

# OECD health care quality and outcomes indicators, Australia 2022-23

Web report | Last updated: 27 Feb 2024 | Topic: International comparisons

# **About**

This report summarises data for Australia provided to the Organisation for Economic Co-operation and Development's (OECD) 2022-23 Health Care Quality and Outcomes data collection. It compares these data with Australia's performance for previous years and with data reported by other OECD countries. For this collection, Australia submitted data for most of the indicators and performed above the OECD average on 13 of the 36 indicators.

Cat. no: PHE 337

## Findings from this report:

- Australia had the highest rate of primary care consultations skipped due to costs (14.4 per 100 patients)
- Australia recorded the highest percentage of diabetic patients prescribed cholesterol-lowering medication
- Australia had the lowest rate of long-term benzodiazepine users (1.9 per 1,000 patients aged 65 and over)
- Australia had the highest total volume of antibiotics prescribed for systemic use (27.6DDD per 1,000 population/day)

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# Introduction

Australia is generally considered to have a high-quality health care system, delivering good health outcomes for the population (Schneider et al. 2021). Against a range of health indicators, Australia compares favourably with other developed countries (AIHW 2022). Nevertheless, the safety and quality of health care in Australia is of ongoing interest to health care planners, providers and consumers, and efforts continue to maintain and improve the performance of health care services.

To help countries achieve high-performing health systems the Organisation for Economic Co-operation and Development (OECD) facilitates inter-country comparisons of health systems through a number of regularly conducted health data collections among member and partner countries. Data submitted to these collections are published in OECD. Stat and selected indicators are also published by the OECD in their Health at a glance publication series (most recently, <u>Health at a glance 2023</u>.)

This report summarises the information provided for Australia to the OECD's Health Care Quality and Outcomes (HCQO) 2022-23 data collection. Participation in this biennial data collection is one way that Australia can contribute to the assessment of the quality and safety of our healthcare system. This report compares the latest available data for Australia with data reported:

- for similar years by the OECD for other participating countries, and
- in previous years for Australia.

#### References

Australian Institute of Health and Welfare (AIHW) 2022. International health data comparisons. Canberra: AIHW.

OECD 2023. Health at a glance 2023: OECD indicators. Paris: OECD.

Schneider et al. 2021. Mirror, mirror 2021 - reflecting poorly: health care in the U.S. compared to other high-income countries. New York: The Commonwealth Fund.

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# **Data submission**

The Australian Institute of Health and Welfare (AIHW) has co-ordinated provision of data to the OECD's HCQO project since 2011. Tables 1.1-1.6 list the HCQO indicators requested for the 2022-23 data collection, indicates whether data for Australia were available and provided and, if so, outlines the data sources and the latest data reference period for the data reported to the OECD. The tables also indicate the name used in this publication to refer to the OECD indicators.

All data tables submitted to the OECD for this collection were prepared by the AIHW, except for 4 patient experiences indicators which were calculated by the Australian Bureau of Statistics. Data for all these indicators are presented in this report. However, the OECD also sourced data for 3 additional patient experience indicators from other sources. Data for these indicators are not presented in this report.

The OECD provide guidelines for all indicators requested, however, the diverse data collection processes and contexts within which data are captured among countries mean that caution is needed when interpreting findings and making cross-country comparisons. This should be considered when interpreting the data presented.

It should also be noted that:

- The OECD request the data for calendar years, but not all the data are available in that format, and some of the data are compiled on a financial year basis (that is, July-June).
- There can be slight differences in terminology used in the OECD guidelines for the collection, which may carry slightly different meanings in participating countries. For example, the OECD guidelines request some data relating to 'inpatient' care and define this term as a formal admission that is expected to constitute an overnight stay. In Australia, this is interpreted to refer to all 'admitted' patient episodes of care, which can include same-day admissions. To maintain consistency with other hospital data reporting, this report uses the term 'admitted' patient care instead of inpatient' care. Further variations are outlined under each impacted indicator.

Table 1.1: Acute care

Acute care HCQO indicator requested	Indicator name used in this report	Data source	Latest data reported to OECD (year) <sup>(a)</sup>
Patient-based AMI 30-day (in- hospital and out of hospital) mortality - using linked data			
Admission-based AMI 30 day in- hospital mortality - using unlinked data	AMI in-hospital mortality rate	AIHW NHMD	2020-21
Patient-based haemorrhagic stroke 30-day (in-hospital and out of hospital) mortality - using linked data			
Admission-based haemorrhagic stroke 30 day in-hospital mortality - using unlinked data	Haemorrhagic stroke in- hospital mortality rate	AIHW NHMD	2020-21
Patient-based ischaemic stroke 30-day (in-hospital and out of hospital) mortality - using linked data			
Admission-based ischaemic stroke 30 day in-hospital mortality - using unlinked data	Ischaemic stroke in-hospital mortality rate	AIHW NHMD	2020-21
Hip fracture surgery initiated within 2 calendar days after admission to the hospital			

<sup>(</sup>a) OECD requested data in calendar years. Data provided by the AIHW is in financial year periods.

