



Government of **Western Australia**
Department of **Health**

Western Australian Stimulant Regulatory Scheme

2019 Annual Report



Resources

Information about prescribing stimulant medicines in Western Australia is available at:
ww2.health.wa.gov.au/Articles/S_T/Stimulant-medicines

The following are available from the Western Australian Legislation website at:
www.legislation.wa.gov.au

- *Medicines and Poisons Act 2014*
- *Medicines and Poisons Regulations 2016*

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Data source

Monitoring of Drugs of Dependence System (MODDS),
Medicines and Poisons Regulation Branch, Department of Health WA

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Introduction

To promote quality, safety and efficacy for patients, the prescribing of stimulant medicines (dexamfetamine, lisdexamfetamine and methylphenidate) is strictly controlled by the Medicines and Poisons Regulations and is subject to the Schedule 8 medicines prescribing Code – Part 4 (the Code).

The Code sets the requirements for the prescribing and dispensing of stimulant medicines in Western Australia (WA). Clinical criteria and standard conditions (for example, attention deficit hyperactivity disorder (ADHD)) for prescribing of stimulant medicines are detailed in the Code. The Code is issued by the Director General of the Department of Health under the provisions of the *Medicines and Poisons Act 2014* and the *Medicines and Poisons Regulations 2016*.

Specialist medical practitioners must apply to become approved stimulant prescribers.

This is the sixteenth report of the data generated by the Scheme and reports on the period 1 January 2019 to 31 December 2019.

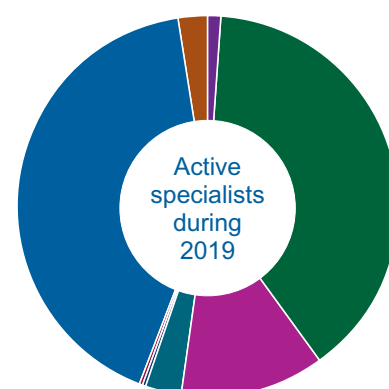
In this report, a detailed analysis was performed on the cohort of patients prescribed stimulant medicines for the treatment of ADHD.

Prescriber statistics

Prescribing of stimulant medicines is restricted to specialist medical practitioners who are authorised by the Western Australian (WA) Department of Health and are practising in WA. The table outlines the number of approved specialists who are currently treating patients with ADHD in 2019.

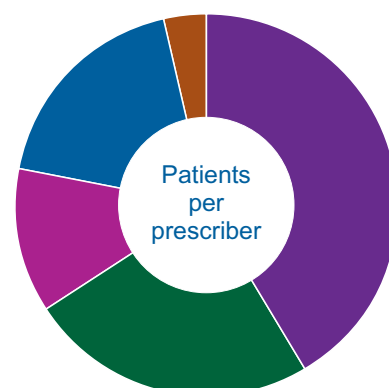
Total number and percentage of active specialists during 2019

Type of specialist	Number active	%
Adult neurologist	4	1.3
Adult psychiatrist	121	39.0
Child and adolescent psychiatrist	38	12.2
Paediatric neurologist	9	2.9
Paediatric rehabilitation physician	1	0.3
Paediatric rheumatologist	1	0.3
Paediatrician	130	41.8
Respiratory and sleep physician	7	2.3
Total	311	100.0



The table below outlines the number of patients per active specialist:

Number of patients	Number of prescribers	%
≥1 and ≤10	129	41.5
≥11 and ≤50	76	24.4
≥51 and ≤100	38	12.2
≥101 and ≤500	57	18.3
>500	11	3.5
Total	311	99.9

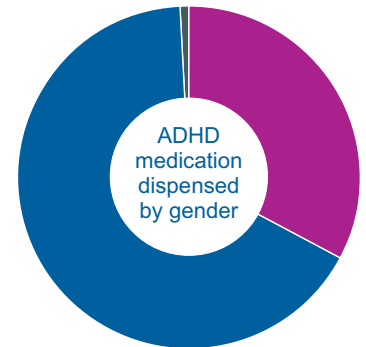


Patient statistics

The table below outlines the number and percentage of patient's dispensed medications for ADHD by gender.

