# GOING TO YOUR HEAD

PHARMAC's analysis of data on psychiatric medicines prescribed in New Zealand

2017 Edition

#### A TASTER OF PHARMAC'S DATA

This booklet provides brief examples of different types of PHARMAC's data and analyses, with a particular focus on medicines for mental health.

Data on medicine use is collected by the Ministry of Health, every time a community pharmacist files a claim for pharmaceutical reimbursement. The data can tell us where and when the medicine was dispensed, whether repeat dispensings were picked up (if applicable), the type, presentation and dosage of medicine, and information about the patient such as their gender, ethnicity and age.

While data collected through community pharmacy dispensing is rich and reliable, hospital data – with the exception of pharmaceutical cancer treatments – is less reliable and not patient-specific.

#### What PHARMAC does not have access to:

- Prescribing data where no pharmaceutical has been dispensed
- Prescribing or dispensing data for unsubsidised pharmaceuticals
- Data on what a particular pharmaceutical is being used for (with the exception of pharmaceuticals for which funding is restricted by indication, e.g. via Special Authority)

If you are interested in finding out more about the analysis in this booklet you can contact one of PHARMAC's analysts at analysis@pharmac.govt.nz.

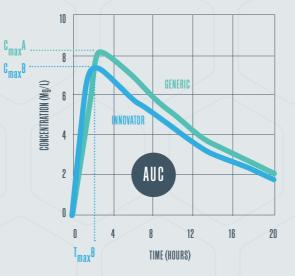
For queries about the data, contact the Ministry of Health at data-enquires@moh.govt.nz

#### **GENERIC MEDICINES - A DOSE OF REALITY?**

Generic medicines are common in New Zealand, and medicines to treat mental health conditions are no exception.

A generic medicine becomes available once the patent expires on an original brand, enabling other manufacturers to enter the market and create competition. Most of the common antidepressants and antipsychotics have been generics for many years now (see timeline), and this is continuing with the recent brand change for venlafaxine.

As part of the regulatory evaluation and approval process, generic medicines are required to demonstrate bioequivalence (usually to the original brand). Medsafe uses international standards to determine bioequivalence, so prescribers and patients can have confidence that a generic medicine has the same clinical efficacy as other brands.



Demonstrating bioequivalence – a typical dose-response curve showing the rate at which an innovator drugs and its generic equivalent are released into the body.

Despite this assurance of clinical efficacy, it's common for patients to perceive and report differences in efficacy, or increased side-effects.

This phenomenon is being looked at by University of Auckland's psychology department, under Prof Keith Petrie. His research has focused on instances where people perceive a decrease in efficacy when a medicine brand changes, the so-called 'nocebo' effect.

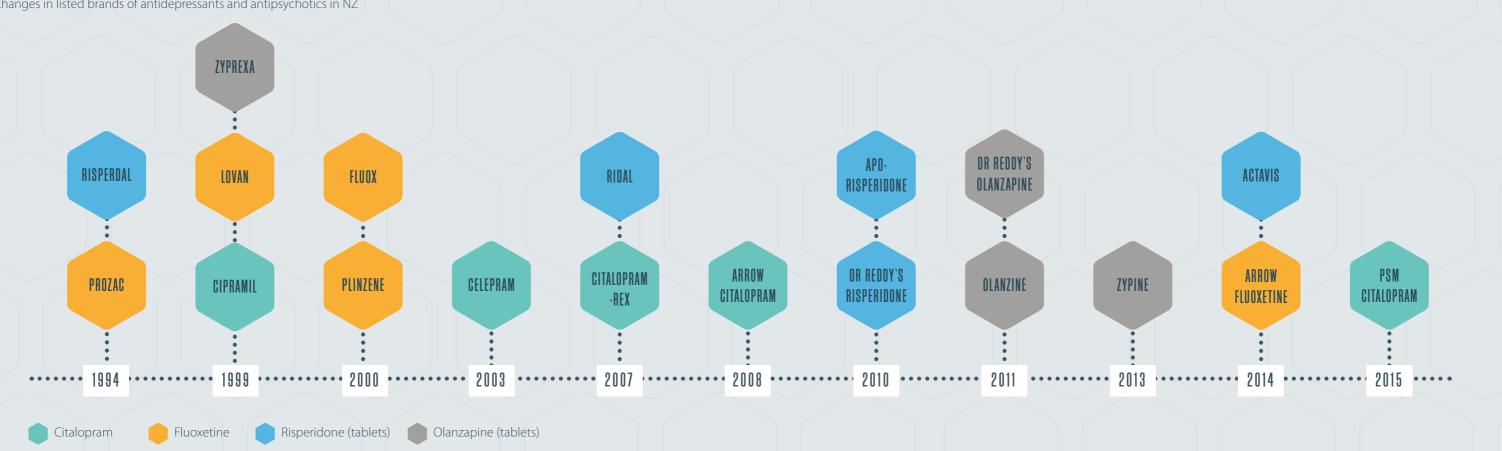
He says low patient expectations about generics are largely explained by perception and unconscious brand bias.

"We equate branding with cost and quality," Prof Petrie says.

"When you strip that away, we think the quality is less."

#### TIMELINE

Changes in listed brands of antidepressants and antipsychotics in NZ



Prof Petrie says people who are uncertain about a new medicine are strongly influenced by the messages they receive from others, including from health professionals.

It's important for health care professionals to help patients positively reframe their expectations and inject a dose of reality into those who doubt the efficacy of generic medicines, Prof Petrie says.

"Prescribers can play a critical role as key influencers of patient perceptions. Telling a patient that the generics have the same active ingredients and although the tablet might look different they can be reassured they're getting the same chemical compound as before," he says.

