

## Mental health-related prescriptions

This section presents information on [prescriptions](#) for mental health-related [medications](#). Mental health-related medications reported here cover antipsychotics, anxiolytics, hypnotics and sedatives, antidepressants, and psychostimulants and nootropics—prescribed by all medical practitioners.

Information for mental health-related prescriptions is sourced through the Pharmaceutical Benefits Scheme (PBS) and the Repatriation Pharmaceutical Benefits Scheme (RPBS). Through both of these schemes, Medicare Australia makes payments to subsidise pharmaceutical products listed in the Schedule of Pharmaceutical Benefits.

For the period 2014–15, this section presents prescription data for both subsidised and under co-payment mental health-related medications (see the [data source](#) section for more information). Trend data for the period 2010–11 to 2014–15 focus solely on the subsidised mental health-related medications because under co-payment data were not available from the Department of Human Services prior to 1 April 2012.

For further information on the PBS and RPBS and the medications covered by these schemes, refer to the [data source](#) section. Related data on expenditure on medications subsidised under the PBS and RPBS are presented in the [Expenditure](#) section.

### Key points

- There were 35.3 million prescriptions for mental health-related medications dispensed (subsidised and under co-payment) in 2014–15. This equates to an average of 9.0 prescriptions per patient in 2014–15.
- There were a total of 24.8 million prescriptions for subsidised mental health-related medications in 2014–15, which was 7 in 10 (70.1%) of the total number of mental health-related prescriptions.
- 86.8% of the mental health-related prescriptions (subsidised and under co-payment) were provided by GPs, with 8.0% being prescribed by psychiatrists and 4.6% by non-psychiatrist specialists.
- Antidepressant medications accounted for 67.8% of total mental health-related (subsidised and under co-payment) prescriptions.
- Females, those aged 65 and over and those people living in *Inner regional* areas had the highest mental health-related prescription and patient rates.

Data in this section were last updated in July 2016.

The 35.3 million prescriptions for mental health-related medications is equivalent to 1,494.8 mental health-related prescriptions per 1,000 population. These prescriptions were provided to 3.9 million patients, which equates to 165.5 patients per 1,000 population (or 16.6%). Combining these data, there were an average of 9.0 prescriptions per patient in 2014–15 (Table PBS.6).

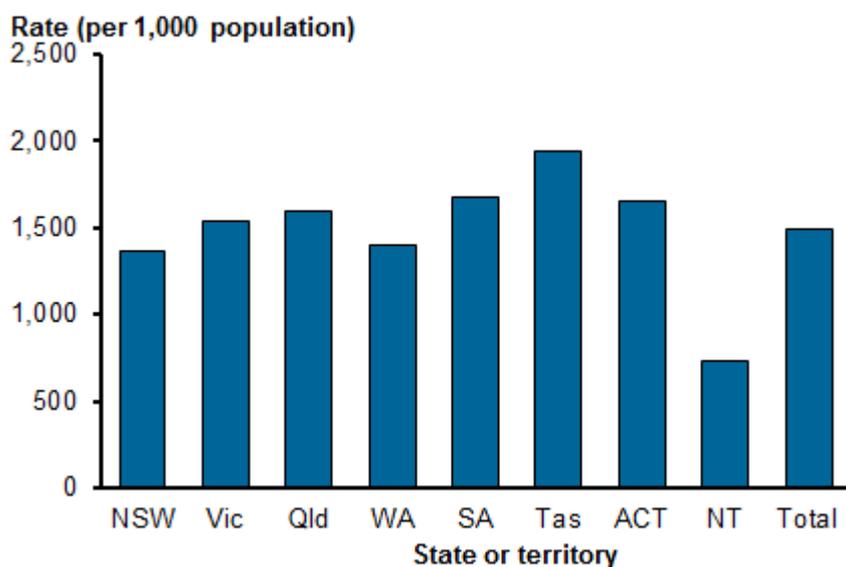
About 25 million of the mental health related prescriptions were subsidised for 2.5 million patients, an average of 10.0 prescriptions per patient in 2014–15.