Mental health PREMs HCQO indicator requested	Indicator name used in this report	Data source	Latest data reported to OECD (year) <sup>(a)</sup>
Care providers treating mental health service users with courtesy and respect (inpatient care)	Care providers treating mental health service users with courtesy and respect (admitted patient)	YES survey Database	2020-21
Care providers treating mental health service users with courtesy and respect (community-based care)	Care providers treating mental health service users with courtesy and respect (community-based care)	YES survey Database	2020-21
Care providers spending enough time with mental health service users (inpatient care)	••		••
Care providers spending enough time with mental health service users (community-based care)	••		••
Care providers providing easy-to- understand explanations to mental health service users (inpatient care)	Care providers providing easy-to- understand explanations to mental health service users (admitted patient)	YES survey Database	2020-21
Care providers providing easy-to- understand explanations to mental health service users (community- based care)	Care providers providing easy-to- understand explanations to mental health service users (community- based care)	YES survey Database	2020-21
Care providers involving mental health service users in decisions about care and treatment (inpatient care)	Care providers involving mental health service users in decisions about care and treatment (admitted patient)	YES survey Database	2020-21
Care providers involving mental health service users in decisions about care and treatment (community-based care)	Care providers involving mental health service users in decisions about care and treatment (community-based care)	YES survey Database	2020-21

(a) OECD requested data in calendar years. Data provided by the AIHW is in financial year periods.

Table 1.3: Patient experiences

Patient experiences HCQO indicator requested	Indicator name used in this report	Data source	Latest data reported to OECD (period) <sup>(a)</sup>
Consultation skipped due to costs	Consultation skipped due to costs	ABS Patient Experience Survey	2021-22
Medical tests, treatment or follow-up skipped due to costs	Medical tests skipped due to costs	ABS Patient Experience Survey	2020-21
Prescribed medicines skipped due to costs	Prescribed medicines skipped due to costs	ABS Patient Experience Survey	2021-22
Doctor spending enough time with patients during the consultation	Patient having enough time with doctor	ABS Patient Experience Survey	2021-22
Doctor treating patient with courtesy and respect <sup>(b)</sup>			
Regular doctor spending enough time with patients during the consultation <sup>(c)</sup>			
Regular doctor providing easy-to- understand explanations <sup>(c)</sup>			

Regular doctor involving patients in decisions about care or treatment <sup>(c)</sup>		 :
Doctor providing easy-to-understand explanations	••	 ••
Doctor giving opportunity to ask questions or raise concerns	•••	 
Regular doctor giving opportunity to ask questions or raise concerns		 
Doctor involving patients in decisions about care or treatment		 
Regular doctor treating patient with courtesy and respect		 ••

- a. OECD requested data in calendar years. Data provided by the AIHW is in financial year periods
- b. Data provided but was not published on the OECD. Stat  $\,$
- c. Data published for Australia on OECD. Stat, but the data source is unclear.

Table 1.4: Patient safety

Patient safety HCQO indicator requested	Indicator name used in this report	Data source	Latest data reported to OECD (year) <sup>(a)</sup>
Retained surgical item or unretrieved device fragment using unlinked data	Retained surgical item or unretrieved device fragment using unlinked data	AIHW NHMD	2020-21
Retained surgical item or unretrieved device fragment using linked data			
Postoperative pulmonary embolism - hip and knee replacement hospitalisations using unlinked data	Postoperative pulmonary embolism - hip and knee replacement hospitalisations using unlinked data	AIHW NHMD	2020-21
Postoperative pulmonary embolism - hip and knee replacement hospitalisations using linked data	••		
Postoperative deep vein thrombosis - hip and knee replacement hospitalisations using unlinked data	Postoperative deep vein thrombosis - hip and knee replacement hospitalisations using unlinked data	AIHW NHMD	2020-21
Postoperative deep vein thrombosis - hip and knee replacement hospitalisations using linked data			
Postoperative sepsis - abdominal hospitalisations using unlinked data	Postoperative sepsis - abdominal hospitalisations using unlinked data	AIHW NHMD	2020-21
Postoperative sepsis - abdominal hospitalisations using linked data	••	••	
Obstetric trauma vaginal delivery with instrument	Obstetric trauma vaginal delivery with instrument	AIHW NHMD	2020-21
Obstetric trauma vaginal delivery without instrument	Obstetric trauma vaginal delivery without instrument	AIHW NHMD	2020-21

(a) OECD requested data in calendar years. Data provided by the AIHW is in financial year periods.

Table 1.5: Prescribing in primary care

Prescribing in primary care HCQO requested	Indicator name used in this report	Data	Latest data reported to
		source	OECD (year) <sup>(a)</sup>

Adequate use of cholesterol lowering treatment in people with diabetes (DDDs/Days)	People with diabetes with at least one prescription of cholesterol lowering medication	PBS	2022
First choice antihypertensives for people with diabetes (DDDs/Days)	People with diabetes with prescription of first choice antihypertensive medication	PBS	2022
Long-term use of benzodiazepines and related drugs in ≥65 years of age (≥365 DDDs/Days per year)	Long-term benzodiazepine use among older adults	PBS	2022
Use of long-acting benzodiazepines in ≥65 years of age	Long-acting benzodiazepine use among older adults	PBS	2022
Proportion of people 65 and over prescribed antipsychotics	Proportion of older adults prescribed antipsychotics	PBS	2022
Proportion of 75 years and over who are taking more than 5 medications concurrently	Polypharmacy among people aged 75 and over	PBS	2022
Any anticoagulating drug in combination with an oral NSAID	Long-term prescription of any anticoagulating drug in combination with an oral nonsteroidal anti-inflammatory drug (NSAID)	PBS	2022
Overall volume of antibiotics for systemic use prescribed (DDDs)	Total volume of antibiotics for systemic use	PBS	2022
Volume of cephalosporines and quinolones as a proportion of all systemic antibiotics prescribed (DDDs)	Volume of second line antibiotics as a share of total volume	PBS	2022
Overall volume of opioids prescribed	Overall volume of opioids prescribed	PBS	2022
Proportion of the population who are chronic opioid users	Proportion of the population who are chronic opioid users	PBS	2022

(a) OECD requested data in calendar years. Data provided by the AIHW is in financial year periods.