#### ANTIDEPRESSANTS - PRESCRIPTIONS AND COSTS



The table below shows the number of subsidised prescriptions and the gross subsidised expenditure for all funded antidepressants, by formulation. Gross figures are used because PHARMAC negotiates confidential rebates on some medicines, which ultimately lower the price paid by the taxpayer.

The table shows figures for the most recent available year (2016), compared with 2015 and 2011.

\* Denotes this product is subject to confidential rebates.

	SCRIPTS					GROSS COST		
PHARMACEUTICAL	2016	1-YEAR- CHANGE	5-YEAR- CHANGE	2016	1-YEAR- CHANGE	5-YEAR- CHANGE		
Amitriptyline	265,297	2%	11%	\$537,457	3%	-54%		
Tab 10 mg	180,545	3%	16%	\$330,454	4%	-63%		
Tab 25 mg	63,257	-2%	-3%	\$133,543	0%	-25%		
Tab 50 mg	21,495	1%	11%	\$73,459	3%	-22%		
Citalopram hydrobromide	362,885	0%	-5%	\$706,466	-22%	-45%		
Tab 20 mg	362,885	0%	-5%	\$706,466	-22%	-45%		
Clomipramine hydrochloride	8,479	-2%	-8%	\$188,906	0%	-4%		
Tab 10 mg	1,840	-3%	-8%	\$33,533	1%	-6%		
Tab 25 mg	6,639	-2%	-8%	\$155,373	0%	-4%		
Doxepin hydrochloride	25,688	-5%	-24%	\$258,537	-5%	-4%		
Cap 25 mg	10,135	-6%	-28%	\$110,813	-7%	-7%		
Cap 50 mg	4,554	-4%	-24%	\$63,430	-3%	-6%		
Cap 10 mg	10,999	-3%	-20%	\$84,294	-4%	0%		
Escitalopram	135,018	22%	616%	\$619,921	-9%	390%		
Tab 10 mg	99,034	24%	664%	\$372,924	-8%	438%		
Tab 20 mg	35,984	19%	509%	\$246,997	-9%	332%		
Fluoxetine hydrochloride	254,575	2%	0%	\$576,878	8%	- <b>29</b> %		
Cap 20 mg	221,069	2%	-2%	\$473,519	8%	-35%		
Tab dispersible 20 mg, scored	33,506	5%	14%	\$103,358	8%	30%		
Imipramine hydrochloride	5,530	-4%	-41%	\$204,170	-14%	-30%		
Tab 10 mg	4,089	-26%	28%	\$143,871	-37%	229%		
Tab 25 mg	1,441	505%	-77%	\$60,299	729%	-76%		
Maprotiline hydrochloride	338	-5%	-38%	\$17,584	-8%	-36%		
Tab 25 mg	315	-10%	-24%	\$15,913	-15%	-11%		
Tab 75 mg	23	229%	-82%	\$1,671	287%	-83%		
Mianserin hydrochloride	44	<b>-93</b> %	- <b>97</b> %	\$4,218	<b>-92</b> %	- <b>96</b> %		
Tab 30 mg	44	-93%	-97%	\$4,218	-92%	-96%		
Mirtazapine	50,869	30%	152%	\$258,305	<b>-59</b> %	-71%		
Tab 30 mg	38,479	34%	136%	\$171,015	-55%	-72%		
Tab 45 mg	12,390	20%	218%	\$87,290	-64%	-67%		

Moclobemide	7,152
Tab 150 mg	5,318
Tab 300 mg	1,834
Nortriptyline hydrochloride	157,277
Tab 10 mg	99,766
Tab 25 mg	57,511
Phenelzine sulphate	459
Tab 15 mg	459
Sertraline	102,020
Tab 50 mg	72,973
Tab 100 mg	29,047
Tranylcypromine sulphate	891
Tab 10 mg	891
Venlafaxine *	199,611
Cap 37.5 mg *	19,075
Cap 75 mg *	54,521
Cap 150 mg *	43,407
Tab 37.5 mg *	17,322
Tab 75 mg *	34,109
Tab 150 mg *	23,545
Tab 225 mg *	7,632
Dosulepin [Dothiepin] hydrochloride	27,548
Cap 25 mg	18,662
Tab 75 mg	8,886
Paroxetine	117,755
Tab 20 mg	117,755
Grand Total	1,721,436

-17%	-2%	\$242,835	- <b>29</b> %	-6%			
-4%	0%	\$165,638	-26%	-5%			
-35%	-4%	\$77,197	-37%	-9%			
<b>-26</b> %	-6%	\$788,237	30%	5%			
-4%	-2%	\$389,496	48%	7%			
-40%	-9%	\$398,741	8%	1%			
4%	-8%	\$112,993	<b>-9</b> %	-11%			
4%	-8%	\$112,993	-9%	-11%			
574%	20%	\$370,800	<b>742</b> %	31%			
425%	9%	\$214,902	614%	27%			
1008%	39%	\$155,898	1430%	41%			
-5%	1%	\$99,149	-6%	-1%			
-5%	1%	\$99,149	-6%	-1%			
-57%	-4%	\$7,458,511	75%	10%			
-47%	-13%	\$351,097	40%	5%			
-73%	-7%	\$2,829,219	-13%	-4%			
-60%	-17%	\$2,363,990	20%	0%			
2539%	39%	\$239,283	7088%	34%			
334%	25%	\$771,349	2838%	23%			
648%	36%	\$645,932	3857%	33%			
	54%	\$257,641		51%			
-8%	-1%	\$295,617	- <b>26</b> %	-5%			
-9%	-3%	\$185,080	-28%	-6%			
-7%	1%	\$110,537	-24%	-3%			
-46%	-2%	\$561,170	-18%	-3%			
-46%	-2%	\$561,170	-18%	-3%			
- <b>48</b> %	-7%	\$13,301,752	22%	5%			

