

Estimating the community prevalence and treatment rates for mental and substance use disorders in Queensland

Report to the Queensland Mental Health Commission

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Executive Summary

Background

The Queensland Mental Health Commission (QMHC) is tasked with providing strategic leadership for a cross-sectoral approach to foster contributing lives for Queenslanders living with or vulnerable to mental or substance use disorders. The inclusion of the alcohol and drug sector within the scope of the QMHC reflects increasing efforts to realign approaches to policy and planning across the mental health and alcohol and drug sectors, and to address the high level of mental health and substance misuse comorbidity.

The critical first step in a population health approach to service system planning is to quantify the population in need of services and to profile current utilisation of services; however these can be challenging to estimate. The current project uses best available published data to provide estimates of the prevalence of mental and substance use disorders in Queensland, and the use of clinical and non-clinical support services by people with mental and substance use disorders.

Community prevalence of mental and substance use disorders in Queensland

Using best available data from Australian and international epidemiological studies, it is estimated that, in Queensland, approximately 897,000 people experienced a mental or substance use disorder in the year 2011-2012. Nearly three-quarters (74.4%) of these were adults of working age (15-64 years), 15.4% were children aged 0-14 years, and the remaining 10.2% were older adults aged 65 years or more. In 2011-2012 there were approximately 156,000 Queenslanders with severe disorders, 249,000 with moderate disorders, and 492,000 with mild disorders.

Treatment of mental and substance use disorders in Queensland

With respect to clinical treatment services, using the best available Queensland and Australian service utilisation data, it is estimated that 436,000 people, or 49% of all those with a mental or substance use disorder, received treatment in Queensland in 2011-12. Approximately 74,000 people (17%) were estimated to be treated by public specialised services. Of the remainder, a further 178,000 people (41%) were receiving Medicare subsidised treatment from psychiatrists and allied health professionals and another 134,000 people (31%) received mental health care from a GP only. Small numbers of people were treated by other health services (37,000, or 8%) or under the DVA health service structure (13,000, or 3%). With respect to non-clinical support services, these were provided to an estimated 14% of adults with a severe disorder.

Indicative data suggest that treatment coverage varied considerably according to severity of disorder (94% for people with severe disorders, 64% for people with moderate disorders, and 26% for those with mild disorder), however these estimates should be interpreted with caution given limitations to the available data.

Five year trends in treatment data show that treatment rates have been increasing over time, with most of this growth occurring in Commonwealth funded general practitioner, psychiatrist and allied health professional mental health services.

Implications

This report provides the best available estimates of the community prevalence and treatment rates for mental and substance use disorders in Queensland. Treatment rates by indicative severity and type of treatment service are provided, but should be interpreted with caution given the limited availability of Queensland-specific data and limitations to the comprehensiveness of service utilisation data available. Combined with previous attempts at similar estimates, the results suggest that treatment rates for mental and substance use disorders have increased over time. Conversely, a large number of people in Queensland who have a mental or substance use disorder are not receiving any treatment, however not all people with a mental disorder will require or perceive a need for treatment. Taking these issues into account, treatment targets from the National Mental Health Service Planning Framework suggest that 100% of people with a severe disorder, 80% of people with a moderate disorder, and 50% of those with a mild disorder have a demand for treatment for their disorder - an overall treatment target of 67%. These targets provide a benchmark to work towards in improving treatment rates for mental and substance use disorders in the Queensland population.

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Introduction

Purpose of this document

The Queensland Mental Health Commission (QMHC) is tasked with providing strategic leadership for a cross-sectoral approach to foster contributing lives for Queenslanders living with or vulnerable to mental or substance use disorders. One of the functions of the QMHC is to develop a whole-of-government strategic plan that provides for coordination of relevant agencies; promotes the best interests of consumers, their support people, and people vulnerable to mental health or substance misuse issues; drives innovation and best practice; and encourages service integration.

This report was prepared by the Mental Health Policy and Epidemiology Group, Queensland Centre for Mental Health Research (QCMHR), University of Queensland for the QMHC to inform the development of the QMHC whole of government strategic plan.

Background

The policy and service context

Mental health reform is cyclical. The problems with services that became apparent in the decades leading up to the start of Australia's National Mental Health Strategy in 1992 were the legacy of thirty years of de-institutionalisation without a corresponding establishment of adequate clinical, housing and support services for individuals with severe mental illness living in the community. Reforms initiated at the start of the National Mental Health Strategy focused on the need to improve services for those individuals who had been discharged from, or who in the past would have been admitted to, long stay hospitals. The focus of national reforms over the next twenty years alternated between a predominantly population health focus emphasising mental health promotion, prevention and early intervention, and approaches to improve access to and quality of services for individuals with established mental disorders. Within the reforms initiated for individuals with an established mental disorder, the Commonwealth government focus was on improving access to treatment for those with common mental disorders such as anxiety, depression and substance abuse. The focus of the State government was on improving treatment for those with more severe mental disorders. A balanced mental health service system for Queenslanders would need all areas to be adequately addressed. This balance would require a service system for Queensland that ensured the services funded by the Commonwealth and Queensland governments were provided in a complementary way, with minimal overlap and no major gaps in services.

In the years leading up to the start of the National Mental Health Strategy, mental health and drug and alcohol services were part of the one Queensland Division of Psychiatric Services. While mental health services at the time were predominantly focused on improving community services for people with severe mental illness, drug and alcohol services had used a "harm minimisation" approach, which included demand reduction activities such as those with a population health focus with the emphasis on health promotion and prevention,

as well treatment for dependent use; and harm reduction interventions intended to reduce the negative consequences for people who used substances, such as needle and syringe programmes.

The mental health and substance use policy areas were formally separated in the early 1990s, with the resultant development of parallel services and data collections. In the years that followed, mental health policy adopted a broader, population health focus while alcohol and drug services reemphasised the role of treatment services. The differences in the policy and service planning approaches of the two areas narrowed significantly, and with the need to address the high level of mental health and substance misuse comorbidity, there was an organisational realignment of the two areas within the corporate structure of Queensland Health. The Queensland Mental Health Commission therefore has responsibility for both mental and substance use disorders.

Quantifying the population in need of services for mental health and drug and alcohol disorders

The World Health Organization defines mental health service planning as the process of determining “the strategies, activities, time frames, indicators and targets and resources” required to implement the objectives of an agreed policy.¹ Ideally, planning should be based on a population health approach, with planning decisions based on reliable, current information about the amount and severity of relevant disorders in the community and levels of current treatment and unmet needs. Increasingly, planning efforts in Australia and elsewhere are adopting, or incorporating elements of, this approach.²⁻⁵ A critical first step in planning is to quantify the population in need of services. There are two related challenges in undertaking this work.

The first relates to generating reliable and comprehensive prevalence estimates. Although Australia has several national surveys designed to capture the prevalence of mental and substance use disorders, assembling an epidemiologically complete picture that takes into account the full range of disorders across the lifespan remains a challenge. With respect to mental disorders, for example, the National Survey of Mental Health and Wellbeing (NSMHWB) comprises three components separately designed for adults, children and adolescents, and people living with psychotic illnesses. However these are not easily brought together, due to variations in methodology (e.g., sampling, diagnostic measurement) and disorder coverage. Attempts to construct a more complete picture (e.g., the Mental Health Clinical Care and Prevention (MH-CCP) model developed in New South Wales^{6, 7}) have required data to be combined across a range of sources including from other countries.

Assembling epidemiological estimates of substance use disorders presents some unique obstacles. Routine data collections that contain substance use data are often gathered for a particular organisation or field (e.g. health, social welfare, criminal justice, or social research) and tailored specifically for that purpose. This can make generalisations to the population difficult. Surveys of the general population can be conducted, but the extent to which it is reasonable to assume that representative population samples are obtained, people honestly disclose their drug use, and that drug users are spread equally around the country varies across drug types. For less commonly used and perhaps more marginalised forms of illicit drug use that are concentrated in capital city markets, for example, national household

surveys may yield underestimates of the size of that population of users. People who use drugs may be less likely to be available or to agree to an interview if contacted; they may be reluctant to admit drug use, particularly if they fear adverse consequences from doing so; illicit drug use is often concentrated in large cities (which national surveys may not be able to reflect); and marginalised groups with high rates of drug use are often missed (e.g. homeless people and prisoners). For such more marginalised forms of drug use (e.g. injecting drug use, illicit opioid dependence), *indirect* methods of prevalence estimation may be preferred.⁸⁻¹⁰

A further complication for estimating the prevalence of substance use disorders and mental disorders is the issue of comorbidity. It can be common for a person to have both a substance use disorder and mental disorder, and data that do not take this into account can provide unstable estimates that artificially increase the actual number of individuals with any disorder.