Table 1.6: Primary care

Primary care HCQO requested	Indicator name used in this report	Data source	Latest data reported to OECD (year) <sup>(a)</sup>
Asthma hospital admission	Asthma hospital admission rate	AIHW NHMD	2020-21
Chronic obstructive pulmonary disease (COPD) hospital admission	COPD hospital admission rate	AIHW NHMD	2020-21
Congestive heart failure (CHF) hospital admission	CHF hospital admission rate	AIHW NHMD	2020-21
Hypertension hospital admission	Hypertension hospital admission rate	AIHW NHMD	2020-21
Diabetes hospital admission	Diabetes hospital admission rate	AIHW NHMD	2020-21
Admission-based diabetes lower extremity amputation using unlinked data	Diabetes lower extremity amputation rate	AIHW NHMD	2020-21
Patient-based diabetes lower extremity amputation using linked data		••	

(a) OECD requested data in calendar years. Data provided by the AIHW is in financial year periods.

The OECD requested data for three additional indicator sets relating to integrated care, mental health care and end of life care, but Australia did not provide data for those indicator modules.

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# **Acute care**

This section presents data for the acute care indicators supplied by Australia to the OECD HCQO collection. It compares these data with the results reported for other OECD countries, and comments on the comparability of the data provided to the OECD specification (<u>HCQO indicators 2022-23 definitions [PDF 1.75MB]</u>).

The OECD published all acute care indicators in OECD. Stat and a selection of these indicators in Health at a glance 2023. Australia calculated and submitted 3 of the 7 acute care indicators requested. The OECD specifications request patient-based and admission-based data. Australia has supplied data for the admission-based indicators but uses hospital separations data (that is, where the data are captured at the point at which an episode of care for an admitted patient ends). These indicators are:

- Acute myocardial infarction (AMI) in-hospital mortality rate
- Haemorrhagic stroke in-hospital mortality rate
- Ischaemic stroke in-hospital mortality rate.

The acute care indicators measure the proportion of total separations where the patient died in the hospital within 30 days of admission, within the one episode of care. In-hospital mortality rates for AMI and stroke may reflect the quality of care provided for those conditions (OECD 2023).

The indicator definitions can be viewed here: Acute care indicator definitions.

### Overall data comparability and methods

The most recent data supplied by Australia for the acute care indicators is for 2020-21, recorded as 2020 in the OECD. Stat database. In this report, we present the latest data when comparing Australia with other OECD countries and provide 10-year Australian data to illustrate time trends. Data from other OECD countries published on OECD. Stat for 2020 are used for comparison and calculation of OECD averages in this section. These data were extracted from the OECD. Stat database in January 2024, and may not reflect subsequent updates made to the database.

The OECD requested acute care data for adults aged 45 and over only, disaggregated by age and sex. The OECD then calculated age-sex standardised rates (standardised to the equivalent 2015 OECD population) for these indicators based on the supplied data. The indicators are presented on the same basis here.

Australia's national data collection for admitted patients can identify if a patient dies during a single episode of care in one hospital. However, if a patient is discharged from hospital and subsequently re-admitted to the same or a different hospital (for example, as a result of a complication), or had a change in the type of care provided (for example, from acute care to rehabilitation care), and then subsequently died within 30 days of the original hospital admission, that death would not be reported by the AIHW as part of these indicators. This is because data for the original admissions are not 'linked' to the subsequent admissions in the national data collection. As a result, the acute care indicators reported by the AIHW may underestimate true in-hospital fatality rates.

# Acute myocardial infarction (AMI) in-hospital mortality rate

The AMI in-hospital mortality indicator measures deaths as a result of AMI that occurred within 30 days of hospital admission. AMI is a life-threatening event that occurs when a blood vessel supplying the heart is suddenly blocked, causing damage to the heart muscle and its functions.

Comparisons are presented for other OECD countries that reported data for this indicator (that is, based on admissions data, not patient data). Note that the AIHW could only provide data for separations where death occurred within the one (hospital) episode of care.

In Australia, the AMI in-hospital mortality rate in 2020 was 3.3 per 100 separations, lower than the OECD average of 6.8 deaths per 100 separations. Among the countries that provided data for this indicator for 2020, Iceland, Norway, and the Netherlands reported the lowest mortality rates (1.9, 2.7 and 2.9 per 100 separations, respectively).