## ANTIDEPRESSANTS - USE BY ETHNICITY

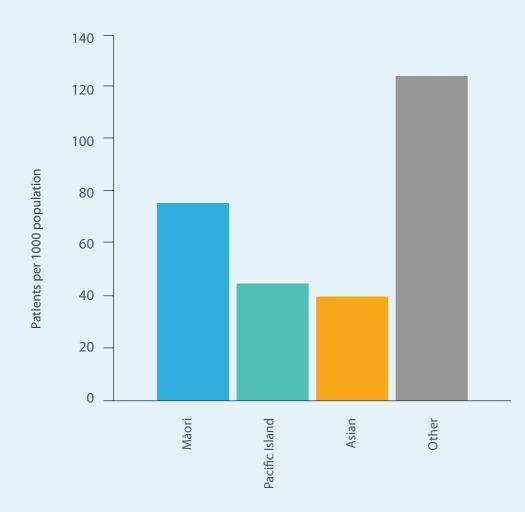
The graph below shows an age-standardised summary of ethnicities for patients who were dispensed a subsidised antidepressant in 2016.

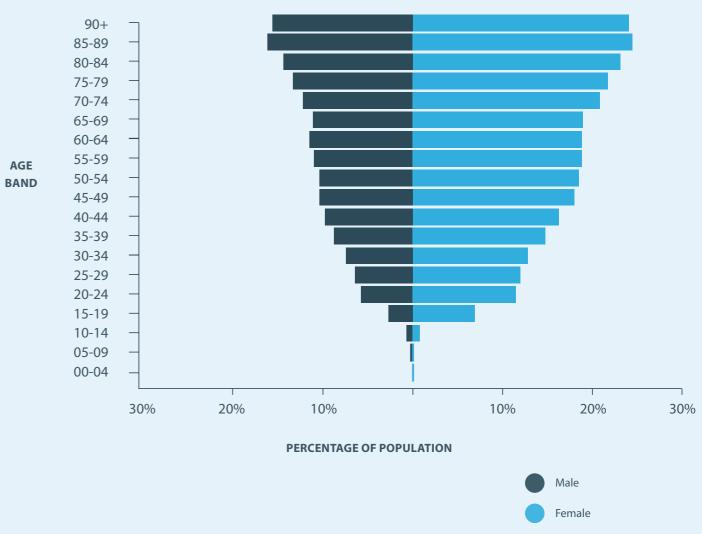
This graph broadly shows that a lower proportion of Asian, Māori and Pacific peoples were dispensed an antidepressant than other New Zealand people, but a higher proportion of Māori were dispensed an antidepressant than Asian or Pacific peoples.

## ANTIDEPRESSANTS - USE BY AGE AND GENDER

The graph below shows the percentage of people in different age bands who were dispensed a subsidised antidepressant in 2016, by gender.

This graph broadly shows that the proportion of patients dispensed an antidepressant increased with age, and that a greater proportion of women were dispensed an antidepressant than men.







## ADHD TREATMENTS - PRESCRIPTIONS AND COSTS



The table below shows the number of subsidised prescriptions and the gross subsidised expenditure for all funded attention deficit hyperactivity disorder treatments, by formulation. Gross figures are used because PHARMAC negotiates confidential rebates on some medicines, which ultimately lower the price paid by the taxpayer.

The table shows figures for the most recent available year (2016), compared with 2015 and 2011.

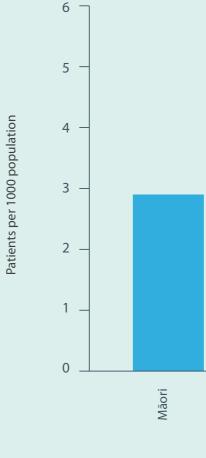
\* Denotes this product is subject to confidential rebates.

			SCRIPTS		GROSS COST		
PHARMACEUTICAL	2016	1-YEAR- CHANGE	5-YEAR- CHANGE	2016	1-YEAR- CHANGE	5-YEAR CHANGE	
Atomoxetine *	3,611	6%	63%	\$1,038,436	11%	85%	
Cap 10 mg *	652	0%	43%	\$199,686	2%	62%	
Cap 18 mg *	317	-4%	32%	\$81,182	1%	45%	
Cap 25 mg *	972	15%	70%	\$327,585	25%	129%	
Cap 40 mg *	900	6%	69%	\$231,037	11%	76%	
Cap 60 mg *	399	2%	41%	\$91,658	12%	39%	
Cap 80 mg *	236	12%	171%	\$68,965	10%	157%	
Cap 100 mg *	135	-7%	221%	\$38,324	-11%	159%	
Methylphenidate hydrochloride *	104,802	8%	33%	\$1,558,363	8%	34%	
Tab immediate-release 5 mg *	12,208	7%	104%	\$73,358	8%	123%	
Tab immediate-release 10 mg *	42,551	10%	<b>39</b> %	\$270,374	11%	41%	
Tab sustained-release 20 mg *	48,260	6%	18%	\$1,184,236	7%	29%	
Tab immediate-release 20 mg *	1,783	16%	101%	\$30,395	21%	96%	
Methylphenidate hydrochloride *	80,853	13%	<b>97</b> %	\$4,923,979	12%	<b>79</b> %	
Cap modified-release 10 mg *	4,664	17%	179%	\$93,390	13%	133%	
Cap modified-release 20 mg *	9,654	15%	165%	\$250,720	12%	115%	
Cap modified-release 30 mg *	8,576	20%	132%	\$249,533	16%	91%	
Cap modified-release 40 mg *	8,148	13%	118%	\$268,902	9%	74%	
Tab extended-release 18 mg *	8,013	15%	88%	\$565,342	15%	95%	
Tab extended-release 27 mg *	8,105	16%	122%	\$560,083	17%	125%	
Tab extended-release 36 mg *	17,112	11%	74%	\$1,466,412	12%	78%	
Tab extended-release 54 mg *	16,581	9%	57%	\$1,469,597	9%	56%	
Dexamfetamine sulfate	7,535	13%	58%	\$170,651	18%	68%	
Tab 5 mg	7,535	13%	58%	\$170,651	18%	68%	
Modafinil	451	23%	478%	\$217,446	22%	762%	
Tab 100 mg	451	23%	478%	\$217,446	22%	762%	
Grand Total	197,252	10%	<b>56%</b>	\$7,908,875	11%	72%	

