

# 11 Mental health-related prescriptions

## 11.1 Introduction

This chapter presents information on prescriptions for *mental health-related medications* that are subsidised by the Australian Government through the Pharmaceutical Benefits Scheme (PBS) and the Repatriation Pharmaceutical Benefits Scheme (RPBS). Under both schemes, Medicare Australia makes payments to pharmacists to subsidise pharmaceutical products that are regarded as necessary and/or life-saving and are listed in the *Schedule of Pharmaceutical Benefits* (DoHA 2006d).

### Key concepts

***Mental health-related medications*** are defined in this chapter as:

- (a) four selected medication groups as classified in the Anatomical Therapeutic Chemical (ATC) Classification System (WHO 2006)—namely antipsychotics (code N05A), anxiolytics (code N05B), hypnotics and sedatives (code N05C), and antidepressants (code N06A)—prescribed by all medical practitioners (that is, general practitioners, non-psychiatrist specialists and psychiatrists); and
- (b) all other medications prescribed by psychiatrists.

***Mental health-related prescriptions***: are defined as prescriptions for mental health-related medications subsidised under the PBS/RPBS, which were dispensed by an approved pharmacist and for which the claim was processed by Medicare Australia in the reporting period.

Note that the intent of the definition of mental health-related medications used in this chapter is to capture, as far as possible, those medications that were dispensed for mental health-related reasons. However, it is likely that some medications are included that were prescribed for non-mental health-related reasons (for example, some medications prescribed by psychiatrists may not relate directly to the patient's mental health problems), while other medications that were related to mental health problems may have been excluded (for example, some medications prescribed by general practitioners or non-psychiatrist specialists that fall outside of the four selected medication groups may have related to mental health-related problems).

It should also be noted that over-the-counter medications (including orthodox and alternative medications) and non-subsidised medications, such as private and below copayment prescriptions (where the patient copayment covers the total costs of the prescribed medication), are not included in the PBS/RPBS data. The Pharmacy Guild of Australia estimated that slightly less than 80% of all community prescriptions were dispensed under the PBS/RPBS in 2001 (AIHW 2003). However, this proportion does not necessarily apply to mental health-related prescriptions.

This chapter first presents information on *mental health-related prescriptions* for 2005–06, according to the type of medication prescribed and the prescribing medical practitioner. This is followed by data that covers the period from 2000–01 to 2005–06. For further information on the PBS/RPBS and on data on medications covered by these

schemes refer to Appendix 1. Related data on *expenditure* on medications under the PBS and RPBS are presented in Chapter 14 of this publication.

In interpreting the information provided in this chapter, note that individual prescriptions will vary in the number of doses, the strength of each individual dose and the type of preparation (such as tablets or injections).

Each of the pharmaceutical products subsidised through the PBS/RPBS is listed in the *Schedule of Pharmaceutical Benefits* (DoHA 2006d). The coding of the pharmaceutical products in this schedule is based on the Anatomical Therapeutic Chemical (ATC) Classification System, defined by the World Health Organization (WHO 2006a). This classification assigns therapeutic drugs to different groups according to the organ or system on which they act, as well as their therapeutic and chemical characteristics. In Table 11.1, the four selected medication groups that have been defined as ‘mental health-related’ when considering prescriptions by general practitioners and non-psychiatrist specialists are briefly described. Specific medications within these groups may also be used in the management of patients with illnesses that are not psychiatric in nature (for example, use of hypnotics and sedatives during post-operative care).

