Estimates of unmet demand for alcohol and other drug treatment in NSW

DPMP — Drug Policy Modelling Program

Overview

Estimates of the extent of met and unmet demand for alcohol and other drug treatment are useful for treatment planning purposes. There are three main analyses to estimating the unmet demand for AOD treatment in NSW:

1. How many people currently receive AOD treatment in NSW?

2. How many people might need AOD treatment in NSW, and of those how many may be suitable for and seek treatment?

3. How many people therefore miss out on AOD treatment in NSW?

We outline these three analyses, including the methods, below. We focus on four main drug types: alcohol, cannabis, methamphetamine, and opioids. This avoids overestimating treatment need, due to polysubstance dependence, and includes about 90-95% of treatment episodes.

As detailed below, using assumptions about 'treatment' (confined to formal professional care inclusive of all settings), and conservative estimates of the proportion of people experiencing substance use disorders who may want to and seek treatment in any one year[1], we find:

- There are approximately 60,000 people receiving AOD treatment in NSW

- There are approximately 164,000 people (main estimate) who would seek treatment were it suitable and available (range: 127,000 to 208,000)

- NSW is currently treating approximately 36% of the AOD treatment demand

- The size of the gap varies by drug class: the largest 'gap' is in relation to treatment for alcohol use disorder.

How many people receive treatment?

We first need a definition of treatment. Treatments provided by services often involve withdrawal, counselling or residential rehabilitation. Because we're interested in service provision, the definition used for this work was: Interventions specifically targeted at someone's AOD use, provided in a professional setting. This aligns with the National Treatment Framework definition of intensive treatment interventions. Brief interventions such as assessments and education or information are excluded.

We use the two main treatment datasets, held by AIHW: the Alcohol and Other Drugs Treatment Services National Minimum Dataset (AODTS-NMDS) and the National Opioid Pharmacotherapy Statistics Annual Dataset (NOPSAD). The AODTS holds all 'specialist' AOD treatment provided by services that receive government funding, and NOPSAD holds all opioid agonist treatment (OAT) prescribing and dispensing.

For the AODTS, we remove any clients that only received a brief intervention (assessment only/education only). We only included clients receiving treatment for their own drug use (about 98% of clients). We include all clients from NOPSAD.

---

[1] We distinguish between 'need' – the number meeting diagnostic criteria for dependence, and 'demand' – the proportion of those who meet diagnostic criteria who are likely to see treatment in any one year, were treatment suitable and available. For example, for alcohol use disorder, 40% of all those meeting diagnostic criteria are assumed to seek and want treatment.

The number of clients receiving treatment in these two datasets is shown in the table below. It is estimated to be about 50,000 people receive treatment from the AODTS and NOPSAD in 2022 in NSW.

Table 1. Clients receiving treatment in AODTS-NMDS and NOPSAD, NSW, 2022

Drug type	AODTS	NOPSAD	Total
Alcohol	11,285		11,285
Cannabis	4,901		4,901
Methamphetamine	6011		6,011
Opioids	2,892	24,475	27,367
Total	**25,089**		**49,564**

However, these two datasets do not include treatment provided in other settings. Many people receive treatment from their GP, in a hospital, private psychologists and psychiatrists, and Aboriginal community-controlled health organisations (ACCHOs). Unfortunately there is not good data about how many people receive treatment in these other settings. Some of these services do report into the two main datasets, but most of them do not. This creates complexity. For example with opioid agonist treatment (OAT), GPs report all prescribing to NOPSAD. So we can assume for opioids we have counted most people. For other drugs, there's likely to be many treatment episodes (and hence people) missing.

A study from 2016[2] accessed additional datasets for these non-specialist settings, and provided estimates of the number of people who received treatment across all settings. They found that the number of people receiving treatment was about 1.6 times the number of people receiving treatment in the two main datasets (AODTS and NOPSAD). This includes private and public hospitals, ACCHOs, GPs, and allied health. When we apply this multiplier to our 2022 data, we can estimate the number of people receiving treatment in all settings in NSW. This is shown in Table 2.