The second challenge relates to assembling comprehensive treatment or service utilisation data. Bringing together various treatment use data from different sources incurs the same type of problems described in determining prevalence rates. A previous attempt by Whiteford and colleagues to model treatment rates for mental disorders illustrates the problem;¹¹ this study had to combine epidemiological and administrative data from a range of sources. Although there are various datasets that gather information on the use of treatment services for mental and substance use disorders, they are extremely diverse, scattered across many fields, and difficult to locate, access and utilise. For example, data can be contained in larger datasets such as the Bettering the Evaluation and Care of Health (BEACH) survey and the Australian Bureau of Statistics (ABS) National Health Survey and NSMWHB. Each dataset is developed for its own unique purpose. These datasets can vary substantially in terms of the sample population, sample size, frequency of collection and methods of data collection, making consolidation of these figures difficult, impractical or impossible.

In addition, many substance use data collections are still developing to meet the demand of an ever increasing need to root service planning and policy recommendations in evidence based practice using the most-up-to-date information. For example, the Alcohol and Other Drugs Treatment Services National Minimum Dataset (AODTS-NMDS) presents data about alcohol and other drug treatment services, their clients, drugs of concern and the types of treatment received, from all publicly funded treatment services. However, it is still difficult to fully utilise such data due to some recognised limitations. A large limitation of the AODTS-NMDS is the 'closed treatment episode' unit of measurement, which cannot provide information on the number of clients who access publicly funded alcohol and other drug treatments because the extent of concurrent, sequential or recurrent service use is unknown. To rectify this, in future years the AODTS-NMDS will include data items that will allow distinct clients to be counted, such as the implementation of a unique client identifier. Another restriction of the AODTS-NMDS is that it is limited to publicly funded, specialised services and does not include treatment data from alternative settings, such as prisons or sobering up shelters.

Defining the scope of disorders and treatment services

A further issue in profiling treatment patterns is to determine the scope of the treatment services to be considered. Recent planning efforts have focused on developing taxonomies that describe the array of services for people with mental and substance use disorders in Australia. The National Mental Health Service Planning Framework (NMHSPF) project⁵, jointly led by the New South Wales Ministry of Health and Queensland Health, has been funded by the Commonwealth Department of Health and Ageing to develop a nationally consistent approach to the planning of mental health services for people deemed to be in need of these services, informed by evidence based practice and epidemiological data. The project has developed a taxonomy that describes the full range of services required in a comprehensive mental health system. The taxonomy spans the spectrum of care provision from population based universal services such as mental health promotion and prevention, to services tailored to individual needs such as primary mental health care, specialised ambulatory mental health care, specialised bed-based mental health services and community mental health support services. The scope of mental disorders treated under the NMHSPF taxonomy includes all mild, moderate and severe mental illnesses.

However, the scope of these services is limited to the mental health sector – it does not include more general services provided in other sectors (e.g. education, justice, housing, employment), nor specialised alcohol and other drug services, which are the focus of the related Drug and Alcohol Clinical Care and Prevention (DA-CCP) model. The DA-CCP framework was developed as Australia's first population-based alcohol and drug service planning model, to be used by jurisdictions to support transparent, consistent and evidence based drug and alcohol service planning. The model includes specialist treatment types based on the severity of the disorder.¹² Limited information on the DA-CCP model is available. However, the AODTS-NMDS provides a suitable reference for some of the key types of alcohol and drug services currently provided across Australia. Service types include withdrawal management, counselling, rehabilitation, pharmacotherapy, assessment only, support and case management, information and education, and other. The scope of substance use disorders treated under the AODTS-NMDS includes alcohol, cannabis, amphetamines, nicotine, heroin, benzodiazepines, ecstasy, and cocaine.

When defining the scope of services providing 'treatment' for mental and substance use disorders for the purposes of this project, consideration was given to the purpose and scope of the QMHC Strategic Plan. As the purpose of this analysis was to estimate the number of people in Queensland receiving treatment for their mental or substance use disorder, services were considered as in scope for the primary analysis if they provided a clinical treatment service to people with either a mental disorder or substance use disorder, or both. These services include, for example, bed-based mental health services, specialised ambulatory mental health services such as state community mental health teams, drug and alcohol withdrawal management, rehabilitation, counselling and pharmacotherapy, private psychiatrists and allied health professionals, and primary care. Information was also sought about services providing non-clinical support to people with either a mental disorder or substance use disorder, such as mental health psychosocial support services, drug and alcohol non-clinical support and case management, and drug and alcohol information and education. These data were not included in the primary analysis to avoid double counting, as

it is expected that people receiving non-clinical support services are likely to also receive clinical treatment from another service.

Services considered to be out of scope for the purpose of this project included any service that does not provide clinical treatment or non-clinical support to individuals with a mental or substance use disorder, such as population-level mental health promotion and prevention services, harm reduction programs, forensic and criminal justice programs, carer support services, or general community education. It is recognised that these services provide important functions that are necessary for a whole of government and population planning approach for mental health and drug and alcohol use, and therefore need also to be considered in the development of the QMHC Strategic Plan.

Aims

The current report presents an attempt to estimate the prevalence of mental and substance use disorders in the Queensland population, the proportion who receive treatment, and the services in which they receive treatment. The project builds upon, and updates, previous attempts to derive these estimates nationally and for the Queensland population.^{2, 11} Specifically, the objectives were to:

- Estimate the prevalence of mental and substance use disorders in Queensland;
- Estimate the prevalence of treated mental and substance use disorders in Queensland; and
- Describe the estimated extent of untreated mental and substance use disorders in the Queensland population.

Method

The evidence on which the paper is based is drawn from a range of Australian sources, both local and national. Where specific evidence was not available, estimates have been derived by combining available data sets and applying a set of assumptions from the available information. A more detailed explanation of the method is provided in Appendix 1. Detailed descriptions of the data sources used in this analysis are provided in Appendix 2.

Briefly, the estimated prevalence of mental and substance use disorders in the Queensland population was calculated, considering data available from population surveys and previous planning projects in Queensland and Australia. National prevalence estimates from the New South Wales MH-CCP 2010 model⁷ were utilised, with updated estimates for the prevalence of heroin and stimulant use disorders. The total prevalence of substance use disorders was discounted for comorbidity to ensure persons with both a substance use disorder and mental disorder were not double counted. These prevalence estimates were then applied to the Queensland December 2011 estimated resident population in each age group for males and females¹³ and then summed to estimate the total community prevalence of mental and substance use disorders in Queensland in 2011-12.

The numbers of people with mental and substance use disorders being treated by each service type in Queensland were identified for in-scope clinical services largely following the methodology outlined in Whiteford and colleagues' in press paper estimating the percentage of Australians with a mental disorder receiving treatment between 2006-07 and 2009-10.¹¹ Key data sources included the Australian Institute of Health and Welfare's (AIHW) *Mental Health Services in Australia* (MHSA¹⁴) and *Alcohol and other drug treatment services in Australia 2011-12*¹⁵, and the 2007 NSMHWB.¹⁶ Where Queensland data were not available, national estimates were applied. All service use data were adjusted to 2011-12, the most recent year with data available. Estimated numbers of people treated by each service type were adjusted hierarchically to account for multiple service use and prevent double counting, and were stratified into three severity groupings (mild, moderate or severe disorder) following the methodology used in Harris et al.'s planning estimates for core mental health services in Queensland paper², with updated data where available. The number of people receiving treatment for a mental or substance use disorder in Queensland in 2011-12 was compared with the prevalence of mental and substance use disorders in Queensland in 2011-12 to identify the gap between the number of people accessing clinical treatment services and the total community prevalence of mental and substance use disorders, and compared to treatment targets set by the National Mental Health Service Planning Framework.

With the exception of pharmacotherapy for opioid dependence, person counts for those using alcohol and other drug treatment services were not available, so data on closed episodes of treatment are provided separately and were not included in the overall treatment rate. A further analysis of persons using mental health non-clinical support services was also conducted, and these data are provided separately and not adjusted for double counting with clinical treatment services. Treatment rates per 1,000 population for Queensland and Australia from 2007-08 to 2011-12 were calculated for each major service type to investigate changes over the last five years.

Results

Community prevalence of mental and substance use disorders in Queensland

The estimated community prevalence of mental and substance use disorders in Australia in 2011-2012 was 19.9%, as shown in Table 1. The prevalence was highest in the adult (25-64 years) age group, followed closely by the youth (15-24 years) population, which is partially due to much higher rates of substance use disorders in these age groups compared to children (0-14 years) and older adults (65+ years). Overall, approximately 3.5% of the population were estimated to have a severe disorder in 2011-2012, with larger proportions of the population experiencing a moderate (5.5%) or mild (10.9%) mental or substance use disorder.