**Table 11.1: Drug groups defined for this report as mental health-related medications prescribed by general practitioners and non-psychiatrist specialists in PBS/RPBS data**

ATC code	Drug groups	Brief description of effects and indications
<b>N05</b>	<b>Psycholeptics</b>	<b>A group of drugs that tranquilises (CNS depressants)</b>
N05A	Antipsychotics	Drugs used to treat symptoms of psychosis (a severe mental disorder characterised by loss of contact with reality, delusions and hallucinations), common in conditions such as schizophrenia, mania and delusional disorder.
N05B	Anxiolytics	Drugs prescribed to treat symptoms of anxiety.
N05C	Hypnotics and sedatives	Hypnotic drugs are used to induce sleep and treat severe insomnia. Sedative drugs are prescribed to reduce excitability or anxiety.
<b>N06</b>	<b>Psychoanaleptics</b>	<b>A group of drugs that stimulates the mood (CNS stimulants)</b>
N06A	Antidepressants	Drugs used to treat the symptoms of clinical depression.

*Note:* Previous *Mental health services in Australia* editions specified that the antipsychotic drug prochlorperazine was excluded from the antipsychotic drugs group, as it is frequently prescribed as an anti-nausea medication. This exclusion is no longer relevant as prochlorperazine is now classified in the ‘alimentary tract and metabolism’ ATC group.

*Source:* World Health Organization 2006a.

## 11.2 Prescriptions

This section presents information on the number and type of mental health-related prescriptions that were subsidised under the PBS/RPBS during 2005–06. In interpreting this information, note that a person may have had several subsidised mental health-related prescriptions during the period covered.

Overall, 182.7 million PBS/RPBS-subsidised prescriptions for medications were provided by medical practitioners in 2005–06, of which 20.7 million (11.3%) were for mental health-related medications (Table 11.2). This is equivalent to 1,010 mental health-related prescriptions per 1,000 population (Table 11.3).

Of the 20.7 million mental health-related prescriptions, 87.2% were provided by general practitioners, 9.4% by psychiatrists and 3.4% by non-psychiatrist specialists.

General practitioners prescribed 95.0% of hypnotics and sedatives, 93.1% of anxiolytics, 88.4% of antidepressants and 73.1% of antipsychotics. Psychiatrists provided 19.6% of the prescriptions for antipsychotics in 2005–06.

Most of the 20.7 million prescriptions were for antidepressant medication (59.6%, or 12.3 million), followed by anxiolytics (15.9%), hypnotics and sedatives (13.9%) and antipsychotics (8.9%). These proportions varied according to the specialty of the prescriber. General practitioners prescribed a total of 18.0 million mental health-related medications, most of which were antidepressants (60.4%), followed by anxiolytics (17.0%) and hypnotics and sedatives (15.1%). Antidepressants accounted for 53.0% of the mental health-related medications prescribed by psychiatrists and for 56.6% of the medications prescribed by non-psychiatrist specialists.

**Table 11.2: Mental health-related prescriptions, by type of medication prescribed<sup>(a)</sup> and prescribing medical practitioner, 2005–06**

ATC group (code)	General practitioners	Non-psychiatrist specialists	Psychiatrists	Total	Total (%)
Antipsychotics (N05A)	1,343,504	135,711	359,794	1,839,009	8.9
Anxiolytics (N05B)	3,060,687	84,636	142,262	3,287,585	15.9
Hypnotics and sedatives (N05C)	2,726,700	87,301	57,594	2,871,595	13.9
Antidepressants (N06A)	10,868,984	401,442	1,029,843	12,300,269	59.6
Other ATC groups <sup>(b)</sup>	..	..	354,675	354,675	1.7
<b>Total</b>	<b>17,999,875</b>	<b>709,090</b>	<b>1,944,168</b>	<b>20,653,133</b>	<b>100.0</b>
<i>Total per cent</i>	<i>87.2</i>	<i>3.4</i>	<i>9.4</i>	<i>100.0</i>	<i>..</i>

(a) Classified according to the ATC Classification System (WHO 2006a).

(b) Includes other N codes as well as other ATC medication groups as presented in Table 11.4. Note that data for other ATC groups prescribed by general practitioners and non-psychiatrist specialist are not presented because they are not included in the definition of mental health-related medications.

Source: Pharmaceutical Benefits Scheme and Repatriation Pharmaceutical Benefits Scheme data (DoHA).