Number and percentage of patients dispensed medications for ADHD by gender

Gender	Number	%
Female	9,192	32.8
Male	18,589	66.4
Transgender	8	<0.1
Unspecified	222	0.8
Total	28,011	100.0

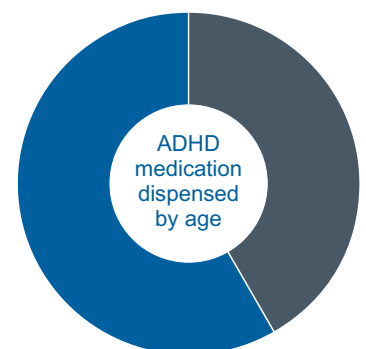


Gender	Number	%
Female	9,192	33.1
Male	18,589	66.9
Total	27,781*	100.0

* excludes unspecified and transgender

Number and percentage of patients dispensed medications for ADHD by age

Age	Number of ADHD patients	%
Child (≤18)	11,679	41.7
Adult (>18)	16,332	58.3
Total	28,011	100.0



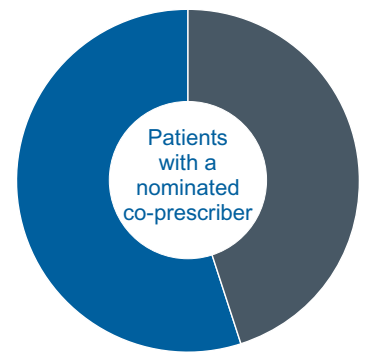
Co-prescriber statistics

Specialist medical practitioners can nominate general practitioners (co-prescribers) to assist with prescribing using a shared care arrangement. The co-prescribers refer the patients back to the specialist medical practitioners for an annual review.

The table below indicates the number of patients with ADHD who are being treated by a nominated co-prescriber in 2019.

Number and percentage of ADHD patients with a nominated co-prescriber by age

Age	Number of patients with a nominated co-prescriber	%
■ Child (≤18)	3,804	45.0
■ Adult (>18)	4,652	55.0
Total	8,456	100.0



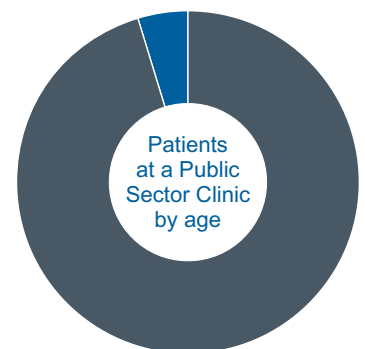
Public Sector Clinics

Public Sector Clinics (PSC) are situated at most hospitals and are available at most Child Development Centres. The PSCs register with the WA Department of Health. Notifications submitted to the Department on behalf of the clinic, cover all approved specialists involved in the treatment of patients at the clinic. This allows the approved specialist medical practitioners at a clinic, who have access to the patients' notes, to prescribe stimulant medicines without having to notify the Department each time.

The table below outlines the number of patients with ADHD who are being treated at Public Sector Clinics:

Number and percentage of patients treated at a Public Sector Clinic by age

Age	Number of patients	%
■ Child (≤18)	2,443	95.4
■ Adult (>18)	118	4.6
Total	2,561	100.0



Treatment statistics

The table below outlines the number of patients (children vs adults) with ADHD treated with different stimulant medicines from 2004 to 2019.