# PBS/RPBS prescriptions patterns

## States and territories PBS/RPBS prescriptions

The annual rate of PBS and RPBS prescriptions per 1,000 population was relatively low for Western Australia (900.3 subsidised and 1,404.1 total prescriptions per 1,000 population) when compared to the national average (1,048.2 subsidised and 1,494.8 total prescriptions). Tasmania had a considerably higher rate of prescriptions than the national average (1,456.1 subsidised and 1,942.1 total prescriptions per 1,000 population) (Figure PBS.1). The jurisdictional rates of patients receiving these medications (per 1,000 population) showed a similar pattern to the prescription rates (Figure PBS.2).

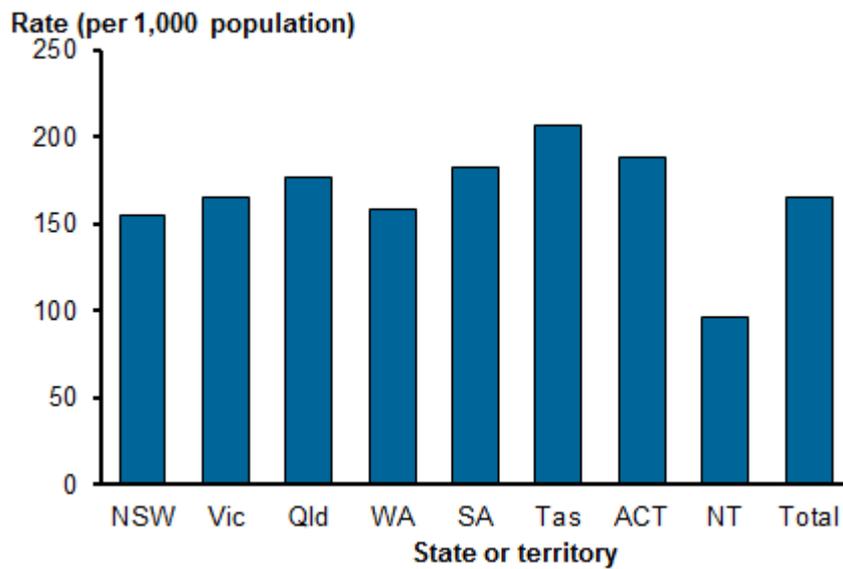
**Figure PBS.1: Mental health-related prescriptions (subsidised and under co-payment), by states and territories, 2014–15**



*Note:* A substantial proportion of the Australian Government subsidy of pharmaceuticals in the Northern Territory is funded through the Aboriginal Health Service program, which is supplied through the Aboriginal Health Services and not through the PBS payment system. Figures presented for the Northern Territory represent an underestimate.

*Sources:* Pharmaceutical Benefits Scheme, Repatriation Pharmaceutical Benefits Scheme and under co-payment data (Department of Health). Source data: Mental health-related prescriptions Table PBS.3 (248KB XLS).

**Figure PBS.2: Mental health-related patients (recipients of subsidised and under co-payment), by states and territories, 2014–15**



*Note:* A substantial proportion of the Australian Government subsidy of pharmaceuticals in the Northern Territory is funded through the Aboriginal Health Service program, which is supplied through the Aboriginal Health Services and not through the PBS payment system. Figures presented for the Northern Territory represent an underestimate.

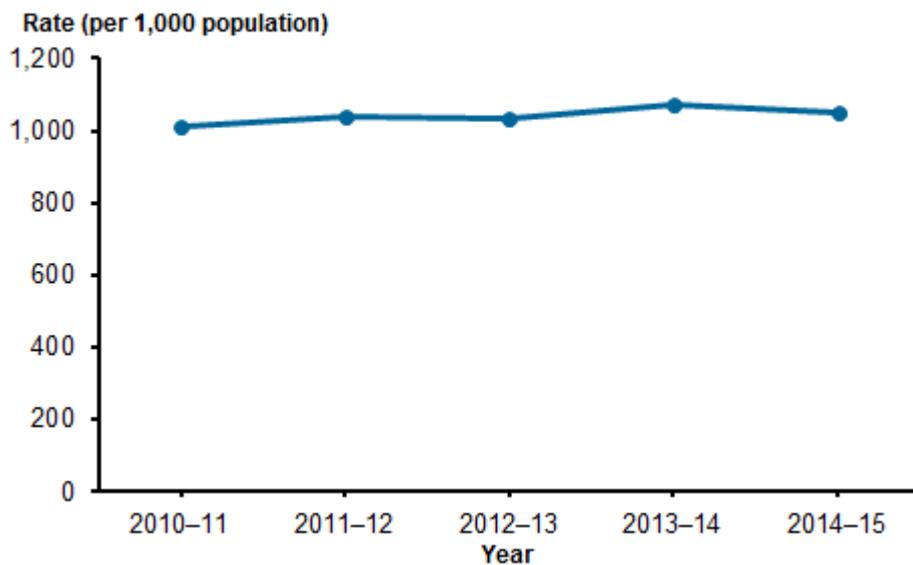
*Sources:* Pharmaceutical Benefits Scheme, Repatriation Pharmaceutical Benefits Scheme and under co-payment data (Department of Health). Source data: Mental health-related prescriptions Table PBS.7 (248KB XLS).