Table 1. Estimated prevalence of mental and substance use disorders in Australia

	0-14 years	15-24 years	25-64 years	65+ years	Total (all ages)
Mild	8.8%	10.9%	12.3%	8.3%	10.9%
Moderate	4.4%	5.6%	6.2%	4.3%	5.5%
Severe	2.2%	3.4%	4.1%	2.9%	3.5%
Total	15.4%	19.8%	22.6%	15.5%	19.9%

Notes:

1. Estimates are drawn from the New South Wales Mental Health Clinical Care and Prevention model (MH-CCP) 2010, with revised estimates of the prevalence of heroin and stimulant use disorders from the National Drug and Alcohol Research Centre and 2007 National Survey of Mental Health and Wellbeing.

Applying the national estimates to Queensland, it was estimated that approximately 897,000 people experienced a mental or substance use disorder in 2011-2012 (Table 2 and Figure 1). Nearly three-quarters (74.4%) of these were young people and adults of working age (15-64 years), 15.4% were children aged 0-14 years, and the remaining 10.2% were older adults aged 65 years or more. In 2011-2012 there were approximately 156,000 Queenslanders with severe disorders, 249,000 with moderate disorders, and 492,000 with mild disorders.

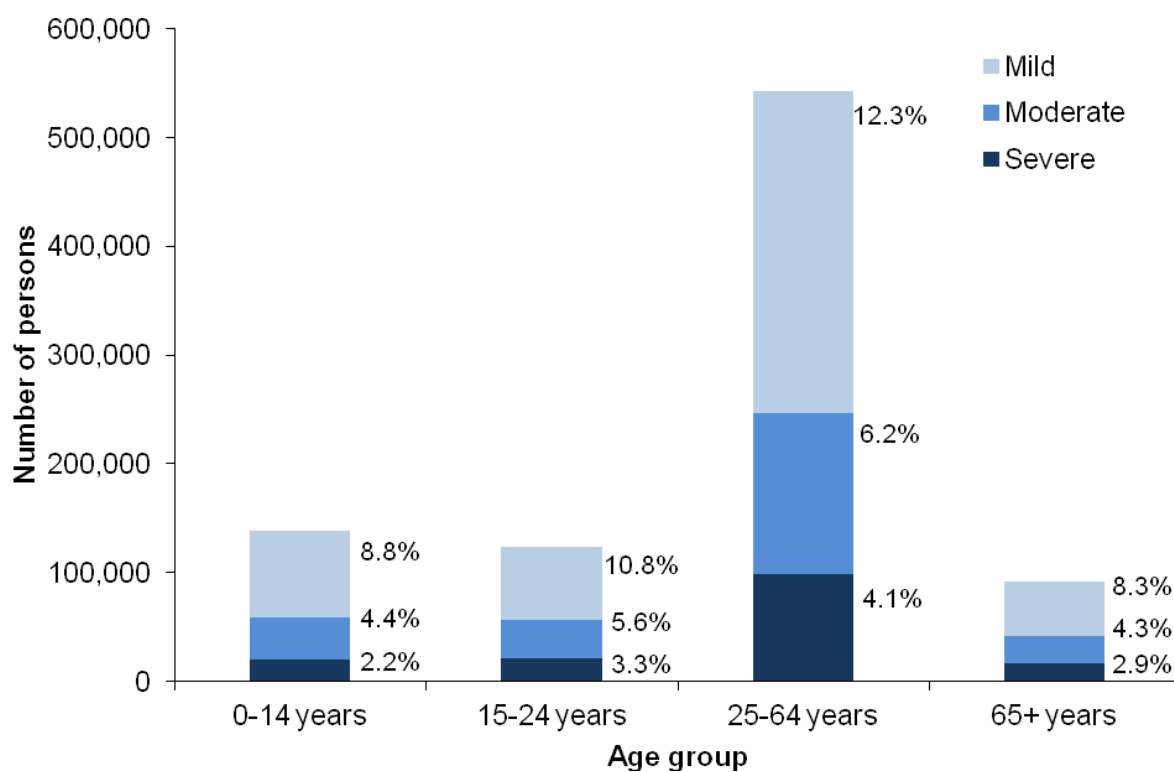
Table 2. Estimated community prevalence of mental and substance use disorders in Queensland, 2011-2012

	0-14 years	15-24 years	25-64 years	65+ years	Total (all ages)
Mild	79,126	68,098	295,921	49,068	492,213
Moderate	39,613	35,247	148,641	25,453	248,954
Severe	19,883	20,993	98,477	16,946	156,300
Total	138,623	124,338	543,038	91,467	897,467

Notes:

1. Estimates are based on national data applied to the Queensland December 2011 population.

Figure 1. Estimated number of people with mental and substance use disorders in Queensland, 2011-2012 (with percentage of all persons in each age group who have a mild, moderate or severe disorder)



Separate estimates for mental disorders, and substance use disorders, respectively for Queensland are provided in Appendix 3. Overall, approximately 734,000 people, or 16.2% of the Queensland population, were estimated to have experienced a mental disorder (with or without a comorbid substance use disorder) in the year 2011-12, and 290,000 (6.4%) were estimated to have experienced a substance use disorder (with or without a comorbid mental disorder).

Treatment rates for mental and substance use disorders in Queensland

We firstly built upon previous methods for generating an overall profile of treatment rates across a range of treatment sectors. The estimated number of people receiving treatment for their mental or substance use disorder in Queensland in 2011-12 is shown in Figure 2 and Table 3. Importantly, these data are presented hierarchically, to avoid double counting of persons using more than one service. Raw person counts for each service type, unadjusted for double counting of persons using more than one service, are provided in Appendix 4. Approximately 74,000 people, or nearly half of all those with a severe disorder, were estimated to be treated by State-funded specialised services. A further 178,000 people, or 20% of all those with a mental or substance use disorder, were not being treated in the public sector but were receiving Medicare subsidised treatment from psychiatrists and allied health professionals. Another 134,000 people received mental health care from a GP only. Small numbers of people were treated by other health services but not a GP or mental health specialist (37,000) or under the DVA health service structure (13,000).

Overall, approximately 436,000 people with a mental or substance use disorder received treatment for their disorder, representing 49% of all Queenslanders with a disorder. Treatment coverage was high for those with severe disorders, with approximately 94% receiving some form of clinical treatment. Nearly two thirds (64%) of people with moderate mental or substance use disorders were receiving treatment, with one quarter (26%) of those with mild disorders accessing clinical care.

A limitation to the approach used above is that some data on use of treatment services, while available, were not able to be incorporated into these estimates. These data are discussed below.

Figure 2. Estimated proportion of people with a mental or substance use disorder in Queensland receiving treatment, 2011-12, hierarchically by service sector

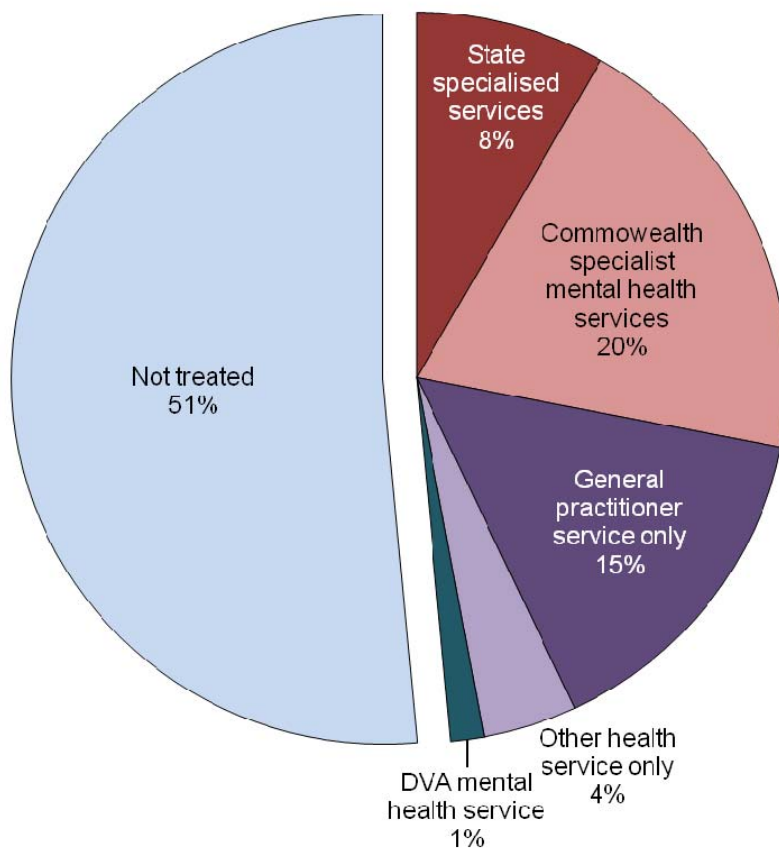


Table 3. Estimated number of people treated for a mental or substance use disorder in Queensland 2011-12, hierarchically by service sector and by severity of disorder (indicative only)