Number of children/adults being treated with specified medicine per year for ADHD

Children	2004	2005	2006	2007	2008	2009	2010
Dexamfetamine	5,563	4,708	3,982	2,874	2,163	1,836	1,567
Compounded dexamfetamine	-	-	-	-	-	-	-
Lisdexamfetamine	-	-	-	-	-	-	-
Methylphenidate	726	825	979	984	1,027	1,157	1,270
Methylphenidate long-acting	1,968	1,898	1,738	1,831	1,993	2,108	2,273
Combination	602	626	584	499	483	479	526
Total	8,859	8,057	7,283	6,188	5,666	5,580	5,636

Adult	2004	2005	2006	2007	2008	2009	2010
Dexamfetamine	5,792	6,092	6,340	6,209	6,276	6,914	7,296
Compounded dexamfetamine	-	-	-	-	-	-	-
Lisdexamfetamine	-	-	-	-	-	-	-
Methylphenidate	206	282	390	359	394	467	538
Methylphenidate long-acting	184	214	242	271	288	397	515
Combination	122	168	170	158	181	203	220
Total	6,304	6,756	7,142	6,997	7,139	7,981	8,569

Children	2011	2012	2013	2014	2015	2016	2017
Dexamfetamine	1,429	1,226	1,241	1,267	1,220	1,043	932
Compounded dexamfetamine	-	-	-	-	-	-	85
Lisdexamfetamine	-	-	0	81	717	1,788	2,293
Methylphenidate	1,499	1,659	1,300	1,394	1,470	1,527	2,105
Methylphenidate long-acting	2,511	2,659	3,228	3,296	3,558	3,482	3,251
Combination	515	571	814	933	1,032	1,017	921
Total	5,954	6,115	6,583	6,971	7,997	8,857	9,587

Adult	2011	2012	2013	2014	2015	2016	2017
Dexamfetamine	7,599	8,237	8,795	9,318	9,850	9,732	9,360
Compounded dexamfetamine	-	-	-	-	-	-	400
Lisdexamfetamine	-	-	0	75	221	577	907
Methylphenidate	699	872	969	995	1,040	1,013	1,049
Methylphenidate long-acting	617	760	959	951	968	972	931
Combination	227	248	293	346	482	689	1,191
Total	9,142	10,117	11,016	11,685	12,561	12,983	13,838

Children	2018	2019
Dexamfetamine	982	1,041
Compounded dexamfetamine	88	83
Lisdexamfetamine	2,908	3,285
Methylphenidate	2,688	3,271
Methylphenidate long-acting	3,105	3,009
Combination	913	980
Total	10,684*	11,669*

Adult	2018	2019
Dexamfetamine	10,031	10,516
Compounded dexamfetamine	379	380
Lisdexamfetamine	1,188	1,539
Methylphenidate	1,211	1,458
Methylphenidate long-acting	1,000	1,042
Combination	1,246	1,393
Total	15,055*	16,328*

* total excludes patients where the medication/dose was not specified

There has been an increase in number of patients treated with lisdexamfetamine since 2015.

Notes:

1. The Department started gathering data for compounded dexamfetamine in 2017.
2. Lisdexamfetamine was listed on the Pharmaceutical Benefits Scheme (PBS) in 2014.

Prevalence statistics

A total of 10.6 per 1000 population in WA were prescribed stimulant medicines for ADHD in 2019. Below is the breakdown by gender, age and region.

Rates – prevalence of patients dispensed medications for ADHD by gender

Gender	Number of patients	Rates per 1000
Female	9,192	3.5
Male	18,589	7.1
Total	27,781*	10.6

* excludes unspecified and transgender

Rates – prevalence of patients dispensed medications for ADHD by age

Age	Number of patients	Rates per 1000
Children (≤ 18)	11,679	4.5
Adults (> 18)	16,332	6.2
Total	28,011	10.7