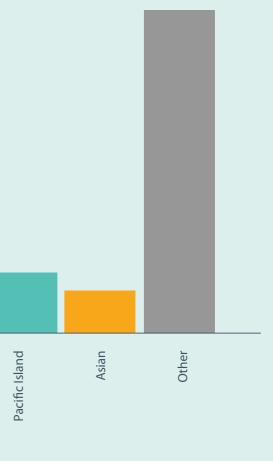
#### ADHD TREATMENTS - USE BY ETHNICITY

The graph below shows an age-standardised summary of ethnicities for patients who were dispensed a subsidised antidepressant in 2016.

This graph broadly shows that a lower proportion of Asian, Māori and Pacific peoples were dispensed an ADHD treatment than other New Zealand people, but a higher proportion of Māori were dispensed an ADHD treatment than Asian or Pacific peoples.



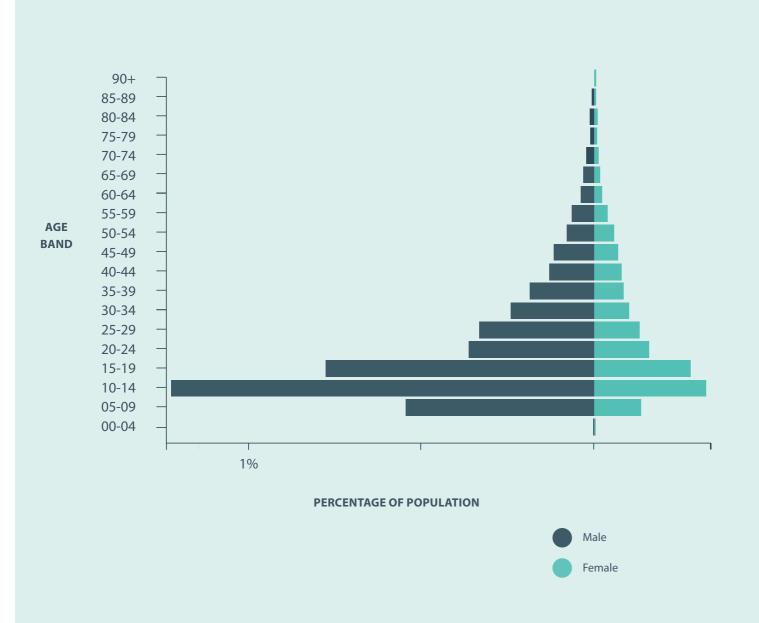




#### ADHD TREATMENTS - USE BY AGE AND GENDER

The graph below shows the percentage of people in different age bands who were dispensed a subsidised ADHD treatment in 2016, by gender.

The graph broadly shows the majority of use is in children and adolesents aged 5–19, with a higher proportion of prescribing in boys.



#### ANTIPSYCHOTICS DEPOT INJECTIONS - PRESCRIPTIONS AND COSTS

The table below shows the number of subsidised prescriptions and the gross subsidised expenditure for all funded antipshchotics injections, by formulation. Gross figures are used because PHARMAC negotiates confidential rebates on some medicines, which ultimately lower the price paid by the taxpayer.

The table shows figures for the most recent available year (2016), compared with 2015 and 2011.

\* Denotes this product is subject to confidential rebates.