	State specialised services	Commonwealth specialist mental health services	General practitioner service only	Other health service only	DVA mental health service	Total	Treatment coverage	Target treatment coverage
Mild	0	65,050	40,496	20,181	3,663	129,389	26%	50%
Moderate	0	80,700	63,236	10,207	5,720	159,863	64%	80%
Severe	74,111	31,980	30,353	6,408	3,459	146,311	94%	100%
Total	74,111	177,730	134,085	36,796	12,842	435,564	49%	67%
% of treated	17%	41%	31%	8%	3%			

Notes:

1. Estimates are based on available Queensland and national data, with older data adjusted to the Queensland 2011-12 population.
2. The relative proportions of persons with mild, moderate and severe disorders accessing services are indicative only, as limited data were available.
3. The estimated number of people receiving State specialised services is based on public specialised community mental health service data from Mental Health Services in Australia (excluding consumers who are assessed only) and persons receiving opioid substitution therapy (data from the National Opioid Pharmacotherapy Statistics Annual Data Collection).
4. Commonwealth specialist mental health services include Medicare-subsidised psychiatrist, psychologist and other allied health professional mental health care items (data from Mental Health Services in Australia), excluding a small proportion of people who are also treated by State specialised services.
5. General practitioner service only includes Medicare-subsidised GP mental health care items (data from Mental Health Services in Australia); the estimated additional GP mental health care provided under non-mental health care items (data from the 2007 National Survey of Mental Health and Wellbeing); and persons receiving opioid substitution therapy (data from the National Opioid Pharmacotherapy Statistics Annual Data Collection). It excludes persons also receiving Medicare-subsidised specialist mental health services or State specialised services.
6. Other health service only includes data from the 2007 National Survey of Mental Health and Wellbeing on persons receiving treatment only from other health care providers, such as other specialist medical practitioners subsidised by Medicare, public hospitals and health centres that do not have dedicated mental health services, or complementary and alternative health practitioners.
7. Data on Department of Veterans' Affairs (DVA) mental health service use are from a 2000 report to the Department of Veterans' Affairs.

Use of specialised alcohol and drug treatment services

Apart from persons using pharmacotherapy for opioid dependence, data on the use of specialised alcohol and drug treatment services were only available as hospital separations and closed episodes of other treatment. Due to the lack of information about the number of people using services and the inability to discount the overlap between people using both specialised mental health services and alcohol and drug treatment services, treatment from specialised alcohol and drug treatment services was not included in the estimates provided in Table 3. Instead, available data from the AODTS-NMDS¹⁵ are shown in Table 4. In Queensland in 2011-12 there were 24,705 closed treatment episodes provided to people for their own drug or alcohol use. Of these, 18,835 were for assessment and treatment, with the remaining 5,870 providing information, education, and non-clinical support only. In addition, there were an estimated 15,429 hospital separations for alcohol, other sedative, opioid, cannabinoid, cocaine, other stimulant (including amphetamine) and multiple drug use related diagnoses in Queensland in 2011-12 (not shown in Table 4; data are derived from the National Hospital Morbidity Database). These include hospital separations with ICD-10-AM diagnostic codes in the range of F10-F19 which are also counted in the admitted mental health care NMDS, as well as other alcohol and drug-related diagnostic codes.

It is likely that a significant portion of people admitted to hospital for an alcohol or drug-related problem are also accessing specialised community or primary care services for their disorder. Further, it can be expected that some people will receive more than one treatment episode and/or hospital separation in a year, so these figures are likely to be greater than the total number of people receiving treatment from these services. However, these figures will exclude any persons who were in ongoing treatment for the whole year of data collection. Based on these data, the overall number of people using services specifically for alcohol and drug treatment is low compared to the number of people using State and Commonwealth funded mental health services, contributing only a small additional percentage, if any, to the overall treated population. However, it is acknowledged that the estimated treatment coverage of 49% may exclude a small number of people receiving treatment only from this sector.

Table 4. Number of closed alcohol and drug treatment episodes in Queensland for own drug use, 2011-12

	Withdrawal	Rehabilitation	Counselling	Pharmaco-therapy	Other treatment	Assessment only	Support and case management only	Information and education only	Total
Number of episodes	2,774	1,350	8,533	154	569	5,455	1,051	4,819	24,705

Notes:

1. Data are from the Alcohol and Other Drug Treatment Services National Minimum Dataset and do not include alcohol and other drug-related hospital separations recorded under the National Hospital Morbidity Database.

Use of mental health-related non-clinical support services

The mental health non-clinical support sector is an important component of the spectrum of services for people with a mental disorder, particularly those with more severe and complex illnesses. The estimated number of people using various types of mental health non-clinical support services is shown in Table 5. In Queensland in 2011-12, approximately 16,000 people with a psychiatric disability used a disability support service, representing approximately 13.6% of adults with a severe mental or substance use disorder. This figure does not include people using only Commonwealth funded mental health non-clinical support programs such as the Personal Helpers and Mentors Program (PHaMs), the Support for Day to Day Living in the Community program, or the newly implemented Partners in Recovery program. Reliable counts of persons using these services were only available for PHaMs, and show that in 2011-12 nearly 3,000 people in Queensland used the PHaMs program, or 2.2% of adults with a severe mental or substance use disorder. Some of these people may also have used other disability support services.

Table 5. Estimated number of people receiving mental health-related non-clinical support services in Queensland, 2011-12

Service group	Service sub-type	Persons	% of severe (15-64 years)
Disability support services (for persons with a psychiatric disability)	<i>Accommodation support</i>	1,534	1.3%
	<i>Community support</i>	2,281	1.9%
	<i>Community access</i>	2,147	1.8%
	<i>Respite</i>	575	0.5%
	<i>Employment</i>	12,723	10.6%
	<i>Residential</i>	403	0.3%
	Total	16,229	13.6%
Personal Helpers and Mentors	N/A	2,677	2.2%

Notes:

1. Disability support services data are from Mental Health Services in Australia, with Queensland 2010-11 data adjusted for the 2011-12 population, assuming no change in treatment rates. Counts are persons with a psychiatric disability using services funded under the National Disability Agreement, including general disability services and those psychiatric disability support services funded by the State. These data exclude Commonwealth funded psychiatric disability support services.
2. The total of persons using disability support services is less than the sum of individual components, as a person may use more than one type of service.
3. For Commonwealth funded support services, only reliable data on the Personal Helpers and Mentors program were available (from Mental Health Services in Australia). These data are not adjusted for possible double counting with the above disability support services data.

Five year trends in treatment data from 2007-08 to 2011-12

Planning treatment services also requires an understanding of patterns and changes in service delivery over time. Time series data for some treatment services were available in order to examine these changes in service provision in Queensland and how Queensland compares to the rest of Australia. Five year trends in treatment data from 2007-08 to 2011-12 are shown in Figure 3 and Table 6. These data indicate that the biggest increase in clinical treatment rates per 1,000 population in Queensland over this period has been in Medicare-subsidised mental health services, and that State increases roughly mirror national trends for state and territory services. Treatment rates per 1,000 population for people accessing State-funded specialised community mental health services have remained fairly stable, both in Queensland and at an aggregate national level. Due to the incomplete data available on persons accessing treatment for alcohol and other drug use, the proxy 'completed episodes of treatment' was used. Alcohol and other drug treatment episodes per 1,000 population have slightly decreased since 2007-08, but remained largely stable. The rate of use of disability support services for psychiatric disabilities has increased over the five year period in Queensland and nationally, with 2011-12 Australian data suggesting a possible levelling off of this growth. Monitoring of data in future years will be required to determine if this pattern is sustained.