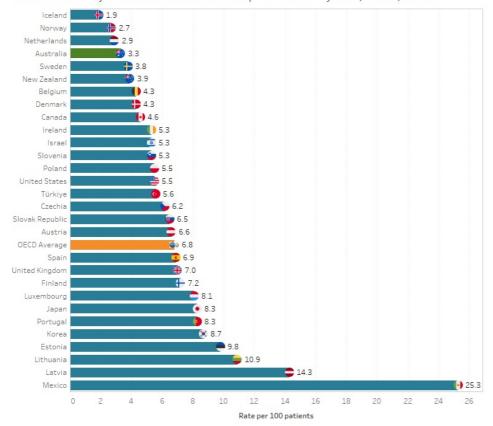
Australia's overall rate has decreased from 4.7 per 100 separations in 2011, consistent with the overall decline in coronary heart disease mortality over the past decades among other OECD countries. The trend may be attributed to reductions in smoking and improvements in treatment for heart diseases (OECD 2023).

Interactive AC1.1 below compares OECD countries with data published for this indicator for 2020, while AC1.2 presents Australia's 10-year trend for this indicator where data are available.

### Figures AC1.1 and AC1.2

AC1.1 presents OECD countries with data published for AMI in-hospital mortality rate in 2020, which shows Australia had one of the lowest mortality rates. AC1.2 presents Australia's 10-year trend for this indicator, which shows an overall decrease.

AC1.1: Acute myocardial infarction in-hospital mortality rate, OECD, 2020



Refer to the data tables for more information.

## Haemorrhagic stroke in-hospital mortality rate

The haemorrhagic stroke in-hospital mortality indicator measures deaths as a result of haemorrhagic stroke that occurred within 30 days of hospital admission. Haemorrhagic stroke occurs when a blood vessel supplying blood to the brain ruptures and begins to bleed.

Comparisons are presented for other OECD countries that reported data for this indicator (that is, based on admissions data, not patient data). Note that the AIHW could only provide data for separations where death occurred within the one (hospital) episode of care.

In Australia, the haemorrhagic stroke in-hospital mortality rate was 18 per 100 separations, lower than the OECD average of 23.5 deaths per 100 separations. Among the countries that provided data for this indicator for 2020, Iceland and Japan had the lowest mortality rates (10.6 and 11.4 per 100 separations, respectively).

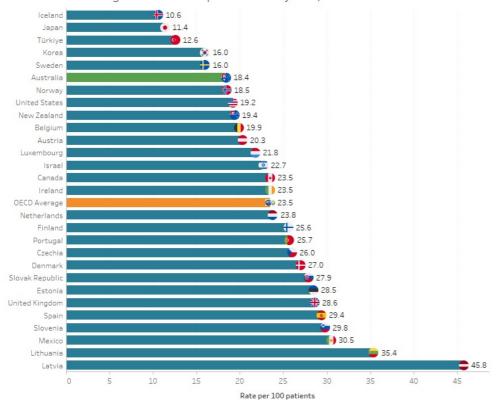
In Australia, the haemorrhagic stroke in-hospital mortality rate was higher for females than males (20 and 17 per 100 separations, respectively). Australia's overall rate has decreased over time from 23 per 100 separations in 2011.

Interactive AC2.1 below compares OECD countries with data published for this indicator for 2020, while AC2.2 presents Australia's 10-year trend for this indicator where data are available.

### Figures AC2.1 and AC2.2

AC2.1 presents OECD countries with data published for haemorrhagic stroke in-hospital mortality rate in 2020, which shows Australia had a lower mortality rate than the OECD average. AC2.2 presents Australia's 10-year trend for this indicator, which shows an overall decrease over time.

AC2.1: Haemorrhagic stroke in-hospital mortality rate, 2020



Refer to the Data tables for more information.

### Ischaemic stroke in-hospital mortality rate

The ischaemic stroke in-hospital mortality indicator measures deaths as a result of ischaemic stroke that occurred within 30 days of hospital admission. Ischaemic stroke occurs when a blood vessel supplying blood to the brain suddenly becomes blocked.

Comparisons are presented for other OECD countries that reported data for this indicator (that is, based on admissions data, not patient data). Note that the AIHW could only provide data for separations where death occurred within the one (hospital) episode of care.

In Australia, the ischaemic stroke in-hospital mortality rate was 4.8 per 100 separations, lower than the OECD average of 8.1 deaths per 100 separations. Among the countries that provided data for this indicator for 2020, Japan and Iceland had the lowest mortality rates (2.9 and 3.0 per 100 separations, respectively).

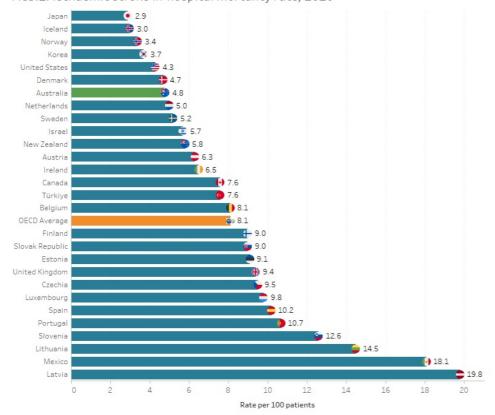
In Australia, the ischaemic stroke in-hospital mortality rate was slightly higher for females than males (4.9 and 4.4 per 100 separations, respectively). Australia's rate has decreased from 8.3 per 100 separations in 2011.

Interactive AC3.1 below compares OECD countries with data available for this indicator for 2020, while AC3.2 presents Australia's 10-year trend for this indicator where data are available.