There was some variation in the number and type of mental health-related medications prescribed across states and territories in 2005–06 (Table 11.3). The rate of prescriptions per 1,000 population was below the national average (of 1,009.8) in the Northern Territory and the Australian Capital Territory (344 and 762 per 1,000 population, respectively). In contrast, Tasmania and South Australia had higher rates of prescriptions than the national average (1,372 and 1,211 prescriptions per 1,000 population, respectively).

Most jurisdictions showed the same relationships between the type of mental health-related medication and the medical practitioner who provided the prescription, as outlined above for Australia as a whole. Exceptions include the Northern Territory, which had a higher proportion of antipsychotic prescriptions provided by non-psychiatrist specialists than the national average (26.0% compared with 7.4% for Australia), and the Australian Capital Territory, which had a higher proportion of antipsychotic prescriptions provided by psychiatrists (31.4% compared with 19.6% for Australia).

## Medications prescribed by psychiatrists

This section focuses on the PBS/RPBS prescriptions provided by psychiatrists that were dispensed by a community pharmacy in the reporting period.

In 2005–06, psychiatrists provided a total of 1.9 million PBS/RPBS subsidised prescriptions, equivalent to 95.1 prescriptions per 1,000 people (Table 11.4).

**Table 11.3: Mental health-related prescriptions, by type of medication prescribed<sup>(a)</sup> and prescribing medical practitioner, states and territories<sup>(b)</sup>, 2005–06**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
<b>Antipsychotics (N05A)</b>									
General practitioners	448,005	370,920	232,474	105,892	136,008	31,581	14,365	4,259	1,343,504
Non-psychiatrist specialists	30,214	54,252	26,815	14,455	5,572	1,121	1,465	1,817	135,711
Psychiatrists	123,289	109,409	60,077	19,767	32,703	6,393	7,255	901	359,794
<i>Subtotal</i>	<i>601,508</i>	<i>534,581</i>	<i>319,366</i>	<i>140,114</i>	<i>174,283</i>	<i>39,095</i>	<i>23,085</i>	<i>6,977</i>	<i>1,839,009</i>
<b>Anxiolytics (N05B)</b>									
General practitioners	864,348	862,124	625,186	244,913	292,414	139,113	25,723	6,866	3,060,687
Non-psychiatrist specialists	19,706	25,609	20,057	8,770	7,944	1,750	570	230	84,636
Psychiatrists	35,525	49,986	29,787	6,882	13,475	5,298	1,025	284	142,262
<i>Subtotal</i>	<i>919,579</i>	<i>937,719</i>	<i>675,030</i>	<i>260,565</i>	<i>313,833</i>	<i>146,161</i>	<i>27,318</i>	<i>7,380</i>	<i>3,287,585</i>
<b>Hypnotics and sedatives (N05C)</b>									
General practitioners	857,602	707,908	506,519	268,220	260,106	98,490	21,421	6,434	2,726,700
Non-psychiatrist specialists	23,518	26,637	18,454	10,026	6,222	1,418	712	314	87,301
Psychiatrists	14,625	17,616	12,392	4,018	6,557	1,599	682	105	57,594
<i>Subtotal</i>	<i>895,745</i>	<i>752,161</i>	<i>537,365</i>	<i>282,264</i>	<i>272,885</i>	<i>101,507</i>	<i>22,815</i>	<i>6,853</i>	<i>2,871,595</i>
<b>Antidepressants (N06A)</b>									
General practitioners	3,279,807	2,683,782	2,299,274	1,101,040	963,679	344,859	152,975	43,568	10,868,984
Non-psychiatrist specialists	105,522	112,234	93,300	49,107	26,103	7,966	4,597	2,613	401,442
Psychiatrists	305,734	299,159	214,036	82,591	92,208	21,582	12,627	1,906	1,029,843
<i>Subtotal</i>	<i>3,691,063</i>	<i>3,095,175</i>	<i>2,606,610</i>	<i>1,232,738</i>	<i>1,081,990</i>	<i>374,407</i>	<i>170,199</i>	<i>48,087</i>	<i>12,300,269</i>
<b>Other medications prescribed by psychiatrists<sup>(c)</sup></b>									
Psychiatrists	101,744	91,005	67,343	51,268	29,469	7,393	5,470	983	354,675
<b>Total</b>	<b>6,209,639</b>	<b>5,410,641</b>	<b>4,205,714</b>	<b>1,966,949</b>	<b>1,872,460</b>	<b>668,563</b>	<b>248,887</b>	<b>70,280</b>	<b>20,653,133</b>
Rate (per 1,000 population) <sup>(d)</sup>	912.8	1,070.9	1,051.2	969.6	1,210.9	1,372.3	761.9	343.7	1,009.8