Rates – prevalence of patients dispensed medications for ADHD by region

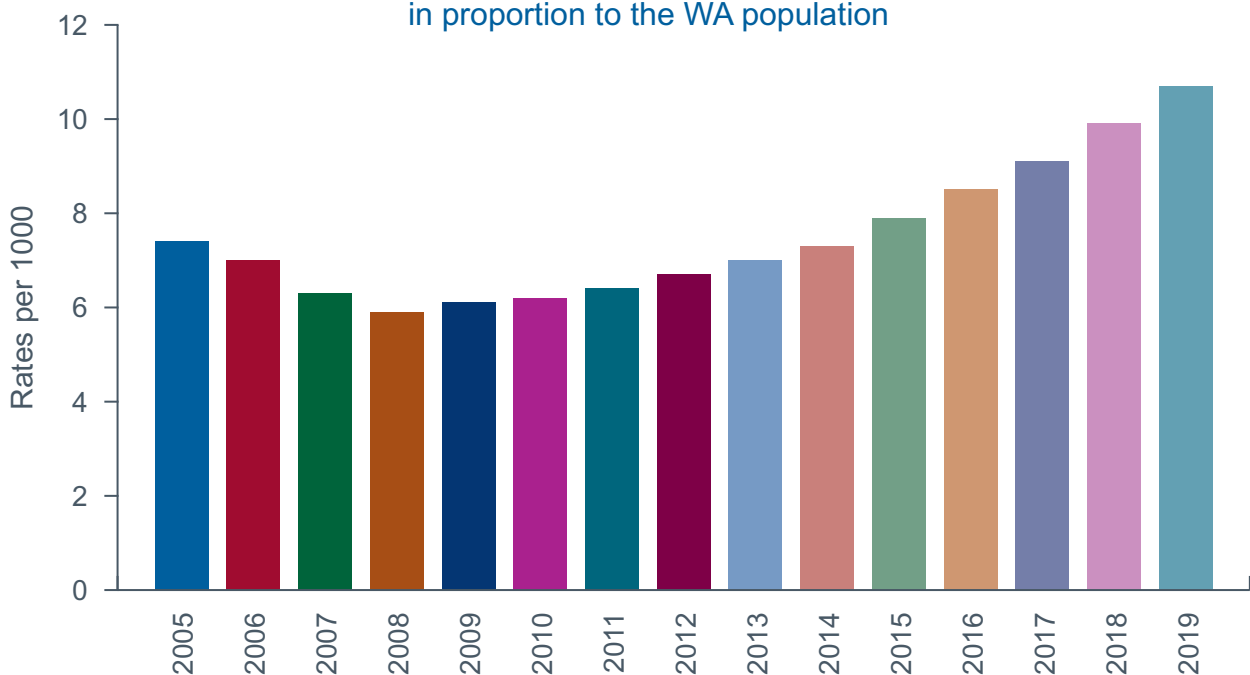
Region	Number of patients	Rates per 1000
Metro	23,519	9.0
Country	4,439	1.7
Total	27,958*	10.7

* excludes interstate and unspecified

Rates – prevalence of patients dispensed medications for ADHD per year in proportion to the WA population

Year	Number of patients	Rates per 1000
2005	14,813	7.4
2006	14,425	7.0
2007	13,185	6.3
2008	12,805	5.9
2009	13,561	6.1
2010	14,205	6.2
2011	15,096	6.4
2012	16,232	6.7
2013	17,599	7.0
2014	18,656	7.3
2015	20,558	7.9
2016	21,840	8.5
2017	23,425	9.1
2018	25,748	9.9
2019	28,011	10.7

Patients dispensed medications for ADHD per year in proportion to the WA population



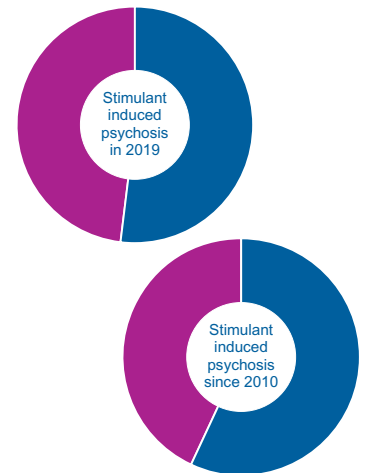
Stimulant Induced Psychosis

Stimulant Induced Psychosis is a prescribed condition of health under the *Health (Notification of Stimulant Induced Psychosis) Regulations 2010*. A psychiatrist who makes a definite diagnosis of Stimulant Induced Psychosis must inform the Chief Executive Officer (CEO) of the Department of Health within 72 hours of making the diagnosis. A report of Stimulant Induced Psychosis may be made by fax or mail (see resources).

There were 25 reported cases of patients presenting with Stimulant Induced Psychosis in 2019.