			SCRIPTS		G	GROSS COST
PHARMACEUTICAL	2016	1-YEAR-	5-YEAR-	2016	1-YEAR-	5-YEAR-
		CHANGE	CHANGE		CHANGE	CHANGE
Flupenthixol decanoate	3,858	-5%	-19%	\$109,722	-5%	-18%
lnj 20 mg per ml, 1 ml	925	-6%	-24%	\$11,911	-5%	-22%
lnj 20 mg per ml, 2 ml	1,040	-2%	-24%	\$20,608	5%	-18%
lnj 100 mg per ml, 1 ml	1,893	-6%	-13%	\$77,203	-7%	-18%
Fluphenazine decanoate	1,381	-12%	-32%	\$76,872	-22%	-32%
lnj 25 mg per ml, 2 ml	42			\$4,079		
lnj 100 mg per ml, 1 ml	331	-29%	-31%	\$48,174	-33%	-36%
lnj 12.5 mg per 0.5 ml, 0.5 ml	444	53%	8%	\$9,167	108%	30%
lnj 25 mg per ml, 1 ml	564	-30%	-51%	\$15,452	-29%	-49%
Haloperidol decanoate	2,069	3%	- <b>9</b> %	\$86,111	4%	- <b>9</b> %
lnj 100 mg per ml, 1 ml	1,206	-2%	-7%	\$65,573	4%	-8%
lnj 50 mg per ml, 1 ml	863	10%	-10%	\$20,538	7%	-11%
Olanzapine *	4,838	13%	<b>4298</b> %	\$8,347,420	15%	<b>5349</b> %
lnj 210 mg vial *	564	0%	5027%	\$563,640	4%	7952%
lnj 300 mg vial *	2,556	12%	3894%	\$4,697,060	13%	4584%
lnj 405 mg vial *	1,718	20%	4809%	\$3,086,720	21%	6622%
Paliperidone	10,356	<b>39</b> %		\$10,476,965	<b>49</b> %	
Inj 25 mg syringe	231	58%		\$119,853	89%	
lnj 50 mg syringe	756	27%		\$502,288	34%	
lnj 75 mg syringe	1,454	38%		\$1,282,057	42%	
lnj 100 mg syringe	3,915	29%		\$4,205,015	40%	
lnj 150 mg syringe	4,000	51%		\$4,367,750	63%	
Pipothiazine palmitate	238	-44%	-77%	\$24,611	- <b>49</b> %	- <b>78</b> %
lnj 50 mg per ml, 1 ml	174	-37%	-74%	\$14,047	-34%	-74%
lnj 50 mg per ml, 2 ml	64	-57%	-82%	\$10,564	-60%	-81%
Risperidone	5,208	-20%	-50%	\$4,900,325	-20%	-58%
lnj 25 mg vial	1,380	-18%	-54%	\$886,454	-18%	-62%
lnj 37.5 mg vial	1,535	-23%	-50%	\$1,525,650	-23%	-56%
lnj 50 mg vial	2,293	-19%	-47%	\$2,488,222	-18%	-57%
Zuclopenthixol decanoate	4,617	4%	12%	\$102,940	5%	12%
lnj 200 mg per ml, 1 ml	4,617	4%	12%	\$102,940	5%	12%
Grand Total	32,565	6%	32%	\$24,124,967	16%	<b>95</b> %



## ANTIPSYCHOTICS GENERAL - PRESCRIPTIONS AND COSTS



			Scripts			Gross Cost
Pharmaceutical	2016	1-year-	5-year-	2016	1-year-	5-year-
		change	change		change	change
Amisulpride *	6,235	5%	67%	\$273,335	2%	-58%
Oral liq 100 mg per ml *	76	69%	986%	\$22,778	147%	1688%
Tab 100 mg *	2,544	3%	70%	\$61,478	-4%	-58%
Tab 200 mg *	2,469	-1%	55%	\$111,782	-8%	-63%
Tab 400 mg *	1,146	21%	80%	\$77,298	4%	-61%
Aripiprazole	14,548	8%	76%	\$4,928,538	8%	88%
Tab 10 mg	7,592	-3%	55%	\$2,102,000	-1%	60%
Tab 20 mg	1,912	10%	75%	\$827,409	8%	88%
Tab 30 mg	1,306	8%	107%	\$741,209	10%	142%
Tab 15 mg	2,657	0%	64%	\$1,078,356	7%	92%
Tab 5 mg	1,081	2250%		\$179,564	3136%	
Chlorpromazine hydrochloride	6,618	-8%	-28%	\$161,710	-6%	-27%
Tab 10 mg	750	-6%	-32%	\$11,868	-8%	-32%
Tab 25 mg	3,706	-10%	-27%	\$72,926	-4%	-27%
Tab 100 mg	1,616	-10%	-32%	\$69,048	-9%	-28%
Inj 25 mg per ml, 2 ml	546	11%	-9%	\$7,868	11%	-8%
Clozapine *	36,529	-1%	-10%	\$1,595,856	-8%	-51%
Tab 100 mg *	22,375	-1%	-12%	\$1,318,006	-9%	-53%
Tab 200 mg *	677	11%	2%	\$57,838	10%	1%
Suspension 50 mg per ml *	343	5%	96%	\$21,304	7%	81%
Tab 25 mg *	12,712	-1%	-8%	\$192,558	-7%	-48%
Tab 50 mg *	422	-5%	-1%	\$6,151	-13%	-18%
Haloperidol	31,775	2%	18%	\$380,952	6%	<b>49</b> %
Oral liq 2 mg per ml	1,191	3%	24%	\$17,432	8%	28%
Tab 500 mcg	17,295	-1%	9%	\$83,223	0%	25%
Tab 1.5 mg	2,118	7%	-19%	\$18,855	6%	1%
Tab 5 mg	2,276	3%	3%	\$61,870	5%	6%
Inj 5 mg per ml, 1 ml ampoule	8,895	7%	71%	\$199,571	10%	103%
Levomepromazine maleate	8,637	-2%	-3%	\$130,447	1%	-3%
Tab 25 mg	7,944	-2%	-3%	\$88,821	2%	0%
Tab 100 mg	693	-3%	-3%	\$41,626	1%	-9%
Lithium carbonate	32,518	0%	1%	\$622,183	-1%	7%
Tab 400 mg	3,132	7%	24%	\$44,473	6%	15%
Cap 250 mg	9,229	1%	-9%	\$182,186	-2%	4%
Tab 250 mg	8,716	0%	-13%	\$107,856	0%	-19%