### Figures AC3.1 and AC3.2

AC3.1 presents OECD countries with data published for ischaemic stroke in-hospital mortality rate in 2020, which shows Australia's mortality rate was below the OECD average. AC3.2 presents Australia's 10-year trend for this indicator, which shows a decreasing trend.

AC3.1: Ischaemic stroke in-hospital mortality rate, 2020



# References

OECD 2023. Health at a glance 2023: OECD indicators. Paris: OECD.

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# Mental health patient-reported experience measures (PREMs)

This section presents data for the mental health patient-reported experience measures (PREMs) indicators supplied by Australia to the OECD HCQO collection. It compares these data with the results reported for other OECD countries, and comments on the comparability of the data provided to the OECD specification.

The OECD published all mental health PREMs indicators in OECD. Stat and a selection of these indicators in Health at a glance 2023. Australia calculated and submitted 6 of the 8 mental health PREMs indicators requested. These indicators are:

- Care providers treating mental health service users with courtesy and respect (admitted patient care)
- Care providers treating mental health service users with courtesy and respect (community-based care)
- Care providers providing easy-to-understand explanations to mental health service users (admitted patient care)
- Care providers providing easy-to-understand explanations to mental health service users (community-based care)
- Care providers involving mental health service users in decisions about care and treatment (admitted patient care)
- Care providers involving mental health service users in decisions about care and treatment (community-based care).

The indicator definitions can be viewed here: mental health patient-reported experience measures (PREMs) definitions.

### Overall data comparability and methods

The most recent data provided by Australia for the mental health patient-reported experience measures (PREMs) indicators corresponds to the year 2020-21. These data are recorded as 2021 in the OECD. Stat database. In this report, we present the latest available data for comparison with other OECD countries, and data for the most recent 5 years for Australia to illustrate time trends. These data were extracted from the OECD. Stat database in January 2024, and may not reflect subsequent updates made to the database.

The OECD requested mental health PREMs data for adults aged 16 and over, disaggregated by age and sex. The OECD then calculated age-sex standardised rates (standardised to the equivalent 2015 OECD population) for these indicators based on the supplied data. The indicators are presented on the same basis here.

The data were sourced from Your Experience of Service survey (YES) data supplied under the Your Experience of Service National Best Endeavours Data Set (YES NBEDS). It should be noted that, currently, only three states/territories provide data under this survey, and variations in methods may exist across states/territories participating in the survey.

### Care providers treating mental health service users with courtesy and respect (admitted patient care)

This indicator was derived from multiple questions within the YES survey. These questions specifically inquire about individuals' experiences when engaging with mental health services in an admitted patient care setting.

In Australia, 80% of people aged 16 and over reported that care providers treated them with courtesy and respect in 2021, lower than the OECD average of 81% of people aged 16 and over. Only three other OECD countries reported data for this indicator in 2021. Among those, Portugal had the highest proportion with 100% of people 16 years and over who reported that their care providers treated them with courtesy and respect.

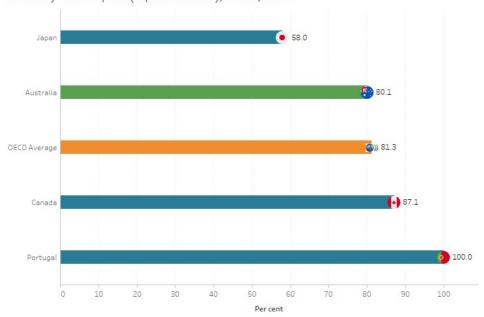
In Australia, the percentage was higher for males (83%) than females (81%). This rate has been stable over the past 5 years, ranging from 79% in 2018 to 81% in 2020.

Interactive MHPREMs1 below presents Australia's 5-year trend for this indicator where data are available.

### Figures PREMs 1.1 and PREMs 1.2

The figure presents Australia's 5-year trend for 'Care providers treating mental health service users with courtesy and respect (admitted patient care)' indicator. The rate has stayed stable over time.

PREMs1.1: Care providers treating mental health patients with courtesy and respect (inpatient care), OECD, 2021



Refer to the Data tables for more information.

# Care providers treating mental health service users with courtesy and respect (community-based care)

This indicator was derived from multiple questions within the YES survey. These questions specifically inquire about individuals' experiences when engaging with mental health services in community-based settings.

In Australia, 87.5% of people aged 16 and over reported that care providers treated them with courtesy and respect in community-based mental health care settings in 2021, slightly lower than the OECD average of 88% of people aged 16 and over. Only three other countries reported data for this indicator in 2021. Among those, Canada had the highest proportion of people aged 16 and over who reported that their care providers treated them with courtesy and respect (92.5% of people 16 years and over).

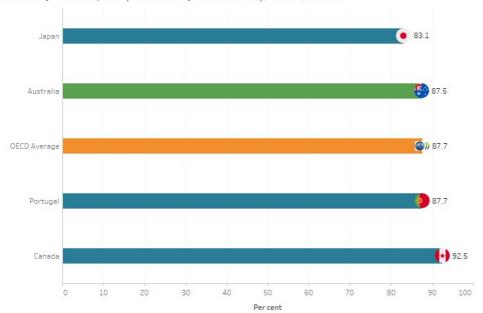
In Australia, this rate has been stable over the past 5 years, ranging from 85% in 2019 to 88% in 2020 and 2021. The percentage was higher for females (90%) than males (88%).