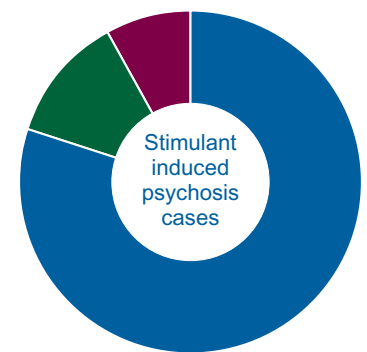
Since the introduction of the *Health (Notification of Stimulant Induced Psychosis) Regulations 2010* in 2010, there have been 177 patients reported until the end of 2019 (76 females and 101 males).

	Number of patients	%
Total in 2019	25	100.0
■ Males	13	52.0
■ Females	12	48.0
Since 2010	177	100.0
■ Males	101	57.1
■ Females	76	43.0



The stimulant medication that precipitated the episode of Stimulant Induced Psychosis in 2019 is outlined in the table below:

Stimulant medicine	Number of patients reported with Stimulant Induced Psychosis
■ Dexamfetamine	20
■ Methylphenidate	3
■ Unspecified	2



Stimulant Assessment Panel statistics

The Stimulant Assessment Panel (the Panel) is established as a Ministerial advisory board under the *Health Legislation Administration Act 1984*.

The Panel comprises nine appointed members, inclusive of the chair. Six appointments are public and private sector specialist clinicians (psychiatrist, paediatrician and addiction medicine specialist), nominated by the respective professional college. Three members are public sector employees, including a public health physician and two officers with regulatory expertise in stimulant medicines. The Panel is chaired by a senior public sector employee and executive support is provided by the Medicines and Poisons Regulation Branch.

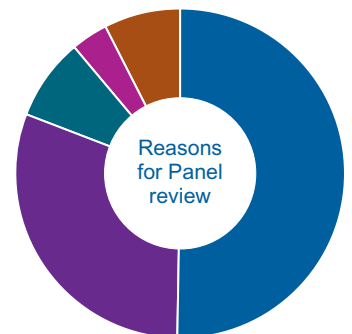
Prescribing of stimulants outside the criteria of the Code requires approval of the Chief Executive Officer (CEO). Decisions on approval to prescribe outside the Code are made by the Delegate of the CEO. The Delegate may refer a request for approval to the Panel who will make a recommendation on which the Delegate may base their decision.

Diagnostic statistics

Requests outside the Code typically include those patients with a history of substance abuse, co-morbid mental health disorders (e.g. psychosis), doses over the maximum specified by the Code, or use in very young children. The number and proportion of patients for each reason for approval outside the Code is outlined in the following statistics:

Number of applications to the Panel by reason

Type	Number of applications received
■ Substance abuse	109
■ Psychiatric co-morbidity	66
■ Drug Dependent Person	17
■ 15-17 years of age, treated by adult specialist	8
■ Other	16



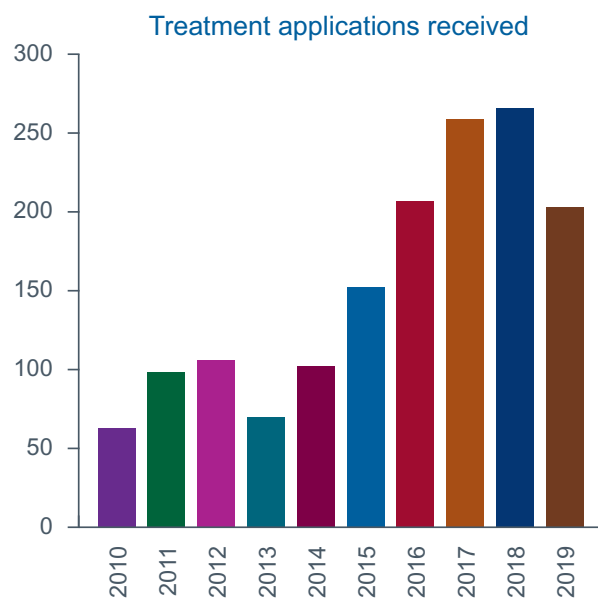
The total number of patients reviewed by the Panel in 2019 is greater than the number of applications received, as some patients present with multiple co-morbidities such as substance abuse and psychosis or bipolar disorder.