### **PBS/RPBS subsidised prescriptions over time**

For the period 2010–11 to 2014–15, the rate of PBS and RPBS subsidised mental health-related prescriptions and patients per 1,000 population remained relatively stable with the average annual rate of growth being 1.3% for prescriptions and 0.6% for patients (Table PBS.4 & PBS.8).

Data on under co-payment prescriptions have only been collected on the same basis as subsidised prescriptions data since 2012. These data will be published as time series in future when sufficient data are available.

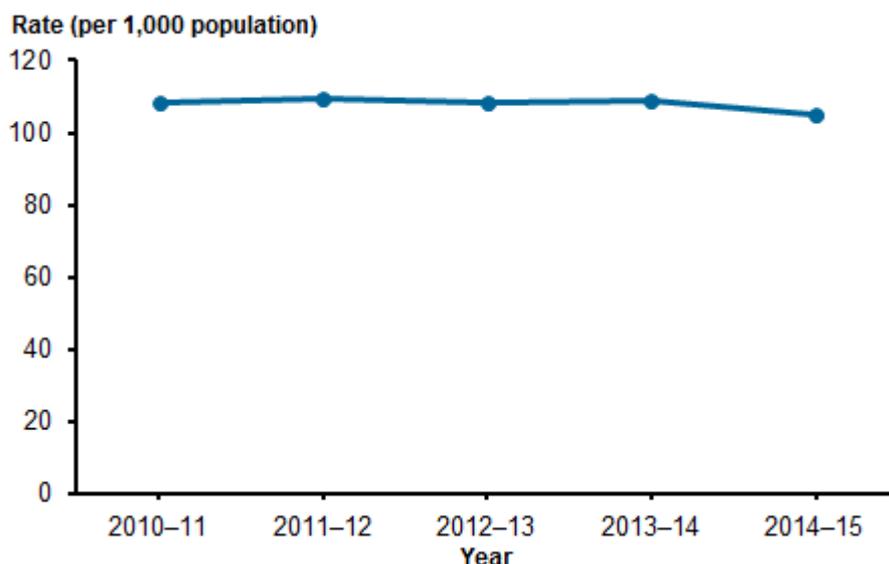
**Figure PBS.3: Mental health-related subsidised prescriptions, 2010–11 to 2014–15**



*Note:* The rates presented are crude rates.

*Sources:* Pharmaceutical Benefits Scheme, Repatriation Pharmaceutical Benefits Scheme and under co-payment data (Department of Health). Source data: Mental health-related prescriptions Table PBS.4 (248KB XLS).

**Figure PBS.4: Mental health-related subsidised patients, 2010–11 to 2014–15**



*Note:* The rates presented are crude rates.

*Sources:* Pharmaceutical Benefits Scheme, Repatriation Pharmaceutical Benefits Scheme and under co-payment data (Department of Health). Source data: Mental health-related prescriptions Table PBS.4 & Table PBS.8 (248KB XLS).