Interactive MHPREMs2 below presents Australia's 5-year trend for this indicator where data are available.

### Figures PREMs 2.1 and PREMS 2.2

The figure presents Australia's 5-year trend for 'Care providers treating mental health service users with courtesy and respect (community-based care)' indicator. The rate has stayed stable over time.

PREMs2.1: Care providers treating mental health patients with courtesy and respect (community-based care), OECD, 2021



Refer to the Data tables for more information.

# Care providers providing easy-to-understand explanations to mental health service users (admitted patient care)

This indicator was derived from multiple questions within the YES survey. These questions specifically inquire about individuals' experiences when engaging with mental health services in an admitted patient care setting.

In Australia, 54% of people aged 16 and over reported that their care providers provided easy-to-understand explanations in 2021, lower than the OECD average of 69% of people aged 16 and over. Only three other countries reported data for this indicator in 2021. Among those, Portugal had the highest proportion of people aged 16 and over reported that the care providers providing easy-to-understand explanations to mental health service users (89% of people 16 years and over).

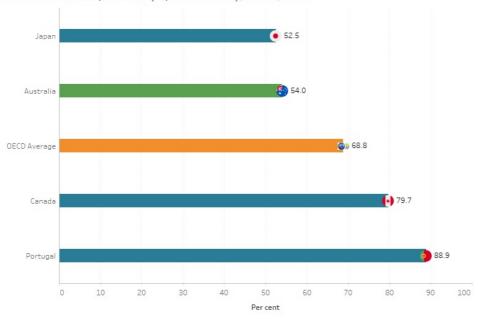
In Australia, this rate has remained relatively stable over the past 5 years The percentage was higher for males (59%) than females (54.5%).

Interactive MHPREMs3 below presents Australia's 5-year trend for this indicator where data are available.

### Figures PREMs 3.1 and PREMs 3.2

The figure presents Australia's 5-year trend for 'Care providers providing easy-to-understand explanations to mental health service users (admitted patient care)' indicator. The rate has fluctuated over time.

PREMs3.1: Care providers providing easy-to-understand explanations to mental health patients (inpatient care), OECD, 2021



Refer to the <u>Data tables</u> for more information.

# Care providers providing easy-to-understand explanations to mental health service users (community-based care)

This indicator was derived from multiple questions within the YES survey. These questions specifically inquire about individuals' experiences when engaging with mental health services in community-based settings.

In Australia, 66% of people aged 16 and over reported that the care providers providing easy-to-understand explanations to mental health service users in 2021, lower than the OECD average of 78%. Only three other countries reported data for this indicator in 2021. Among those, Portugal had the highest proportion of people aged 16 and over reported that the care providers providing easy-to-understand explanations to mental health service users (94% of people 16 years and over).

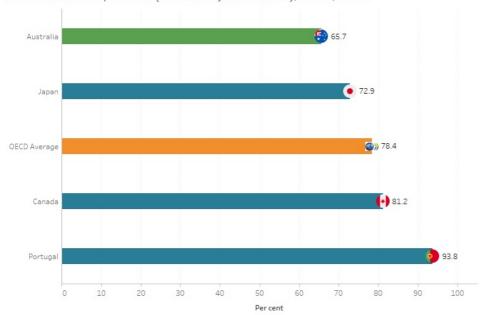
In Australia, this rate has remained relatively stable over the past 5 years. The percentage was higher for females (68%) than males (67%).

Interactive MHPREMs4 below presents Australia's 5-year trend for this indicator where data are available.

### Figures PREMs 4.1 and PREMs 4.2

The figure presents Australia's 5-year trend for 'Care providers providing easy-to-understand explanations to mental health service users (community-based care)' indicator. The rate has fluctuated over time.

PREMs4.1: Care providers providing easy-to-understand explanations to mental health patients (community-based care), OECD, 2021



Refer to the <u>Data tables</u> for more information.

# Care providers involving mental health service users in decisions about care and treatment (admitted patient care)

This indicator was derived from multiple questions within the YES survey. These questions specifically inquire about individuals' experiences when engaging with mental health services in an admitted patient care setting.

In Australia, 71% of people aged 16 and over reported that care providers involving mental health service users in decisions about care and treatment in 2021, lower than the OECD average of 74.5%. Only three other countries reported data for this indicator in 2021. Among those, Portugal had the highest proportion of people aged 16 and over reported that the care providers involving mental health service users in decisions about care and treatment (100% of people 16 years and over).

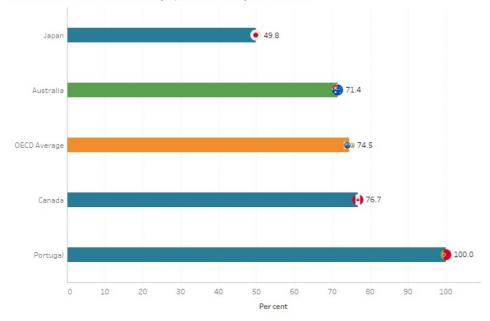
In Australia, the percentage was higher for males (75%) than females (72%). This rate has remained relatively stable over the past 5 years.

Interactive MHPREMs5 below presents Australia's 5-year trend for this indicator where data are available.

