distressed or concerned about discussions that have taken place during the interview process. In this instance, you should contact peer support co-ordinator Anne Howell confidentially, on extension 66127 as soon as convenient. Anne will discuss your concerns with you confidentially and suggest appropriate follow-up if necessary. Alternatively, you may contact PPC International, the Employee Assistance Provider for Alfred Health, on 1300 361 008.

All responses will be treated with utmost confidentiality, and transcripts will be recorded using pseudonyms. Under no circumstances will identifiable information be available to parties other than the researcher and research supervisors. Despite all of these measures, confidentiality cannot be guaranteed. You may be identified by the responses or commentary you provide during the interview.
8 What if I withdraw from this research project?

If you do consent to participate, you may withdraw at any time. If you decide to withdraw from the project, please notify a member of the research team before you withdraw. A member of the research team will inform you if there are any special requirements linked to withdrawing. If you do withdraw, you will be asked to complete and sign a ‘Withdrawal of Consent’ form; the research team will provide this to you.

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You will need to tell Ms Bingle the following Alfred Health project number: 110/14.
Consent Form - Adult providing own consent

Title: Dual diagnosis in older adults: A hidden epidemic?
Short Title: Dual diagnosis in older adults
Principal Investigator: Associate Professor Phil Maude
Associate Investigators: Dr Ian McGrath, Adam Searby
Location: Caulfield Hospital

Declaration by Participant
I have read the Participant Information Sheet or someone has read it to me in a language that I understand.
I understand the purposes, procedures and risks of the research described in the project.
I have had an opportunity to ask questions and I am satisfied with the answers I have received.
I freely agree to participate in this research project as described and understand that I am free to withdraw at any time during the project without affecting my future care.
I understand that I will be given a signed copy of this document to keep.

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<tr>
<td>Date</td>
</tr>
</tbody>
</table>

☐ Please tick this box to indicate your consent to audio recording during interviews.

Declaration by Researcher†
I have given a verbal explanation of the research project, its procedures and risks and I believe that the participant has understood that explanation.

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<tbody>
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<tr>
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† An appropriately qualified member of the research team must provide the explanation of, and information concerning, the research project.

Note: All parties signing the consent section must date their own signature.
### FILE AUDIT TOOL

**Dual Diagnosis in Older Adults: A Hidden Epidemic?**

<table>
<thead>
<tr>
<th>Date of Admission/Assessment:</th>
<th>Code:</th>
<th>Age:</th>
<th>Sex: M</th>
<th>F</th>
<th>Diagnosis:</th>
</tr>
</thead>
</table>

Suburb:

#### Intake Assessment

"Yes" recorded in AOD section in risk assessment? *If no, continue to next section.*

- Medical conditions: [ ]
- Narrative Review: *Further details of substance use*

<table>
<thead>
<tr>
<th>Substance (if indicated)</th>
<th>ETOH</th>
<th>THC</th>
<th>BZDs</th>
<th>Opiates</th>
<th>Other:</th>
<th>Not indicated</th>
</tr>
</thead>
</table>

#### 91 Day/Clinical Review (if no intake assessment)

Narrative indicates substance use? *If no, continue to next section.*

- Medical conditions: [ ]
- Narrative Review: *Further details of substance use*

<table>
<thead>
<tr>
<th>Substance (if indicated)</th>
<th>ETOH</th>
<th>THC</th>
<th>BZDs</th>
<th>Opiates</th>
<th>Other:</th>
<th>Not indicated</th>
</tr>
</thead>
</table>

#### HoNOS Data

**HoNOS Score**  
**Item 3. Problem Drinking or Drug-Taking**

<table>
<thead>
<tr>
<th>HoNOS Score</th>
<th>Episode Score</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admission</td>
<td>91 Day 1</td>
<td>91 Day 2</td>
</tr>
</tbody>
</table>

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Dual Diagnosis in Older Adults.File Audit Tool_Version 1.0_February 2014
Appendix D: Semi-Structured Interview Questions

Client Interview Guide

(Key questions and possible prompts to explore further responses)

Questions are to be guided by case history review, and reflective listening process during the interview itself. Ultimately, the aim is for an informal conversational interview rather than attempting to complete a prescribed list of questions. These guidelines are therefore intended as an index of topics and possible questions that may be utilised to stimulate discussion during the interview itself.