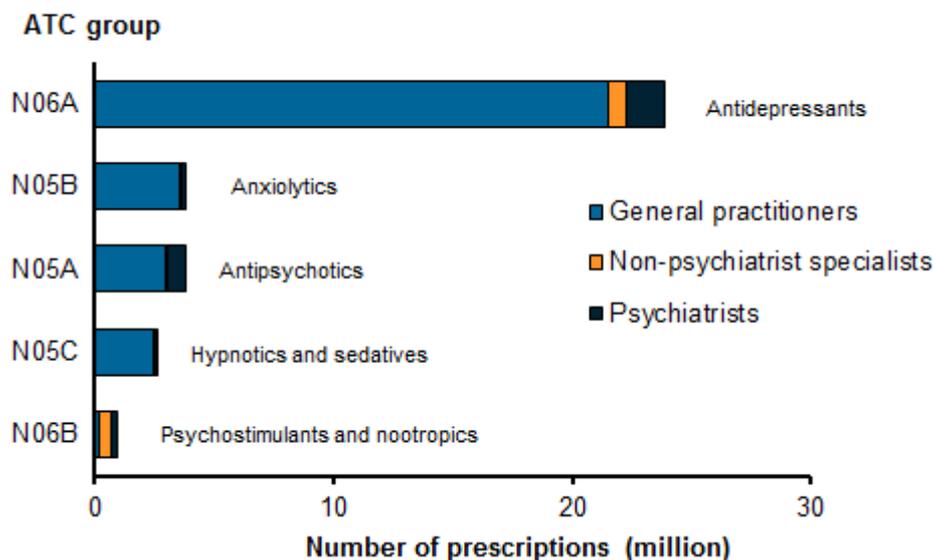
## **PBS/RPBS prescription characteristics**

Of the 35.3 million mental health-related prescriptions (subsidised and under co-payment), the majority (86.8%) were prescribed by GPs, with another 8.0% prescribed by psychiatrists and 4.6% by non-psychiatrist specialists (Table PBS.2). These percentages were very similar when considering only subsidised prescriptions.

The majority of prescriptions were for antidepressant medications (67.8%, or 24.0 million), followed by antipsychotics and anxiolytics (11.0% each) and hypnotics and sedatives (7.5%) (Figure PBS.5). When

considering subsidised prescriptions only, a similar pattern was observed. However, the percentage of subsidised antidepressant medications prescribed was lower (61.7%) than the percentage of total antidepressant medications (67.8%).

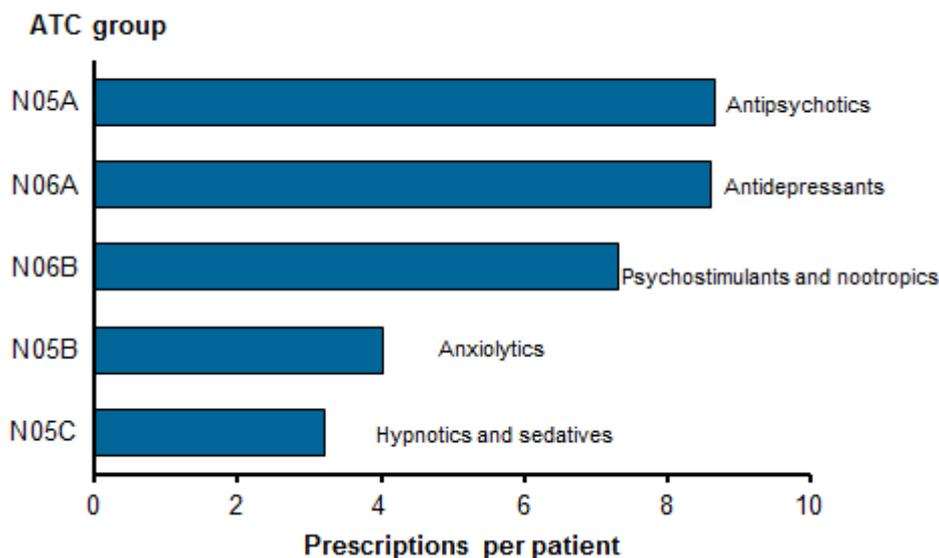
**Figure PBS.5: Mental health-related prescriptions (subsidised and under co-payment), by ATC group of medication prescribed and prescribing medical practitioner, 2014–15**



Sources: Pharmaceutical Benefits Scheme, Repatriation Pharmaceutical Benefits Scheme and under co-payment data (Department of Health); Anatomical Therapeutic Chemical (ATC) Classification System (WHO 2011). Source data mental health-related prescriptions Table PBS.2 (248KB XLS).

Antipsychotics and antidepressants had the highest rate of prescriptions per patient (8.7 and 8.6 respectively). The prescription category psychostimulants and nootropics, with the least number of prescriptions, had the third highest rate of prescriptions per patient (7.3) in 2014–15 (Figure PBS.6). A similar pattern was observed for subsidised prescriptions only.