### Figures PREMs 5.1 and PREMs 5.2

The figure presents Australia's 5-year trend for 'Care providers involving mental health service users in decisions about care and treatment (admitted patient care)' indicator. The rate has fluctuated over time.

PREMs5.1: Care providers involving mental health patient in decisions about care and treatment (inpatient care), OECD, 2021



## Care providers involving mental health service users in decisions about care and treatment (communitybased care)

This indicator was derived from multiple questions within the YES survey. These questions specifically inquire about individuals' experiences when engaging with mental health services in community-based settings.

In Australia, 81.7% of people aged 16 and over reported that care providers involving mental health service users in decisions about care and treatment in 2021, this is similar to the OECD average of 82.2% of people aged 16 and over. Only three other countries reported data for this indicator in 2021. Among those, Portugal had the highest proportion of people aged 16 and over who reported that the care providers involving mental health service users in decisions about care and treatment (93% of people 16 years and over).

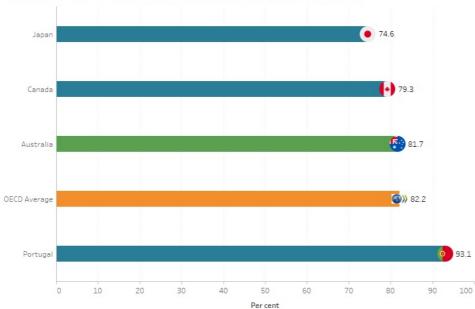
In Australia, the percentage was higher for females (84%) than males (82%). This rate has remained relatively stable over the past 5 years.

Interactive MHPREMs6 below presents Australia's 5-year trend for this indicator where data are available.

### Figures PREMs 6.1 and PREMs 6.2

The figure presents Australia's 5-year trend for 'Care providers involving mental health service users in decisions about care and treatment (community-based care)' indicator. The rate has fluctuated over time.

PREMs6.1: Care providers involving mental health patient in decisions about care and treatment (community-based care), OECD, 2021



Refer to the Data tables for more information.

### References

OECD 2023. Health at a glance 2023: OECD indicators. Paris: OECD.

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# Patient experiences

This section presents data for the patient experience indicators supplied by Australia to the HCQO collection. It compares these data with the HCQO results for other OECD countries, and comments on the comparability of the data provided to the OECD specification (OECD 2021).

The OECD published all patient experience indicators in OECD. Stat and a selection of patient experience indicators in Health at a glance 2023. Australia calculated and submitted 4 out of 13 of the patient experience indicators requested:

- consultation skipped to costs
- medical tests, treatment or follow-up skipped due to costs
- prescribed medicines skipped due to costs
- doctor spending enough time with patients during the consultation.

See Patient experiences indicator definitions.

# Overall data comparability and methods

The most recent data supplied by Australia for the patient experience indicators were for 2020-21 and 2021-22. The data are recorded as 2020 and 2021 data in the OECD. Stat database, and so are described in that way here. These data were extracted from the OECD. Stat database in January 2024, and may not reflect subsequent updates made to the database.

The OECD requested patient experiences data for adults aged 16 and over, disaggregated by age and sex. The OECD then calculated age-sex standardised rates (standardised to the equivalent 2015 OECD population) for these indicators based on the supplied data. The indicators are presented on the same basis here.

The ABS Patient Experience Survey is an annual survey that is used to collect information from people aged 15 and over about their experiences with selected aspects of the health system over the last 12 months. For the 'consultation skipped' indicator, the ABS survey asked people a number of questions about their experiences with GPs, medical specialists, dental professionals or hospitals, whereas the OECD HCQO requested information in relation to experiences with 'a health professional' (for example, a doctor, nurse or allied health professional). Therefore, the wording used by the ABS in the Patient Experience Survey differs from the OECD specifications.

### Consultations skipped due to costs

This indicator was supplied using multiple questions from the ABS Patient Experience Survey that asked people whether there had been any time they needed to go to a GP, medical specialist, dental professional or hospital but did not go, or delayed going, due to the cost.

In Australia, 14% of people aged 16 and over skipped a consultation due to costs in 2021, almost twice the OECD average of 7.8% of people aged 16 and over. Among the countries that reported 2021 data for this indicator, Australia had the highest proportion while Korea had the lowest proportion of people that skipped a consultation due to costs (2.8% of people 16 years and over).

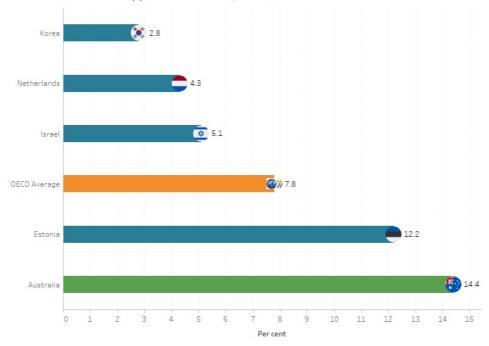
In Australia, the percentage of people aged 16 and over skipped a consultation due to costs was higher for females (16%) than males (13%). This rate has fluctuated over time in the past decade, ranging from 8.9% in 2016 to 19% in 2012.

Interactive PE1 below presents Australia's 10-year trend for this indicator where data are available.

### Figures PE1.1 and PE1.2

The figure presents Australia's 10-year trend for 'Consultations skipped due to costs' indicator. The rate has fluctuated over time.