Figure 3. Number of persons per 1,000 population receiving mental health-related treatment and support services, 2007-08 to 2011-12

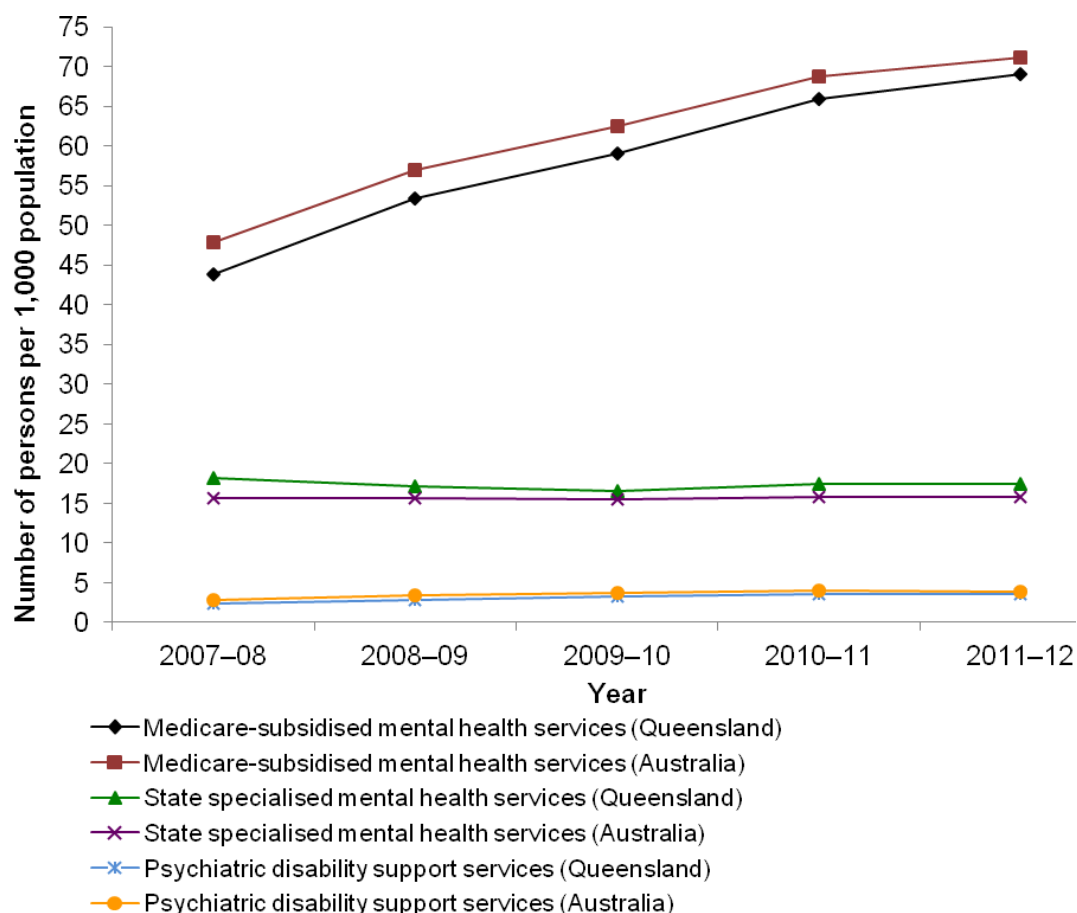


Table 6. Persons using mental health-related and alcohol and other drug-related treatment and support services, 2007-08 to 2011-12

	2007-08	2008-09	2009-10	2010-11	2011-12
	Queensland				
Medicare-subsidised mental health services	182,247	228,201	258,297	293,008	312,371
<i>Persons per 1,000 population</i>	43.8	53.4	59.1	66.0	69.1
State specialised mental health services	75,541	72,989	72,232	77,036	78,524
<i>Persons per 1,000 population</i>	18.2	17.1	16.5	17.4	17.4
Alcohol and other drug services (episodes)	26,332	24,984	22,835	25,580	24,705
<i>Episodes per 1,000 population</i>	6.3	5.8	5.2	5.8	5.5
Disability support services (psychiatric)	9,863	12,602	14,211	15,921	16,229
<i>Persons per 1,000 population</i>	2.4	2.9	3.3	3.6	3.6
	Australia				
Medicare-subsidised mental health services	1,006,985	1,224,940	1,366,185	1,522,720	1,603,263
<i>Persons per 1,000 population</i>	47.9	57.0	62.5	68.7	71.2
State specialised mental health services	327,873	336,296	339,170	350,588	356,088
<i>Persons per 1,000 population</i>	15.6	15.7	15.5	15.8	15.8
Alcohol and other drug services (episodes)	147,721	138,027	139,613	144,002	146,948
<i>Episodes per 1,000 population</i>	7.0	6.4	6.4	6.5	6.5
Disability support services (psychiatric)	58,078	72,898	80,034	87,828	87,649
<i>Persons per 1,000 population</i>	2.8	3.4	3.7	4.0	3.9

Notes:

1. Medicare-subsidised mental health services include mental health-related items delivered by general practitioners, psychiatrists, clinical psychologists, other psychologists, and other allied health professionals; data are from Mental Health Services in Australia.
2. State specialised mental health services are community mental health care services provided by states and territories; data are from Mental Health Services in Australia. Estimates for 2011-12 for Queensland and Australia are a projected estimate based on population increase and do not reflect any change in treatment rates. No data for 2011-12 were available.
3. Alcohol and other drug services data are from the Alcohol and Other Drug Treatment Services National Minimum Dataset (NMDS).
4. Disability support services (psychiatric) figures are for people with a psychiatric disability using disability support services reporting to the Disability Services NMDS. Queensland data for 2011-12 are a projected estimate based on population increase and do not reflect any change in treatment rates. No data for 2011-12 for Queensland were available.

Conclusions

Summary of results

Approximately 20% of the Queensland population, or nearly 900,000 people, are estimated to have experienced a mental or substance use disorder in the year 2011-12. The majority of this population were adults with a mild or moderate disorder, however more than 156,000 people of all ages experienced a severe disorder.

Overall, 49% of people with a mental or substance use disorder were estimated to have received some type of clinical treatment service in 2011-12. Treatment coverage rates were estimated to be high for people with a severe disorder, with 94% receiving any treatment; 47% being treated by public specialised services and a further 39% using Medicare subsidised services such as psychiatrists, allied health professionals or GPs. It was estimated that approximately 14% of adults with a severe disorder also accessed non-clinical support services. Indicative treatment rates were estimated to be lower for people with moderate and mild disorders, with 64% and 26% respectively receiving treatment. For mild and moderate disorders, the main service types providing treatment in Queensland are Medicare subsidised services from psychiatrists, allied health professionals and GPs.

Caveats and limitations

As noted in the Background section of this report, there are numerous challenges to assembling comprehensive epidemiological and treatment data for mental and substance use disorders. The estimates provided here utilised the best available data, but this involved bringing together multiple data sets from a variety of sources.

Prevalence estimates are largely based on national data applied to the Queensland population. However, the prevalence of mental disorders in Queensland is likely to follow national patterns. National estimates for the prevalence of drug use disorders were also used due to the unreliability and limited availability of state-level estimates, however illicit drug use patterns are known to vary by state and therefore the actual Queensland prevalence of drug use may differ somewhat from the national average.^{17, 18}

Queensland data on service utilisation were obtained where available. In the absence of Queensland-specific data for a number of items, such as the number of people being treated by a GP only, using GP non mental health-specific services, receiving treatment only from other health care providers or DVA mental health services, as well as the growth in GP services over time and severity of disorder for people using services, national data were applied to the Queensland context. These data were generally from nationally representative surveys such as the NSMHWB but sometimes included data from smaller surveys or research projects. In some circumstances, specifically treatment of substance use disorders, the per capita treatment rates for Queensland and Australia are not directly comparable because the underlying prevalence may vary.

Data from the year 2011-12 were obtained wherever possible. In some cases, data from previous years (e.g. 2010-11 community mental health care NMDS data) or older studies

(e.g. the DVA report¹⁹) were extrapolated to the year 2011-12. Where possible, changes in the population and service use over time were taken into account in this process, however it is acknowledged that all variables may not have remained stable over time.

Limited data were available to estimate the severity of disorder for people accessing each type of treatment service. The estimates provided here are based on the best available data at the time of this report, but may over- or under-estimate the proportion of people who have a mild, moderate or severe disorder in certain treatment settings, which may impact the relative treatment rates for each level of severity.

Finally, the exclusion of a number of services due to a lack of data, such as in-house health services provided by the Australian Defence Force, and specialised alcohol and other drug treatment services (except for opioid substitution therapy), may have led to an underestimate in the overall treatment rate for people with mental and substance use disorders in Queensland.

Implications

This report provides the best available estimates of the community prevalence of mental and substance use disorders in Queensland, the number of people receiving treatment, and the unmet need for mental health and drug and alcohol treatment services. Combined with previous attempts to provide similar estimates for Queensland in 2004-05² and more recently for Australia for 2006-07 to 2009-10¹¹, the results of this report suggest that treatment rates for mental and substance use disorders have increased over time, largely as a result of the expansion of the Medicare mental health items to include some services provided by allied mental health professionals. At 49%, the estimated 2011-12 treatment rate represents a likely increase of approximately 7.5% over the past five years, from 41.5% in 2007-08.¹¹ However, the results also highlight a large number of people in Queensland who have a mental or substance use disorder but are not currently receiving any treatment.