Table 2. Number of clients receiving treatment in all settings, NSW, 2022

Drug type	Clients in NOPSAD and AODTS	Other settings	Total
Alcohol	11,285	6,546	17,831
Cannabis	4,901	2,843	7,744
Methamphetamine	6,011	3,487	9,498
Opioids	27,367	–	27,367
Total	**49,564**	**12,875**	**62,439**

This gives us an additional 13,000 people receiving treatment, and about 60,000 people receiving treatment in NSW in 2022. We can now turn to how many people are in need of treatment.

---

[2] Chalmers, J., Ritter, A., & Berends, L. (2016). Estimating met demand for alcohol and other drug treatment in Australia. Addiction, 111(11), 2041-2049.

How many people need treatment?

The NSW population in 2022 was 7,363,373. How many people within this population need alcohol or other drug treatment? This requires a definition of 'need for treatment'. Although other healthcare areas typically look at the number of people with the condition, diagnosis or injury to determine treatment need, AOD is a bit more complex. One option is to look at consumption rates. However there is no one way to define need for treatment from consumption. Too much for one person will be fine for another, and it's dependent on gender, age, culture, and context. We could ask people, but there isn't any good survey data about this.

We have substance use disorder diagnoses, but not all of these people will want or need treatment. Many people resolve their AOD dependence without treatment. So diagnosis does not necessarily mean need for treatment. Even so, diagnostic rates are our best available option, so we proceed with these as the basecase for treatment need, but then apply adjustments to reflect that only a proportion of these people would want and seek treatment if it were available to them.

Prevalence estimates of substance use disorders are available from the Global Burden of Disease (GBD) study. The GBD estimates are based on household surveys, mainly the National Survey of Mental Health and Wellbeing for Australia, and adjusted to account for underrepresented populations not well accounted for in household surveys. GBD provide Australian data at the national level for ages 10 and above, and have recently published estimates for 2021.

We apply the prevalence rates of substance use disorders to the NSW population by 5-year age increment, and present the totals across ages here. For opioids, recently published NSW-specific data[3] are available from a peer-reviewed paper which used indirect estimation methods. We used this figure for opioid use disorder rather than the GBD rates because it is recent and specific to NSW.

The GBD (and the opioid paper) provide a main estimate (the middle figure), and a high and low figure, so we have three estimates to work with, shown in Table 3. We estimate between 210,000 and 380,000 people have a substance use disorder in NSW in 2022. For the main (middle figure) estimate, this is 170,000 people with an alcohol use disorder, 50,000 people with a cannabis use disorder, 40,000 people with a methamphetamine use disorder, and 50,000 people with an opioid use disorder (290,000 people overall).

Table 3. Number of people with a substance use disorder, NSW, 2022

Drug type	Low prevalence	Mid prevalence	High prevalence
Alcohol	124,232	169,483	224,640
Cannabis	36,516	49,467	65,601
Methamphetamine	27,666	41,798	59,503
Opioids	47,491	50,315	52,870
Total	**211,346**	**287,820**	**381,632**

Note: for opioids, we have NSW specific research available on the prevalence of opioid use disorders. We used this for the ages available (15-64)

[3] Downing, B. C., Hickman, M., Jones, N. R., Larney, S., Sweeting, M. J., Xu, Y., ... & Jones, H. E. (2023). Prevalence of opioid dependence in New South Wales, Australia, 2014–16: Indirect estimation from multiple data sources using a Bayesian approach. Addiction, 118(10), 1994-2006. https://onlinelibrary.wiley.com/doi/pdf/10.1111/add.16268#page=5.64

Because not all 210,000-380,000 people will want or need treatment (some people are not ready/see no need for treatment or will resolve their issues without treatment) we need to decide what proportion of the diagnosed population would receive treatment if it were available in a year.

We have limited data to inform these estimates. Based on the available research on 'natural recovery' or 'spontaneous remission' and recovery through self-help, plus expert reference groups for Drug and Alcohol Services Planning Model (DASPM), we apply the proportions presented in Table 4. We estimate 40% of the diagnosed alcohol and cannabis population should be treated, 75% of the methamphetamine population, and 90% of the opioid population. Opioid and methamphetamine use have lower rates of 'natural recovery', hence the assumption of higher treatment rates for these substances.