(a) Classified according to the ATC Classification System (WHO 2006a).

(b) State/territory is based on the patient's residential address. If the patient's address is unknown, the state or territory of the pharmacy supplying the item is used.

(c) Includes other N codes as well as other ATC medication groups as presented in Table 11.4. Note that data for other ATC groups prescribed by general practitioners and non-psychiatrist specialist are not presented because they are not included in the definition of mental health-related medications.

(d) Crude rate based on the preliminary Australian estimated resident population at 31 December 2005.

Source: Pharmaceutical Benefits Scheme and Repatriation Pharmaceutical Benefits Scheme data (DoHA).

**Table 11.4: Mental health-related prescriptions by psychiatrists, by broad type of medication prescribed<sup>(a)</sup>, states and territories<sup>(b)</sup>, 2005–06**

Code	ATC group	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
N	Central Nervous System									
N05A	Antipsychotics	123,289	109,409	60,077	19,767	32,703	6,393	7,255	901	359,794
N05B	Anxiolytics	35,525	49,986	29,787	6,882	13,475	5,298	1,025	284	142,262
N05C	Hypnotics and sedatives	14,625	17,616	12,392	4,018	6,557	1,599	682	105	57,594
N06A	Antidepressants	305,734	299,159	214,036	82,591	92,208	21,582	12,627	1,906	1,029,843
	<i>Subtotal</i>	<i>479,173</i>	<i>476,170</i>	<i>316,292</i>	<i>113,258</i>	<i>144,943</i>	<i>34,872</i>	<i>21,589</i>	<i>3,796</i>	<i>1,589,493</i>
	Other N	59,944	53,571	36,091	40,976	17,377	4,734	3,583	449	216,725
	<i>Subtotal / N</i>	<i>539,117</i>	<i>529,741</i>	<i>352,383</i>	<i>154,234</i>	<i>162,320</i>	<i>39,606</i>	<i>25,172</i>	<i>3,645</i>	<i>1,806,218</i>
A	Alimentary tract and metabolism	10,851	10,076	8,929	2,491	3,084	803	405	54	36,693
B	Blood and blood-forming organs	870	968	943	413	452	56	50	2	3,754
C	Cardiovascular system	15,220	11,926	9,573	3,276	4,553	933	647	324	46,452
D	Dermatologicals	689	650	516	300	171	30	25	2	2,383
G	Genito-urinary system and sex hormones	2,651	1,953	2,847	945	792	134	146	2	9,470
H	Systemic hormonal preparations, excl. sex hormones and insulins	1,155	1,322	1,064	437	476	98	55	4	4,611
J	Antifectives for systemic use	2,660	2,733	1,939	607	624	117	149	16	8,845
L	Antineoplastic and immunomodulating agents	272	154	126	48	42	10	25	3	680
M	Musculo-skeletal system	2,877	3,521	2,268	807	822	268	160	72	10,795
P	Antiparasitic products, insecticides and repellents	47	35	19	17	12	13	3	0	146
R	Respiratory system	3,128	2,941	2,090	679	787	153	173	42	9,993
S	Sensory organs	1,183	971	756	238	230	43	44	13	3,478
V	Various <sup>(c)</sup>	140	158	155	22	40	1	5	0	521
Z	Other <sup>(d)</sup>	57	26	27	12	7	0	0	0	129
	<i>Subtotal</i>	<i>41,800</i>	<i>37,434</i>	<i>31,252</i>	<i>10,292</i>	<i>12,092</i>	<i>2,659</i>	<i>1,887</i>	<i>534</i>	<i>137,950</i>
<b>Total</b>		<b>580,917</b>	<b>567,175</b>	<b>383,635</b>	<b>164,526</b>	<b>174,412</b>	<b>42,265</b>	<b>27,059</b>	<b>4,179</b>	<b>1,944,168</b>
	Rate (per 1,000 population) <sup>(e)</sup>	85.4	112.3	95.9	81.1	112.8	86.8	82.8	20.4	95.1