So how does the current treatment rate compare to optimal treatment targets that have been proposed? The NMHSPF⁵ provides estimates of the optimal treatment rate for those with mild, moderate and severe mental disorders. The framework provides targets of 100% of people with a severe mental disorder receiving treatment, 80% of people with a moderate mental disorder receiving treatment, and 50% of those with a mild disorder receiving treatment. These targets, along with those proposed by other experts,^{20, 21} suggest that an overall level of coverage between 60% and 67%, with good quality treatment, should be achievable in Australia. The setting of treatment targets should be informed by consideration of a range of factors, including the clinical characteristics of the disorders in scope, the personal preferences of consumers, the resources available to fund services, and treatment barriers (financial, attitudes, beliefs etc.).²² For example, the targets proposed by the NMHSPF take into account data from previous population surveys showing that many people, particularly those with mild or moderate mental and substance use disorders, do not perceive a need for treatment services.^{23, 24} Conversely, they take into account that services should be planned for people with expressed need (i.e., those who have used services) and people with unmet need (i.e., people who perceive a need for services but who, for various reasons, may not seek treatment). In addition, there may be some people whose disorders remit before access to services is feasible. Also, non-face-to-face therapies (such as web-

based interventions without clinical mediation) may also be appropriate for some people.²² These targets provide a benchmark to work towards in improving treatment rates for mental and substance use disorders in the Queensland population, however further information regarding the type and quality of treatment provided is also needed to inform progress against these targets.

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Appendix 1: Detailed method

Estimating community prevalence

Step 1: Search for up-to-date prevalence estimates suitable for the Queensland population

A search was conducted for the most up-to-date estimates of the prevalence of mental and substance use disorders suitable for the Queensland population, considering data available from population surveys and previous planning projects in Queensland and Australia. Prevalence estimates for the Australian population from the New South Wales MH-CCP 2010 model⁷ were identified as the most up-to-date and suitable for the purpose of this project.

MH-CCP 2010 is a state-level mental health service planning tool originally developed for use in New South Wales, and is the primary epidemiological input for the NMHSPF⁵ and DA-CCP model¹². MH-CCP 2010 derives age group, sex and diagnosis specific estimates of the past 12-month prevalence of mental and substance disorders from the Australian Burden of Disease study.²⁵ The MH-CCP 2010 prevalence estimates cover all relevant mental health diagnoses (schizophrenia, bipolar disorder, anxiety, depression, personality disorders, eating disorders, ADHD and other childhood disorders), substance use diagnoses (alcohol, heroin, benzodiazepine, cannabis and stimulant use disorders; excludes nicotine and pharmaceutical opioid dependence), and include estimates of the proportion of intellectual disability (34%), autism (27%), and behavioural and psychological symptoms of dementia (61%) requiring mental health treatment. MH-CCP groups severity of disorder into three levels (severe, moderate and mild), using definitional and epidemiological criteria developed by the US National Advisory Mental Health Council which takes into account diagnosis, disability and duration/chronicity.

The MH-CCP 2010 prevalence estimates cover the full spectrum of mental and substance use disorders, including low prevalence disorders such as schizophrenia and eating disorders which are not captured by population surveys such as the NSMHWB. However, advice from the DA-CCP expert working groups^a has indicated that the prevalence estimates for heroin and stimulant use disorders from this model are likely to be significant underestimates. Therefore for the purposes of this project these estimates were adjusted with the best available data.

The estimated prevalence of heroin harmful use and dependence for 15-54 year olds was derived from work from the National Drug and Alcohol Research Centre¹⁷, which found that there were 4.0 regular heroin users per 1000 population aged 15-54 in Australia in 2002. This rate was applied to the 2011-2012 Queensland population. The prevalence of heroin use disorders in young people under 15 years and older adults aged 55+ years was obtained from MH-CCP 2010 in the absence of better data. Severity of disorder was determined using the MH-CCP 2010 severity proportions.

^a Mr Gavin Stewart, New South Wales Ministry of Health, personal communication 16 October 2013

The estimated prevalence of stimulant harmful use and dependence was derived from analysis of the 2007 NSMHWB²⁶, which showed that the past 12-month prevalence of any stimulant use disorder was 1.6% for Australians aged 16-29 years, 0.7% for those aged 30-39 years, and 0.61% across all age groups. The first two figures were applied to their respective Queensland populations, with the prevalence for those aged 40-85 years calculated from the remaining cases to be 0.1%. MH-CCP 2010 prevalence rates were applied for persons aged under 16 or over 85 years in the absence of better data. Severity of disorder was determined using the MH-CCP 2010 severity proportions.

The prevalence estimates derived from MH-CCP 2010 are not adjusted for comorbidity between disorders, with the exception of that between anxiety and depressive disorders. However, any overestimate of the total prevalence of mental disorders resulting from summing these individual prevalence rates is likely to be small, due to both a lower rate of comorbidity between mental disorders other than anxiety and depression, and the low prevalence of many other disorders. However, it was recognised that comorbidity between substance use disorders and mental disorders is substantial and needed to be accounted for. The total prevalence of the five alcohol and drug use disorders was discounted by 43.5% to allow for comorbidity with mental disorders, based on analysis from the 2007 NSMHWB indicating that 38.6% of males and 48.5% of females with a substance use disorder have at least one co-occurring affective or anxiety disorder.²⁷

Step 2: Use identified prevalence data to estimate the Queensland prevalence of mental and substance use disorders

National prevalence data identified in Step 1 for each age group and sex were applied to the Queensland December 2011 estimated resident population in each age group for males and females¹³ and then summed to estimate the total community prevalence of mental and substance use disorders in Queensland in 2011-12.

Estimating treatment rates

Step 3: Identify sources of data on treatment for people with mental and substance use disorders in Queensland

A search was conducted to identify sources of data on treatment rates or treated numbers of people with mental and substance use disorders by service type in Queensland. For each service type, the best possible data source was sought, taking into account currency and format of data. Counts of persons using services were identified where possible. All data were identified or adjusted to reflect service use in the year 2011-12, which was the most recent year of data available. The procedure used to estimate the number of people treated by each service type largely followed the methodology of Whiteford and colleagues' in press paper which estimated the percentage of Australians with a mental disorder receiving treatment between 2006-07 and 2009-10.¹¹

- The number of people using public specialised community mental health care services in Queensland in 2010-11 was sourced from MHS¹⁴ and adjusted to the 2011-12 Queensland population. As per Whiteford et al.'s paper, this estimate was used as the

overall population of people being treated by state specialised mental health services, as nearly all people admitted to hospital for treatment of a mental disorder are already counted in community mental health treatment data. Queensland does not report data for any residential mental health services.

- The number of people using Medicare subsidised mental health-related services in Queensland in 2011-12 was also obtained from MHSAs. This includes services delivered under the *Better Access* program and other mental health items claimable by psychiatrists, allied health professionals and general practitioners (GPs). The proportion of this group receiving services from a psychiatrist or allied health professional versus only a GP was estimated using 2009-10 data from Whiteford et al.¹¹
- As per Whiteford et al.'s method, the additional number of people receiving mental health care from a GP only under non mental health-related Medicare items was estimated by combining data from MHSAs with information from the 2007 NSMHWB¹⁶ on people with a mental or substance use disorder accessing GP services and 2011-12 BEACH survey data on the growth in GP mental health-related services over time.²⁸ The estimate was adjusted to reflect the 2011-12 Queensland population of service users. The total number of people receiving GP only mental health treatment is the sum of the number of people receiving GP only mental health care under Medicare mental health-related and non mental health-related items.
- The number of people receiving services from only other health service providers was estimated based on analysis of the 2007 NSMHWB²⁹ applied to the estimated number of people with a mental disorder in Queensland in 2011-12. This includes mental health care provided by other specialist medical practitioners (such as paediatricians) subsidised by Medicare, public hospitals and health centres that do not have dedicated mental health services counted in the mental health NMDs, or complementary and alternative health practitioners.
- The number of people using Department of Veterans' Affairs (DVA) mental health services was estimated based on the proportion of the DVA population using services in 1997-98¹⁹ applied to the 2011-12 DVA treatment population.³⁰
- The number of people receiving pharmacotherapy treatment for opioid dependence in Queensland in 2011-2012 was estimated from the midpoint of the number of people receiving pharmacotherapy in 2011 and 2012, drawn from the National Opioid Pharmacotherapy Statistics Annual Data Collection.³¹ Based on the prescriber type provided in this report, 59.7% of these people were allocated to public specialised services, and the remaining 40.3% to general practitioner (private) services.

Data on the use of specialised alcohol and drug community treatment services were available from the AIHW's *Alcohol and other drug treatment services in Australia 2011-12*.¹⁵ However, no count of unique persons using services was available, with data provided as 'closed episodes of treatment'. Service types that were considered to provide clinical treatment include withdrawal, rehabilitation, counselling, pharmacotherapy, other treatment and assessment. Service types considered to provide non-clinical support include support and case management, and information and education.

Data on the number of hospital separations for alcohol and other drug related diagnoses was also provided by the AIHW for Australia in 2011-12, based on the National Hospital Morbidity Database. This figure was adjusted to include only separations related to the principal drugs of concern for this project (alcohol, heroin, benzodiazepines, cannabis and stimulants). The number of hospital separations in Queensland was estimated by applying the relative proportion of all closed drug and alcohol treatment service episodes attributable to Queensland to the national hospital separations figure.