**Figure PBS.6: Mental health-related prescriptions (subsidised and under co-payment) per patient, by ATC group of medication prescribed, 2014–15**



Sources: Pharmaceutical Benefits Scheme Repatriation Pharmaceutical Benefits Scheme and under co-payment data

(Department of Health); Anatomical Therapeutic Chemical (ATC) Classification System (WHO 2011).

Source data mental health-related prescriptions Table PBS.2 (248KB XLS).

There was variation observed in the rate of patients and prescriptions by sex, age and remoteness area. Females (1,818.9 and 198.5 per 1,000), those aged 65 and over (3,125.8 and 318.1 per 1,000) and those people living in *Inner regional* areas (1,933.8 and 206.7 per 1,000) had the highest mental health-related prescription and patient rates per 1,000 population. This variation was observed for both total prescriptions (subsidised and under co-payment) and subsidised only prescriptions (Table PBS.6).

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## Reference

WHO (World Health Organization) 2011. ATC: Structure and principles. Oslo: WHO Collaborating Centre for Drug Statistics Methodology. Viewed April 2016, <[http://www.whocc.no/atc/structure\\_and\\_principles/](http://www.whocc.no/atc/structure_and_principles/)>

## Data source

### Pharmaceutical Benefits Scheme and Repatriation Pharmaceutical Benefits Scheme data

The Department of Human Services (DHS) provides data on prescriptions funded through the Pharmaceutical Benefits Scheme (PBS) and Repatriation Pharmaceutical Benefits Scheme (RPBS) to the Department of Health. Government subsidy is applied when the cost of a medication dispensed at a pharmacy exceeds the patient co-payment threshold. The patient co-payment threshold is set each year by the Australian Government depending on income, age, health status and certain other factors. The PBS and RPBS cover the gap between the full cost of the medication and the patient co-payment threshold (subsidised medicine). The medicines listed in PBS and RPBS at below co-payment threshold are fully paid by the patient (under co-payment medicine).

Information collected includes the characteristics of the person who is provided with the prescription, the medication prescribed (for example, type and cost), the prescribing practitioner and the supplying pharmacy (for example, location). The figures reported relate to the number of mental health-related prescriptions processed by DHS in the reporting period, the number of people provided with the prescriptions and their characteristics, as well as the prescription costs funded by the PBS and RPBS.

Although the PBS and RPBS data capture most of the prescribed medicines dispensed in Australia, these data have the following limitations:

- They refer only to prescriptions scripted by registered medical practitioners who are approved to work within the PBS and RPBS and to paid services processed from claims presented by approved pharmacists who comply with certain conditions. They exclude adjustments made against pharmacists' claims, any manually paid claims or any benefits paid as a result of retrospective entitlement or refund of patient contributions.
- Until 1 April 2012 the PBS and RPBS data supplied to the AIHW by the Department of Health excluded non-subsidised medications, such as private and under co-payment prescriptions (where the patient co-payment covers the total costs of the prescribed medication) and over-the-counter medications. As of April 2012, under co-payment prescription data are supplied directly to the DHS (DoH 2014). This permits a more accurate count of these data, similar in quality to that of PBS and RPBS data, so they can be incorporated in the same tables. However, a time series presentation of these data is not possible at this time and comparison with the data from the previously used Drug Utilisation Sub-Committee (DUSC) database should be interpreted with caution as the DUSC survey methodology may have been an underestimate of under co-payment prescription volumes.
- The number of patients dispensed with under co-payment prescriptions cannot be derived by subtracting the number of subsidised prescriptions from the total number of prescriptions. This is due to double counting which occurs due to a number of patients receiving under co-payment prescriptions who are also receiving subsidised prescriptions. Tables for prescription numbers also show data in this way (subsidised and total) so that they are compatible with patient number tables.
- The level of the co-payment increases annually and drug prices can reduce for a variety of factors (for example, patent changes), which means that some medicines that were captured in previous years might fall below the co-payment level and thus be excluded from the subsidised category in following years.
- Programs funded by the PBS that do not use the DHS PBS processing system include:
  - most Section 100 drugs funded through public hospitals (although the pharmaceutical reform measures for public hospitals under the National Health Reform Agreement and the Chemotherapy Pharmaceutical Access Program are paid through Medicare)
  - Aboriginal health services program
  - Opiate Dependence Treatment Program
  - Special Authority Program

- Botox (including Dysport)
- in vitro fertilisation
- human growth hormones.