(a) Classified according to the ATC Classification System (WHO 2006a).

(b) State/territory is based on the patient's residential address. If the patient's address is unknown, the state or territory of the pharmacy supplying the item is used.

(c) Include allergens, diagnostic agents, urine test reagents and food supplements (lactose, amino acid preparations).

(d) Refers to extemporaneously prepared items and/or PBS items with no ATC equivalent.

(e) Crude rate based on the preliminary Australian and Repatriation Pharmaceutical Benefits Scheme data (DoHA).

Source: Pharmaceutical Benefits Scheme and Repatriation Pharmaceutical Benefits Scheme data (DoHA).

Of these, 1.6 million (81.8%) were for the four selected mental health-related medication groups (namely antipsychotics, anxiolytics, hypnotics and sedatives, and antidepressants). Similar to the pattern described for all medical practitioners, the rate of prescriptions provided by psychiatrists under PBS/RPBS was well below the national average in the Northern Territory (20.4 prescriptions per 1,000 people). South Australia and Victoria accounted for the highest number of prescriptions per 1,000 people (112.8 and 112.3 respectively).

In Western Australia and the Northern Territory, the percentage of prescriptions provided by psychiatrists for the four selected mental health-related medication groups was lower than average (68.8% and 76.5%, respectively). While prescriptions for antidepressants accounted for 53.0% of all medications prescribed by psychiatrists, this ranged from 45.6% in the Northern Territory to 55.8% in Queensland. Prescriptions for antipsychotics ranged from 12.0% of medications prescribed by psychiatrists in Western Australia to 26.8% in the Australian Capital Territory; this compares with an overall average of 18.5%. Anxiolytics and hypnotics and sedatives accounted for smaller percentages of medications prescribed by psychiatrists overall (7.3% and 3.0% respectively).

## **11.3 Changes in mental health-related prescriptions**

This section provides data from 2000–01 to 2005–06 on the number of prescriptions issued by medical practitioners for mental health-related medications. Note that the data provided for the years before 2005–06 may not match those published in previous publications due to data revisions.

Overall, mental health-related prescriptions increased from 18.5 million in 2000–01 to 20.6 million in 2005–06, at an annual average rate of 2.2% (Figures 11.1 and 11.2). The number of antipsychotics and antidepressants prescribed both increased (on average by 6.8% and 4.6% per year, respectively) while prescriptions for hypnotics and sedatives as well as anxiolytics decreased on average by 4.7% and 0.9% per year, respectively. Other medications prescribed by psychiatrists increased (2.4% on average per year).

The number of prescriptions provided by general practitioners and non-psychiatrists for antipsychotics and antidepressants increased between 2000–01 and 2005–06 by 7.1% and 5.0% per year on average, respectively, while it decreased for hypnotics and sedatives, and anxiolytics at an average rate of 4.7% and 0.9% per year, respectively (Figure 11.1).

There was an annual average increase of 5.8% in the number of prescriptions provided by psychiatrists (Figure 11.2) for antipsychotics and a smaller average increase in the number of prescriptions for antidepressants (0.8% annual average increase). In contrast, the number of prescriptions for hypnotics and sedatives by psychiatrists decreased by 6.2% on average per year between 2000–01 and 2005–06.