Table 4. Proportion of clients estimated to seek treatment

Drug type	Estimated % who would seek treatment
Alcohol	40%
Cannabis	40%
Methamphetamine	75%
Opioids	90%

We can apply these rates to the three diagnosed populations (low, main/mid, high) to estimate the demand for treatment. This is shown below in Table 5. We estimate between 130,000 and 210,000 people are likely to seek treatment (were treatment suitable and available) in 2022. Looking at the main figure, this is about 70,000 for alcohol, 20,000 for cannabis, 30,000 for methamphetamine, 45,000 for opioids, and 165,000 people overall.

Table 5. Estimated number of people in need of treatment*

Drug type	# estimated to seek treatment applying the Low prevalence	# estimated to seek treatment applying the Mid prevalence	# estimated to seek treatment applying the High prevalence
Alcohol	49,693	67,793	89,856
Cannabis	14,607	19,787	26,240
Methamphetamine	20,750	31,348	44,627
Opioids	42,742	45,284	47,583
Total	**127,791**	**164,212**	**208,306**

*This is commonly referred to as 'demand' for treatment

How many people miss out?

Now that we have an estimated number of people receiving treatment, and an estimated range of people in need of treatment, we are now in a position to estimate how many people are missing out on treatment in NSW.

When we compare the number of people receiving treatment against the three estimates of the number of people in need of treatment, we end up with the figures below in Table 6. Between 65,000 and 145,000 people are missing out on AOD treatment in NSW for 2022. Looking at the mid-estimate, this is about 50,000 for alcohol, 12,000 for cannabis, 20,000 for methamphetamine, 18,000 for opioids, and 100,000 overall.

Table 6. Estimated number of people missing out on treatment

Drug type	Low estimate	Mid estimate	High estimate
Alcohol	31,862	49,962	72,025
Cannabis	6,863	12,043	18,497
Methamphetamine	11,251	21,850	35,129
Opioids	15,375	17,917	20,216
Total	**65,351**	**101,773**	**145,867**

This can be expressed in proportions; that is, what proportion of the people in demand are receiving treatment for 2022? Table 7 provides the results. Between 30% and 50% of the people who would be suitable for and seek treatment, are receiving treatment (depending on the prevalence estimate used). Looking at the mid estimate, about 25% of people receive alcohol treatment, 40% for cannabis, 30% for methamphetamine, 60% for opioids, and 40% overall.

Table 7. Estimated proportion of people that do receive treatment

Drug type	Low estimate	Mid estimate	High estimate
Alcohol	36%	26%	20%
Cannabis	53%	39%	30%
Methamphetamine	46%	30%	21%
Opioids	64%	60%	58%
Total	**49%**	**38%**	**30%**

Summary tables

Need = diagnosed population

Demand = proportion of diagnosed population who would seek treatment if it were suitable/available

Treated = number of people receiving treatment in NSW in 2022

Gap = number of people who miss out on treatment who would be suitable for it (demand minus treated)

% treated = treated/demand x 100

% untreated = gap/demand x 100

Applying the low prevalence estimate	Need	Demand	Treated	Gap	% Treated	% Untreated
Alcohol	124,232	49,693	17,831	31,862	36%	64%
Cannabis	36,516	14,607	7,744	6,863	53%	47%
Methamphetamine	27,666	20,750	9,498	11,251	46%	54%
Opioids	47,491	42,742	27,367	15,375	64%	36%
Total	**235,905**	**127,791**	**62,439**	**65,351**	**49%**	**51%**

Applying the main prevalence estimate	Need	Demand	Treated	Gap	% Treated	% Untreated
Alcohol	169,483	67,793	17,831	49,962	26%	74%
Cannabis	49,467	19,787	7,744	12,043	39%	61%
Methamphetamine	41,798	31,348	9,498	21,850	30%	70%
Opioids	50,315	45,284	27,367	17,917	60%	40%
Total	**311,063**	**164,212**	**62,439**	**101,773**	**38%**	**62%**

Applying the high prevalence estimate	Need	Demand	Treated	Gap	% Treated	% Untreated
Alcohol	224,640	89,856	17,831	72,025	20%	80%
Cannabis	65,601	26,240	7,744	18,497	30%	70%
Methamphetamine	59,503	44,627	9,498	35,129	21%	79%
Opioids	52,870	47,583	27,367	20,216	58%	42%
Total	**402,613**	**208,306**	**62,439**	**145,867**	**30%**	**70%**