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Olanzapine	79,484	3%	28%	\$502,070	2%	<b>-97</b> %
Tab 10 mg	29,179	2%	25%	\$259,499	1%	-97%
Tab 5 mg	24,367	3%	39%	\$126,807	3%	-96%
Tab 2.5 mg	17,003	9%	77%	\$40,890	12%	-95%
Tab orodispersible 5 mg	3,732	2%	-14%	\$18,942	0%	-97%
Tab orodispersible 10 mg	5,203	-4%	-30%	\$55,933	-3%	-98%
Pericyazine	2,035	5%	20%	\$102,468	8%	37%
Tab 10 mg	780	-3%	12%	\$71,289	3%	29%
Tab 2.5 mg	1,255	10%	26%	\$31,179	21%	62%
Quetiapine *	226,652	<b>9</b> %	43%	\$753,947	7%	- <b>78</b> %
Tab 100 mg *	32,365	4%	18%	\$167,916	3%	-80%
Tab 200 mg *	11,771	4%	-2%	\$104,557	0%	-84%
Tab 25 mg *	177,397	10%	55%	\$424,115	10%	-74%
Tab 300 mg *	5,119	8%	18%	\$57,358	3%	-80%
Risperidone	80,932	4%	4%	\$478,731	-7%	-85%
Oral liq 1 mg per ml	3,233	14%	28%	\$88,488	9%	-70%
Tab orodispersible 0.5 mg	267	0%	-23%	\$17,992	-11%	-12%
Tab 0.5 mg	35,586	7%	18%	\$83,791	3%	-76%
Tab 1 mg	21,002	2%	-5%	\$72,607	-9%	-90%
Tab orodispersible 1 mg	318	-10%	-44%	\$45,834	-7%	-31%
Tab orodispersible 2 mg	379	-15%	-52%	\$100,565	-13%	-51%
Tab 2 mg	11,482	0%	-3%	\$37,965	-18%	-94%
Tab 3 mg	5,552	-1%	-8%	\$18,559	-24%	-96%
Tab 4 mg	3,113	1%	-12%	\$12,931	-22%	-96%
Trifluoperazine hydrochloride	3,108	-7%	- <b>29</b> %	\$71,711	3%	-19%
Tab 5 mg	694	-45%	-61%	\$17,862	-49%	-61%
Tab 1 mg	1,229	-19%	-33%	\$20,851	-10%	-20%
Tab 2 mg	1,185	103%	52%	\$32,997	175%	99%
Ziprasidone *	2,083	-14%	-33%	\$116,215	-86%	- <b>89</b> %
Cap 40 mg *	623	-16%	-44%	\$38,624	-86%	-90%
Cap 60 mg *	235	-10%	-23%	\$13,901	-86%	-89%
Cap 80 mg *	362	-10%	-35%	\$26,759	-89%	-91%
Cap 20 mg *	863	-16%	-23%	\$36,931	-84%	-86%
Zuclopenthixol hydrochloride	1,284	<b>19</b> %	70%	\$47,554	11%	<b>78</b> %
Tab 10 mg	1,284	19%	70%	\$47,554	11%	78%
Levomepromazine hydrochloride	5,342	<b>9</b> %	<b>49</b> %	\$428,694	-1%	48%
Inj 25 mg per ml, 1 ml ampoule	5,342	9%	49%	\$428,694	-1%	48%
Pimozide	29	-6%	-24%	\$3,621	3%	-25%
Tab 4 mg	29	-6%	-24%	\$3,621	3%	-25%
Grand Total	537,809	5%	22%	\$10,598,032	-4%	-68%

\* Denotes this product is subject to confidential rebates.

## ANTIPSYCHOTICS - USE BY ETHNICITY



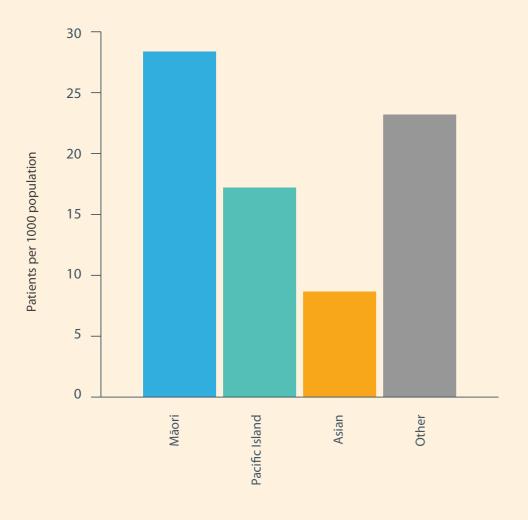
The graph below shows an age-standardised summary of ethnicities for patients who were dispensed a subsidised antipsychotics in 2016.

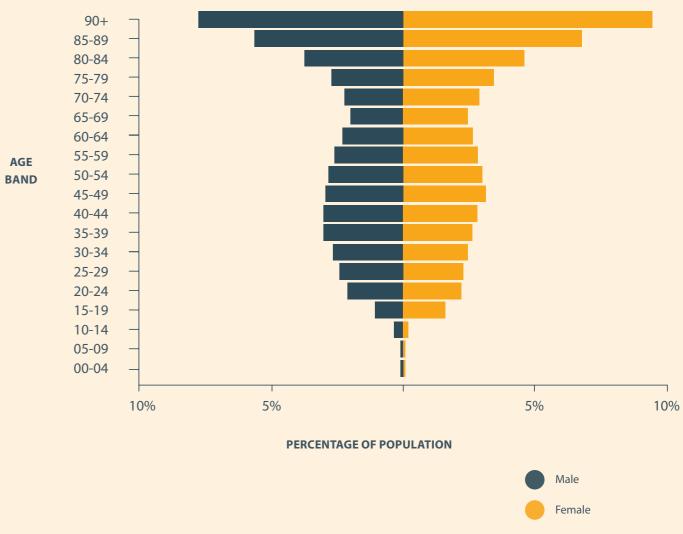
This graph broadly shows that a greater proportion of Māori were dispensed an antipsychotic than any other ethnic group, whereas the lowest proportion of antipsychotic dispensing was seen in Asian and Pacific peoples.

## ANTIPSYCHOTICS - USE BY AGE AND GENDER

The graph below shows the percentage of people in different age bands who were dispensed a subsidised antipsychotics in 2016, by gender.