Treatment statistics

Number of applications received per year

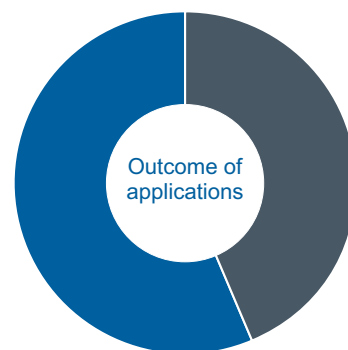
There has been an increase in applications from the prescribers seeking to treat patients with co-morbidities that place them outside the Code.

Year	Number of applications received
2010	63
2011	98
2012	106
2013	70
2014	102
2015	152
2016	207
2017	259
2018	266
2019	203

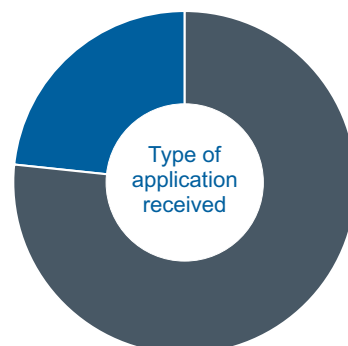


Outcome statistics

Total number of applications received	Number	%
Approved	89	43.8
Not approved	114	56.2
Total	203	100.0



Total number of applications received	Number	%
New	156	76.8
Re-application	47	23.2
Total	203	100.0



The Panel members follow a strict protocol in assessing the applications for authorisation and applications are reviewed on a case by case basis. In 2019, 44% of the applications were approved as per the request from the specialist medical practitioners.

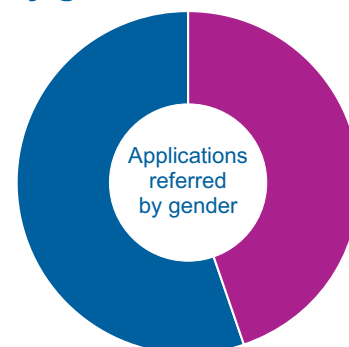
Where the applications are not approved, the Panel may decline the application or may recommend an alternative medication where the stimulant medicines and formulations recommended are less likely to be misused, such as long acting preparations and medicines to be dispensed from a Pharmacy weekly or daily.

Re-applications can be referred to the Panel for increases in dose or to provide further information.

Patient statistics

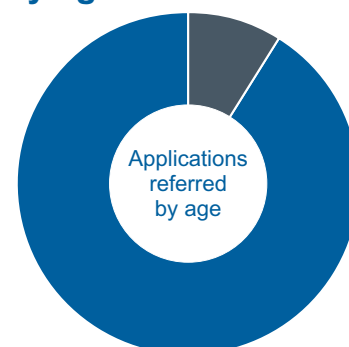
Number and percentage of applications referred to the Panel by gender

Gender	Number of applications received	%
Female	91	44.8
Male	112	55.2
Total	203	100.0



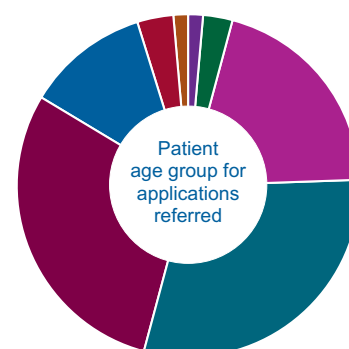
Number and percentage of applications referred to the Panel by age

Age	Number of applications received	%
Child (≤ 18)	18	8.9
Adult (> 18)	185	91.1
Total	203	100.0



Number and percentage of applications referred to the Panel by age range

Age (year)	Number of applications received	%
<4	3	1.5
4-15	6	3.0
16-25	41	20.2
26-35	60	29.6
36-45	60	29.6
46-55	23	11.3
56-65	7	3.4
>65	3	1.5
Total	203	100.0



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