- Exploration of drug career trajectory
  - Although likely apparent through medical history, explore:
    1. Age of onset of each substance
    2. Past and current substance use (see substance use matrix)
    3. Periods of abstinence
    4. Current patterns of use
    5. Mode of use (regular or binge use)

- Client’s observations/narrative on drug use
  - Intended to cover the client’s personal views and experiences of their own substance use. Where appropriate, explore:
    - Onset of substance use. *At what age did you start using drugs/alcohol?*
    - Circumstances leading to substance use. *What were the circumstances surrounding your commencement of drug/alcohol use?*
    - Personal history, i.e. Family, schooling, employment, developmental. *How would you describe your family life/school/work when you began using substances? What happened to your family life/school/work after you started using substances?*
    - Client’s observations of effect of substance use on life/lifestyle. *How has using drugs/alcohol affected your life?*

- Effects of drug use
  - Intended to further explore effects of drug use on individual.
    - Involvement in crime or arrest. *Have you ever been arrested or been involved with crime related to your drug/alcohol use?*
    - Physical health. *Has your physical health been affected due to your use of drugs or alcohol?*
    - Financial effects. *How have you financed your use of drugs/alcohol?* (Possible overlap with crime/work history).
    - Social effects. *Has your use of drugs/alcohol had effects on your friends/family? How has your use impacted on relationships?*

- Mental health
  - Intended to explore the client’s experience of mental illness and diagnosis.

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Age and experience of diagnosis. At what age were you first diagnosed/hospitalised due to mental illness? What happened leading up to this? What happened at the time?

Substance use at time of diagnosis. Were you using drugs/alcohol in the lead up to your diagnosis/hospitalisation?

- **Effects of substance use on mental health**
  - Intended to explore client’s perceptions of substance use on mental health.
  - Perceptions of use and mental health. Do you think that using substances affects your mental health? How?
  - Substance use leading to diagnosis. Do you think drug/alcohol use led to you becoming mentally unwell? How?
  - Substance use and relapse. There is a lot of research that says that using drugs/alcohol may lead to your mental state becoming worse. Do you agree with this? Why/why not?

- **Experiences of services**
  - Intended to explore client’s experiences of MAPS/other services in relation to their substance use.
  - Understanding. What are your experiences of telling your case manager/clinicians about your substance use? Did you feel supported/understood?
  - Assistance to cease use. Have you ever asked your case manager/clinicians to help you stop using drugs/alcohol? Did you feel supported/understood? Were you referred to appropriate services to assist with this process?
  - Harm reduction. Have you disclosed that you currently use drugs/alcohol to your case manager/clinician? Did you feel supported/understood? Sometimes, harm reduction strategies such as controlled use/needle exchanges/overdose awareness can make using drugs/alcohol safer. Did your case manager/clinician help you with any of these?
    - If client in supported accommodation, explore staff attitudes to continued use and support.
  - Overall satisfaction with MAPS/other services. Do you feel that mental health services are able to help you with substance use? Can you tell me your experience of being a client of MAPS with both a mental illness diagnosis and drug/alcohol use?
### Substance Use Matrix

<table>
<thead>
<tr>
<th>Substance</th>
<th>Age at first use</th>
<th>Age of regular use</th>
<th>Route of use</th>
<th>Average daily use</th>
<th>Days used in past week</th>
<th>Days used in past month</th>
<th>Days injected in past month</th>
<th>Last use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol</td>
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<tr>
<td>Cannabis</td>
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<td>Amphetamine type stimulants</td>
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<td>Inhalants</td>
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<tr>
<td>Sedatives or sleeping pills</td>
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<tr>
<td>Hallucinogens</td>
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<tr>
<td>Opioids</td>
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<tr>
<td>Other (ie cocaine, GHB)</td>
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<table>
<thead>
<tr>
<th>Semi-Structured Interview Questions</th>
<th>Staff Interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>(Key questions and possible prompts to explore further responses)</strong></td>
<td></td>
</tr>
</tbody>
</table>

### Do you feel confident in assessing and recognising clients’ substance abuse?
- Can you describe how you would assess for substance abuse?
- Are you aware of any tools available to assist with assessing for substance abuse? Can you name and describe any of these tools?
- Do you feel that MAPS, as a service, is doing enough to identify dual diagnosis clients?
- Can you describe any factors where certain cues may have led you to believe substance abuse was occurring (during an assessment or home visit)?

### How do you feel clients with dual diagnosis in MAPS are managed?
- Do you think enough is done to support clients wishing to cease their use of substances?
- Can you describe a situation where you feel a dual diagnosis client was managed well?
- How about describing a situation where a dual diagnosis client was managed poorly?

### How do you feel personally about case managing clients with dual diagnosis?
- How do you feel about your level of knowledge and skill in case managing those who abuse substances?
- Could you confidently refer clients to appropriate AOD services if they told you they wanted help to cease their substance use?
- Could you describe your idea of harm minimisation in clients who continue to use substances?
- How would you implement strategies to minimise harm related to drug use?

### How could we improve as a service?
- How could we assess dual diagnosis better?
- How could we case manage clients who abuse substances better?
- Given the potential for an increase in dually diagnosed clientele, do you think MAPS is ready to handle more clients who abuse substances?