This graph broadly shows that the proportion of people dispensed an antipsychotic increases progressively from about age 70-74, although the proportion of dispensing is less evenly distributed between males and females in younger years.







# ANXIOLYTICS, SEDATIVES AND HYPNOTICS - PRESCRIPTIONS AND COSTS 💲 🔮 🐵

The table below shows the number of subsidised prescriptions and the gross subsidised expenditure for all funded anxiolytics, sedatives and hypnotics, by formulation. Gross figures are used because PHARMAC negotiates confidential rebates on some medicines, which ultimately lower the price paid by the taxpayer.

The table shows figures for the most recent available year (2016), compared with 2015 and 2011.

\* Denotes this product is subject to confidential rebates.

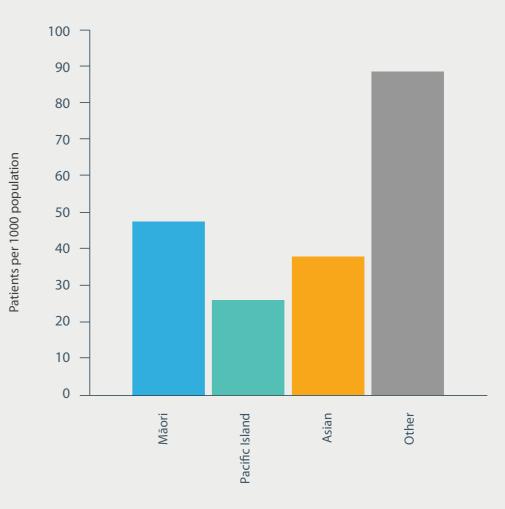
			Scripts			Gross Cost
Pharmaceutical	2016	1-year- change	5-year- change	2016	1-year- change	5-year- change
Alprazolam	17,072	10%	27%	\$72,933	7%	-8%
Tab 500 mcg	6,722	8%	20%	\$30,386	4%	-10%
Tab 1 mg	1,953	15%	42%	\$17,925	12%	-2%
Tab 250 mcg	8,397	11%	28%	\$24,623	6%	-9%
Clonazepam	89,956	3%	3%	\$644,565	8%	27%
Tab 500 mcg	79,319	3%	5%	\$502,224	8%	28%
Tab 2 mg	10,637	1%	-9%	\$142,341	7%	23%
Lorazepam	157,192	8%	20%	\$316,217	-12%	-24%
Tab 2.5 mg	4,981	1%	-9%	\$39,297	-3%	11%
Tab 1 mg	152,211	9%	22%	\$276,920	-13%	-27%
Oxazepam	14,669	-6%	-31%	\$68,904	-6%	25%
Tab 10 mg	12,120	-6%	-29%	\$46,540	-7%	24%
Tab 15 mg	2,549	-6%	-39%	\$22,364	-5%	28%
Temazepam	61,508	-2%	-23%	\$171,203	-4%	1%
Tab 10 mg	61,508	-2%	-23%	\$171,203	-4%	1%
Triazolam	64,878	-5%	-28%	\$174,150	-5%	-21%
Tab 250 mcg	27,164	-6%	-30%	\$70,314	-6%	-23%
Tab 125 mcg	37,714	-4%	-27%	\$103,836	-4%	-19%
Buspirone hydrochloride	4,779	6%	16%	\$187,635	0%	31%
Tab 10 mg	2,551	7%	-4%	\$82,178	0%	8%
Tab 5 mg	2,228	6%	55%	\$105,457	0%	58%
Lormetazepam	682	-12%	-36%	\$3,634	-7%	-25%
Tab 1 mg	682	-12%	-36%	\$3,634	-7%	-25%
Nitrazepam	5,642	-7%	-40%	\$24,059	-6%	79%
Tab 5 mg	5,642	-7%	-40%	\$24,059	-6%	79%
Zopiclone	566,360	3%	8%	\$432,529	-20%	-38%
Tab 7.5 mg	566,360	3%	8%	\$432,529	-20%	-38%
Diazepam *	114,534	2%	-3%	\$183,754	2%	0%
Tab 5 mg	62,954	2%	-4%	\$117,531	1%	-2%
Tab 2 mg	51,580	3%	0%	\$66,223	3%	2%

Midazolam	33,052	14%	37%	\$793,439	7%	84%
Tab 7.5 mg	56	-2%	-99%	\$485	30%	-98%
Inj 1 mg per ml, 5 ml plastic ampoule	808	6%	321%	\$6,645	2%	278%
Inj 1 mg per ml, 5 ml ampoule	3,028	7%	10%	\$82,935	0%	4%
Inj 5 mg per ml, 3 ml ampoule	14,253	19%	25%	\$345,686	13%	14%
Inj 5 mg per ml, 3 ml plastic ampoule	14,907	11%	969%	\$357,689	4%	1653%
Phenobarbitone sodium	14	27%	•	\$1,760	108%	•
Inj 200 mg per ml, 1 ml ampoule	14	27%		\$1,760	108%	
Grand Total	1,130,338	3%	2%	\$3,074,783	-2%	5%

#### ANXIOLYTICS, SEDATIVES AND HYPNOTICS - USE BY ETHNICITY

The graph below shows an age-standardised summary of ethnicities for patients who were dispensed a subsidised anxiolytic, sedative and hypnotic in 2016.

This graph broadly shows that a lower proportion of Asian, Māori and Pacific peoples were dispensed one of these treatments than other New Zealand people, but a higher proportion of Māori were dispensed one of these treatments than Asian or Pacific peoples.