Only one of these has a significant bearing on the mental health-related prescriptions data published in the Prescriptions and Expenditure sections: the Aboriginal health services program. Most affected are the data for *Remote* and *Very remote* areas and the data for the Northern Territory. Consequently, the mental health-related prescriptions data in these sections will not fully reflect Australian Government expenditure on mental health-related medications.

The ATC classification version used is the primary classification as it appears in the PBS Schedule of Pharmaceutical Benefits. This can differ slightly from the WHO version (WHO 2011). There are two differences between the WHO ATC classification and the PBS Schedule classification that have a bearing on mental health data. Prochlorperazine is regarded as another antiemetic (A04AD) in the PBS Schedule while it is an antipsychotic according to the WHO classification. This means that information on prochlorperazine will not appear in the data provided as it is not classed as an N code in the PBS Schedule. Lithium carbonate, on the other hand, is classified as an antidepressant in the PBS Schedule while it is an antipsychotic according to the WHO classification. This means that lithium carbonate will appear in the data as an antidepressant rather than an antipsychotic (see the following table).

### Data Source PBS.1 Differences between the WHO ATC classification and the PBS Schedule of Pharmaceutical Benefits classification

Drug name	WHO ATC Code	PBS Schedule Code	Scripts dispensed in 2014–15 <sup>(a)</sup>
Prochlorperazine	N05AB04	A04AD	595,533
Lithium carbonate	N05AN01	N06AX	107,616

(a) Prescriptions data using date of service basis.

Source: DHS 2015

To avoid double counting patients are allocated to the last category in which they appear. The reporting category most affected by this will be age group, as age is calculated at the time of supply, and patients' ages will be one year greater for prescriptions supplied after their birthday than before it.

State and territory are determined by the Department of Health according to the patient's residential address. If the patient's state or territory is unknown, then the state or territory of the pharmacy supplying the item is reported.

Unless otherwise indicated, the year was determined from the date the service was processed by Medicare, rather than the date of prescribing or the date of supply by the pharmacy.

### Reference

WHO 2011. ATC: Structure and principles. Oslo: WHO Collaborating Centre for Drug Statistics Methodology. Viewed April 2016, <[http://www.whocc.no/atc/structure\\_and\\_principles/](http://www.whocc.no/atc/structure_and_principles/)>

DHS (Department of Human Services) 2015. Pharmaceutical Benefits Schedule Item Reports website, Canberra: Commonwealth of Australia. Viewed 12 April 2016, <[http://medicarestatistics.humanservices.gov.au/statistics/pbs\\_item.jsp](http://medicarestatistics.humanservices.gov.au/statistics/pbs_item.jsp)>

DoH 2014. Pharmaceutical Benefits Scheme Collection of Under Co-payment Data. Viewed 6 April 2016 <<http://www.pbs.gov.au/info/statistics/under-co-payment/under-co-payment-data>>.

# Key concepts

## Mental health-related prescriptions

Key Concept	Description
<b>Mental health-related medications</b>	<b>Mental health-related medications</b> are defined in this section as 5 selected medication groups as classified in the Anatomical Therapeutic Chemical (ATC) Classification System (WHO 2011), namely antipsychotics (code N05A), anxiolytics (code N05B), hypnotics and sedatives (code N05C), antidepressants (code N06A), and psychostimulants and nootropics (code N06B)—prescribed by all medical practitioners (that is, general practitioners (GPs), non-psychiatrist specialists and psychiatrists) (WHO 2016).
<b>Prescriptions</b>	The information on <b>prescriptions</b> in this section is sourced from the processing of the PBS/RPBS together with under co-payment prescription data supplied to the Department of Human Services and refers to medications prescribed by medical practitioners and subsequently dispensed in community pharmacies (or, for Section 100 drugs, by hospital pharmacies). Consequently, it is a count of medications dispensed rather than a count of the prescriptions written by medical practitioners.

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## References

WHO (World Health Organization) 2011. ATC: Structure and principles. Oslo: WHO Collaborating Centre for Drug Statistics Methodology. Viewed April 2016, [http://www.whocc.no/atc/structure\\_and\\_principles/](http://www.whocc.no/atc/structure_and_principles/)

WHO 2016. Lexicon of alcohol and drug terms published by the World Health Organization. Viewed May 2016, [http://www.who.int/substance\\_abuse/terminology/who\\_lexicon/en/](http://www.who.int/substance_abuse/terminology/who_lexicon/en/)