Estimates of the number of people receiving non-clinical support services were sourced from MHSA, which provides data on the number of people with a psychiatric disability using disability services in Queensland in 2010-11 from the Disability Services NMDS, and the number of people using the Commonwealth funded Personal Helpers and Mentors (PHaMs) program in Queensland in 2011-12. The 2010-11 disability services data were adjusted to the 2011-12 Queensland population. These estimates exclude people using other mental health-specific support services funded by the Commonwealth, such as the Support for Day to Day Living in the Community program and the newly implemented Partners in Recovery program. No reliable data were available to estimate the numbers of people using these services in 2011-12.

The estimated number of people receiving mental health treatment excludes defence force personnel receiving in-house treatment provided by Defence mental health services as no data were available. People receiving mental health services from private hospitals, *headspace* centres, through the Access to Allied Psychological Services (ATAPS) program and the Mental Health Nurse Incentive Program (MHNIP) are already counted under persons receiving Medicare subsidised mental health services – for the first two directly under Medicare items and for the latter two because referral is required by a GP.

Step 4: Adjust estimated treatment rates to account for multiple service use

Estimated numbers of people treated by each service type were adjusted hierarchically to account for multiple service use and prevent double counting.

The estimated number of people using specialised mental health services was adjusted down by 10% to exclude the proportion of people seen only once for assessment but not ongoing treatment. This was based on previous work¹¹, with data suggesting a reduction in this rate over time.

Estimates from Whiteford et al.¹¹ and the results of the 2010 Survey of High Impact Psychosis (SHIP³²) suggest that between 15%-38% of people using public specialised community mental health services are also receiving Medicare subsidised mental health-related services from psychiatrists, allied health professionals or GPs. Therefore, the estimated numbers of people using Medicare subsidised specialist mental health services and GP mental health services were each adjusted down proportionally to exclude the approximately 27% of public community mental health services users already accounted for. Estimates of the numbers of people receiving treatment from a GP only, other health service provider only, or via the DVA were already calculated hierarchically in Step 3 to avoid double counting.

Queensland data from the Illicit Drug Reporting System³³ found that 41% of surveyed injecting drug users in 2011, and 30% in 2012 had attended a health professional for a mental health problem in the past six months (approximately half a psychiatrist or psychologist, and half a GP only). The number of people using opioid pharmacotherapy was discounted by the midpoint of these two estimates (35.5%) to remove the estimated number of people already counted under other service use items.

Estimates for non-clinical support services were calculated separately to clinical treatment services and do not account for multiple service use between PHaMs and other disability support services, or with clinical mental health or alcohol and other drug treatment services. It is expected that most people accessing non-clinical support services are also receiving clinical treatment services.

Step 5: Stratify treatment rates within each service type by severity of the treated disorder

The number of people receiving treatment within each type of service was stratified into three severity groupings to estimate the severity of the disorder being treated (mild, moderate, or severe disorder). The stratification into severity groups was conducted following the methodology used in Harris et al.'s planning estimates for core mental health services in Queensland paper² with updated data where available.

- It was assumed that all people receiving treatment from state community mental health services or pharmacotherapy treatment for opioid dependence have a severe disorder.
- The relative proportion of people with mild, moderate and severe mental and substance use disorders using Medicare subsidised specialist mental health services was estimated based on data from the 2007 NSMHWB, adjusted to match the severity splits provided by MH-CCP 2010.²⁹
- The relative proportion of people with mild, moderate and severe mental and substance use disorders using GP only services for mental health care was estimated based on data from the 2007 NSMHWB, adjusted to match the severity splits provided by MH-CCP 2010.²⁹
- The adjustment for double counting of public specialised and Medicare subsidised service users from Step 4 was applied to the severe populations of Medicare service users, as it was assumed to reflect the severity of public mental health service users.
- The relative proportion of people with mild, moderate and severe mental and substance use disorders receiving services from only other health service providers was estimated based on analysis of the 2007 NSMHWB²⁹ applied to the estimated number of people with a mental disorder in Queensland in 2011-12.
- The relative proportion of people with mild, moderate and severe mental and substance use disorders receiving DVA mental health services was assumed to be the same as for people using GP only mental health care.

Step 6: Calculate the estimated clinical treatment gap in Queensland

The number of people receiving treatment for a mental or substance use disorder in Queensland in 2011-12 estimated in Step 5 was compared with the prevalence of mental and substance use disorders in Queensland in 2011-12 from Step 2 to identify the gap between the number of people accessing clinical treatment services and the total community prevalence of mental and substance use disorders.

Step 7: Calculate treatment rates per 1,000 population for the past five years

Data on number of persons accessing Medicare- and State-funded mental health services and disability support services for psychiatric reasons were sourced from MHSA data tables for the years 2008-09 through to 2010-2011. Data pertaining to 2007-2008 were extracted from the AIHW report *Mental Health Services in Australia 2007-08*.³⁴ Data on episodes of treatment for alcohol and other drug use were sourced from the AIHW's *Alcohol and other drug treatment services in Australia 2011-12*.¹⁵ Data for 2011-12 were available for episodes of treatment for alcohol and other drug services and for number of persons accessing Medicare-subsidised mental health services. However, data for State specialised mental health services for 2011-12 were not yet available, and predictions were made based on the growth of the Queensland and Australian populations from 2010-11, assuming the same rate of treatment across the two years. Likewise, data for disability service use for 2011-12 were available nationally but not at the State level. For Queensland, the 2011-12 estimate was projected based on 2010-11 data and population growth, assuming the same rate of treatment across the two years.

The rate of persons using services per 1,000 population was calculated by dividing the persons accessing treatment (or episodes of alcohol and other drug treatment) by ABS data on the estimated resident Queensland and Australian populations¹³ for December (the midpoint) of the years in question.

Appendix 2: Summary of data sources

Estimating community prevalence

Data source	Description	Notes
New South Wales Mental Health Clinical Care and Prevention Model (MH-CCP 2010) ⁷	<p>The Mental Health Clinical Care and Prevention model (MH-CCP) is managed by the Mental Health and Drug & Alcohol Office (MHDAO) NSW. It is a population-based mental health planning model that provides the clinical and epidemiological evidence base to estimate the need for mental health services in NSW, including mental health promotion, illness prevention and early intervention.</p> <p>Version 1 was released in 2000 and reviewed and updated in 2001. Version 2 was released in 2009 which includes updated prevalence data from the Australian Burden of Disease (AusBoD) study and additional mental illnesses such as eating disorders, personality disorders, and comorbidities such as substance misuse.</p>	<p>The MH-CCP model includes past 12-month mental illness and substance misuse prevalence rates, and stratifies these rates by age groups, sex and level of severity (mild, moderate and severe). Mental illnesses include schizophrenia, bipolar disorder, anxiety, depression, personality disorders, eating disorders, ADHD and other childhood disorders. Substance use disorders include alcohol, heroin, benzodiazepine, cannabis and stimulant misuse. This large dataset can help build prevalence figures for a range of mental and substance use disorders.</p>
Degenhardt, L. et al., (2004) Estimating the number of current regular heroin users in NSW and Australia 1997-2002 ¹⁷	<p>This study aimed to make annual estimates of the number of current regular heroin users in Australia and NSW, between 1997 and 2002, to calculate population rates and to estimate the size of this population according to age and gender.</p>	<p>The study used national data on the number of opioid induced deaths per year compiled by the Australian Bureau of Statistics; data on ambulance attendances at suspected drug overdoses provided by the NSW ambulance service; the NSW Health Department's heroin pharmacotherapy client database provided by the Pharmaceutical Services Branch (PSB); and data on arrests for drug offences provided by the NSW Police Service.</p> <p>The measure used from this study includes the prevalence rate per 1000 population for heroin dependence or harmful use for 15-54 year olds in Australia. Queensland estimates were considered too unreliable to use for the purpose of this report.</p>

Data source	Description	Notes
Sara, G. et al. (2011) Stimulant use and stimulant use disorders in Australia: findings from the National Survey of Mental Health and Wellbeing ²⁶	The study describes the prevalence of lifetime and 12-month stimulant use disorders in the Australian population, and compares the prevalence estimates from a population survey (NSMHW 2007) with prevalence estimates derived using indirect methods.	The 2007 National Survey of Mental Health and Wellbeing (NSMHW) included questions on substance use and substance use disorders. In particular, questions relating to amphetamine-type stimulants, ecstasy and cocaine were of most interest. Lifetime stimulant use was assessed by asking whether respondents had used any of these drugs (i) at any time, and (ii) more than five times in their lifetime. The data from this study was used to derive stimulant use prevalence figures.
Teesson, et al. (2009) Comorbidity in Australia: findings of the 2007 National Survey of Mental Health and Wellbeing ²⁷	The aim of the paper was to report the prevalence and patterns of 12 month comorbidity in the 2007 National Survey of Mental Health and Wellbeing (2007 NSMHWB). In this paper the comorbidity between common mental disorders (affective, substance use and anxiety) and between physical and mental disorders was examined.	The report used the 2007 NSMHWB. It provided national data on the prevalence and patterns of mental disorders among Australian men and women, highlighting the extent of comorbidity in the general population. These data were used to estimate the proportion of individuals with a substance use disorder who also have a mental disorder.