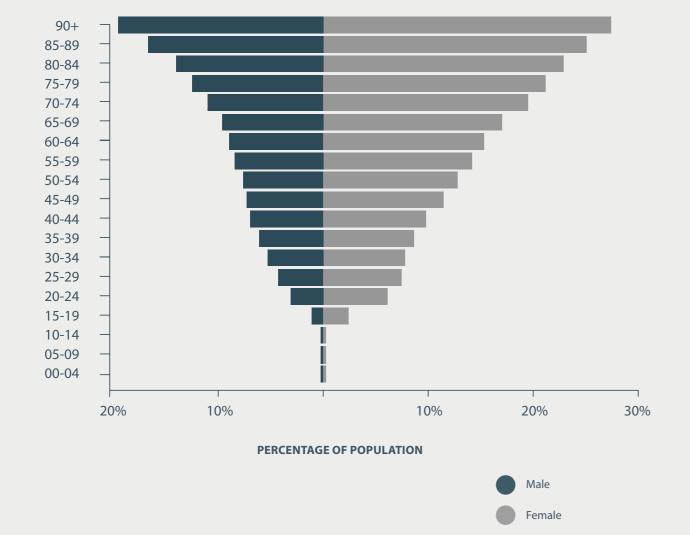




#### ANXIOLYTICS, SEDATIVES AND HYPNOTICS - USE BY AGE AND GENDER

The graph below shows the percentage of people in different age bands who were dispensed a subsidised anxiolytic, sedative and hypnotic in 2016, by gender.

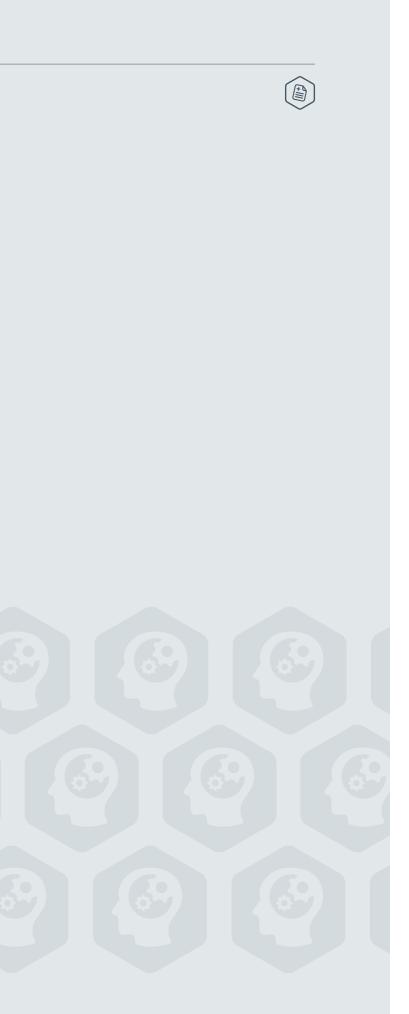
This graph broadly shows that the proportion of patients dispensed one of these treatments increased with age, and that a greater proportion of women were dispensed one of these treatments than men.

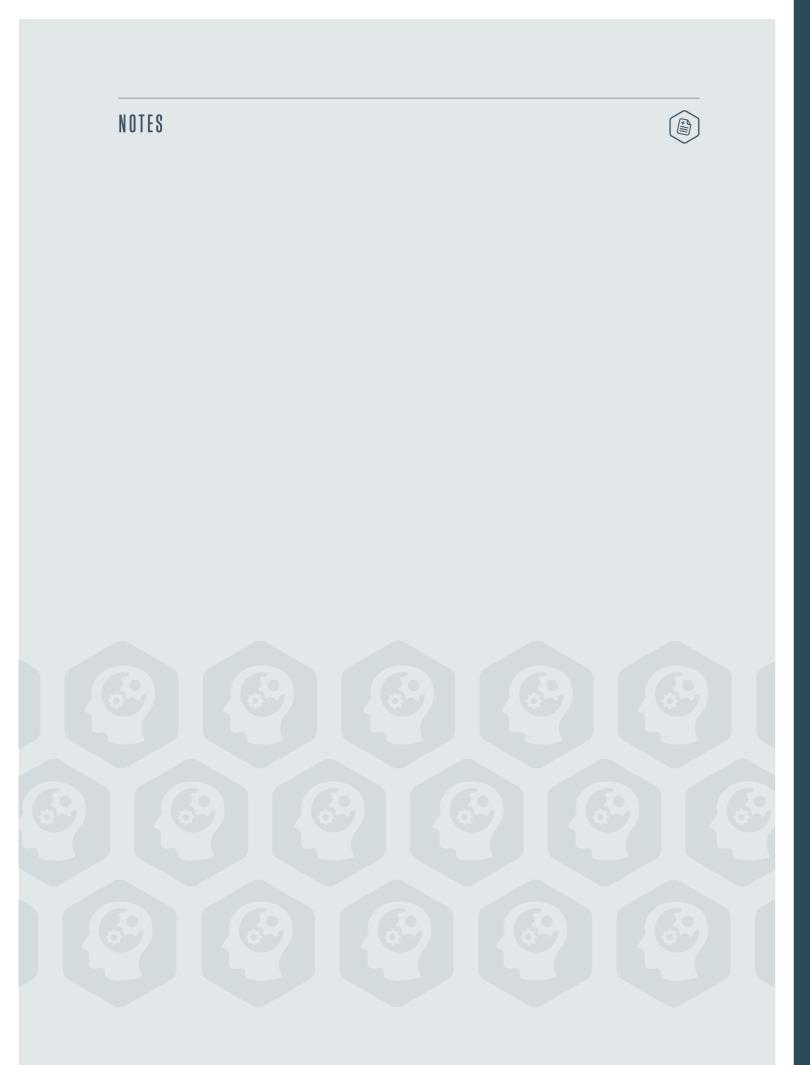














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