Estimating treatment rates

Data source	Description	Notes
Whiteford et al (2013) Estimating treatment rates for mental disorders in Australia ¹¹	The aim of the study was to estimate the percentage of Australians with a mental disorder who received treatment for that disorder each year between 2006-2007 and 2009-2010.	The procedure used in this report to estimate the number of people treated by each service type largely followed the methodology of Whiteford and colleagues' paper. For example, use of epidemiological survey data in combination with administrative data on persons receiving care to estimate the number receiving treatment.
AIHW Mental Health Services Australia ¹⁴	Mental Health Services Australia (MHSA) provides a picture of the national response of the health and welfare service system to the mental health care needs of Australians. It is a repository of information relating to mental health services, national policies and resources.	MHSA provides various summary tables of mental health service use data, nationally and by states and territories. Service use data includes mental health services and mental health facilities (e.g. public/private hospitals, GPs and psychiatric disability support services) usually measured in episodes of care, patients, or hospital separations.

Data source	Description	Notes
The 2007 National Survey of Mental Health and Wellbeing: Summary of Results ¹⁶	The 2007 National Survey of Mental Health and Wellbeing (NSMHWB) is the second iteration, the first of which was conducted in 1997. It is managed by the Australian Bureau of Statistic (ABS). The purpose of the survey was to collect information about lifetime and 12-month prevalence (symptoms present in the 12 months prior to the survey) of selected mental disorders. It collected information on the level of impairment for these disorders, health services used for mental health problems, social networks and caregiving, and demographic and socio-economic characteristics.	Information on mental health service use included visits to a general practitioner or psychologist; hospital admissions; and self-management strategies, such as using the Internet or going to a self-help group. This data was used to help assemble treatment rate estimates.
Department of Veterans' Affairs. Mental Health Disorders in the Veteran Community and their Impact on DVA's Programs: An Analysis of Available Data ¹⁹	This report was one component of a project to develop a national strategy to guide the Department of Veterans' Affairs in assisting its clients with mental health disorders. The objective of this aspect of the mental health project was to build a comprehensive picture of the role of the Department in meeting the mental health needs of the veteran population.	The report established the proportion of the DVA population receiving DVA mental health services in 1997-98. This information was applied to the latest DVA population data to build treatment prevalence rates.
National Opioid Pharmacotherapy Statistics Annual Data Collection 2012 ³¹	The National Opioid Pharmacotherapy Statistics Annual Data Collection 2012 collects information from a 'snapshot' day in June 2012 on the number of Australians that received pharmacotherapy treatment for their opioid dependence. Its primary purpose is to compare and contrast opioid pharmacotherapy client trends over time (since 1998) across all states and territories. It also provides comparative statistics on pharmacotherapy prescribers, what they prescribe and where they work (e.g. private/public sector, correctional facility).	The survey provides a direct number of individuals receiving pharmacotherapy treatment for their opioid dependence across Australia and the type of treatment (i.e. buprenorphine, methadone, and buprenorphine-naloxone). Because of the heavily regulated use and administrative burden of Schedule 8 drugs of dependence this figure is likely to be a good representation of those receiving treatment, presumably for opioid dependence. Queensland data from this study were used to contribute to estimating the treatment rate for all disorders.

Data source	Description	Notes
<p>AIHW. Alcohol and other drug treatment services in Australia 2011-12¹⁵</p>	<p>Alcohol and other drug treatment services in Australia 2011-12 presents data on alcohol and other drug treatment agencies, the type of treatment they provide and the number of episodes of treatment they provide. It was produced by the Australian Institute of Health and Welfare (AIHW) and draws data largely from the Alcohol and Other Drug Treatment Services National Minimum Dataset (AODTS-NMDS), as well as information from the National Hospital Morbidity Database, the National Opioid Pharmacotherapy Statistics Annual Data (NOPSAD) and the National Prisoner Health Data Collection.</p> <p>Service types include Withdrawal Management, which includes any form of detoxification in any delivery setting; Counselling, which is directed towards identified problems with alcohol and/or other drug use or dependency (e.g. CBT, resistance training and motivational interviewing); Rehabilitation, which can include 24 hour residential care, counselling, living and social skills; and Pharmacotherapy, such as maintenance therapy and those used for relapse prevention. Non-clinical services include Support and Case management, such as support with legal issues, housing, financial management, relationships, employment and referral to specialists; Information and Education, in areas such as harm minimisation and health promotion; and Assessment only, which seeks to match the client's needs to the most appropriate service.</p>	<p>The AODTS-NMDS was used to build information about utilisation of alcohol and other drug treatment services the types of treatment received (e.g. withdrawal management, counselling, rehabilitation, pharmacotherapy, support and case management, information and education and assessment only) in Queensland.</p> <p>Data provided from the National Hospital Morbidity Database was used to estimate hospital separations for alcohol and drug problems.</p>
<p>Morgan et al (2011) People living with psychotic illness 2010. Report on the second Australian national survey³²</p>	<p>The 2010 national survey of low prevalence disorders, the "Survey of High Impact Psychosis" (SHIP), was designed to collect data capturing the impact of psychosis across different age groups, with the capacity to examine outcomes by sex and diagnostic category. It aimed to estimate the treatment rate for persons with psychosis seen in the public sector, describe the profile of people with psychotic illness and determine the services used by those with a psychotic illness.</p>	<p>The SHIP survey included questions about health service use, psychiatric hospital admissions and community services accessed in the previous year. This data was used as an input to estimate the number of people using public specialised community mental health services who also receive mental health care from a Commonwealth funded provider (e.g. GP).</p>
<p>Harris et al (2012) Planning estimates for the provision of core mental health services in Queensland 2007 to 2017²</p>	<p>The aim of this study was to derive planning estimates for the provision of public mental health services in Queensland in 2007–2017, including in-patient services, residential rehabilitation services, supported accommodation services and ambulatory services.</p>	<p>This study stratified mental disorders by severity levels (i.e. severe, moderate and mild) and using categories developed for the MH-CCP 2001 model. The same methodology was used in the current report to stratify service use by severity of disorder, updated with current data where available.</p>

Data source	Description	Notes
Burgess et al (2009) Service use for mental health problems: findings from the 2007 National Survey of Mental Health and Wellbeing ²⁹	The aim of this study was to provide an overview of 12 month rates of service use for mental health problems and mental disorders by the general Australian adult population.	An analysis of the 2007 NSMHWB provided estimates of the service use of mental health problems for the Australian population aged 16-85 years. In particular, estimates of 'other' health services were used in the current report and applied to the current Queensland population.

Appendix 3: Community prevalence in Queensland

Table A3.1 Estimated prevalence of mental disorders, Queensland 2011-2012, by age group and severity

	0-14 years		15-24 years		25-64 years		65+ years		Total (all ages)	
	N	%	N	%	N	%	N	%	N	%
Mild	79,123	8.8%	49,256	7.8%	224,761	9.4%	45,632	7.7%	398,772	8.8%
Moderate	39,612	4.4%	25,826	4.1%	113,061	4.7%	23,735	4.0%	202,234	4.5%
Severe	19,883	2.2%	16,283	2.6%	80,687	3.4%	16,087	2.7%	132,940	2.9%
All ages	138,617	15.4%	91,365	14.5%	418,509	17.4%	85,454	14.4%	733,945	16.2%

Table A3.2 Estimated prevalence of substance use disorders, Queensland 2011-2012, by age group and severity

	0-14 years		15-24 years		25-64 years		65+ years		Total (all ages)	
	N	%	N	%	N	%	N	%	N	%
Mild	6	0.0%	33,371	5.3%	126,031	5.3%	6,086	1.0%	165,493	3.7%
Moderate	3	0.0%	16,685	2.7%	63,016	2.6%	3,043	0.5%	82,747	1.8%
Severe	1	0.0%	8,343	1.3%	31,508	1.3%	1,521	0.3%	41,373	0.9%
All ages	10	0.0%	58,398	9.3%	220,554	9.2%	10,650	1.8%	289,613	6.4%

Appendix 4: Number of people receiving treatment

Table A4.1 Number of people treated by each service sector, Queensland 2011-2012 (not adjusted hierarchically)

	Public community mental health service	Commonwealth specialist mental health care	GP mental health care only (MBS mental health items)	GP other mental health care (non-mental health items)	Other health care provider	DVA mental health care	Opioid pharmacotherapy
Number of persons	78,524	190,497	121,874	20,102	36,796	12,842	5,761