PE1.1: Consultation skipped due to costs, OECD, 2021



Refer to the Data tables for more information.

### Medical tests skipped due to costs

This indicator was supplied using multiple questions from the ABS Patient Experience Survey that asked people whether they delayed, or did not get, referred pathology or imaging tests due to the cost. Data for this indicator was not collected in the 2021 ABS patient experience survey, so the data from 2020 is presented below.

In Australia, 14% of people aged 16 years and over delayed or skipped a pathology or imaging test due to costs, almost twice the OECD average of 7.8%. Among countries that reported 2020 data for this indicator, Poland had the lowest proportion of people that skipped a pathology or imaging test due to costs (0.5% of people 16 years and over).

In Australia, the rate of people who delayed or skipped a pathology or imaging test due to costs has varied over the past decade, ranging from 3.0% in 2018 to 14% in 2020. This percentage was higher for females (17%) than males (10%).

Interactive PE2 below presents Australia's 10-year trend for this indicator where data are available.

### Figures PE2.1 and PE2.2

The figure presents Australia's 10-year trend for 'Medical tests skipped due to costs' indicator.

PE2.1: Medical tests, treatment or follow-up skipped due to costs, OECD, 2020 Poland - 0.5 3.5 Netherlands United Kinadom Germany Norway Sweden Canada OECD Average New Zealand Switzerland United States 12 16 18

Prescribed medicines skipped due to costs

This indicator was supplied using the ABS Patient Experience Survey question that asked whether people delayed or did not get a prescription due to the cost.

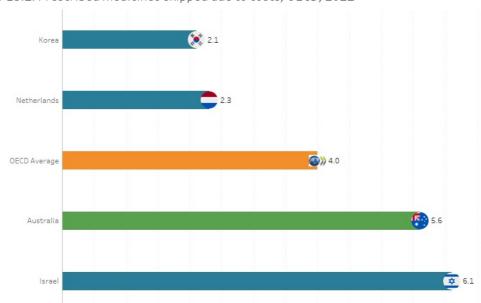
In Australia, 5.6% of people aged 16 and over delayed or skipped prescribed medicines due to costs in 2021, higher than the OECD average of 4% of people aged 16 and over. Among countries that reported 2021 data for this indicator, Korea had the lowest proportion of people that skipped prescribed medicines due to costs (2.1% of people 16 years and over).

In Australia, the percentage of people aged 16 and over that skipped prescribed medicines due to costs has reduced in 2021 (5.6% in 2021 as compared to 8.5% in 2020) The proportion was higher for females (6.1%) than males (5.1%).

Interactive PE3 below presents Australia's 10-year trend for this indicator where data are available.

### Figures PE3.1 and PE3.2

The figure presents Australia's 10-year trend for 'Prescribed medicines skipped due to costs' indicator. The rate has remained stable since 2016.



PE3.1: Prescribed medicines skipped due to costs, OECD, 2021

## Patient having enough time with doctor

1.0

1.5

2.0

2.5

3.0

3.5

Per cent

0.5

This indicator was supplied using a question from the ABS Patient Experience Survey that asked those people who saw a GP for their own health about whether the doctor(s) spent enough time with the respondents during the consultation for the OECD HCQOs.

4.0

4.5

5.0

5.5

6.0

In Australia, 91% of patients aged 16 and over reported that for all the GPs seen in the past 12 months, the doctor had always or often spent enough time with them in 2021, higher than the OECD average of 88% of patients aged 16 and over. Among countries that reported 2021 data for this indicator, Estonia had the highest proportion of people that reported that a doctor spent enough time with them (92% of people 16 years and over)

In Australia this rate has remained relatively stable since 2013. The proportion was slightly higher for males (92%) than females (89.5%).

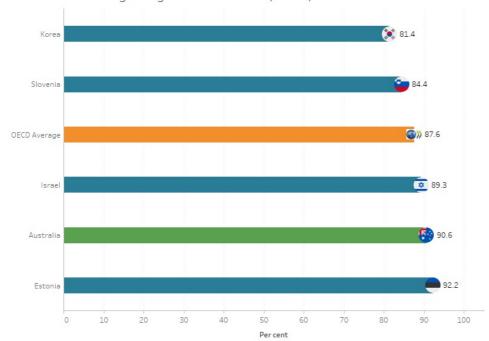
The OECD recommends monitoring patient experience with any doctor, as Australia has done, but some of the other countries to which Australia is compared measure experience with a patient's regular doctor (OECD 2021).

Interactive PE4 below presents Australia's 10-year trend for this indicator where data are available.

# Figures PE4.1 and PE4.2

PE4.1 presents Australia's 10-year trend for 'Patient having enough time with doctor' indicator. The rate has remained stable since 2013.

PE4.1: Patient having enough time with doctor, OECD, 2021



Refer to the <u>Data tables</u> for more information.

# References

OECD 2023. *Health at a glance 2023:* OECD indicators. Paris: OECD.

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# Patient safety

This section presents data for the patient safety indicators supplied by Australia to the HCQO collection. It compares these data with the HCQO results for other OECD countries, and comments on the comparability of the data provided to the OECD specification (OECD 2021).

Patient safety remains a pressing issue in the delivery of health services, with over 15% of hospital expenditure and activity in OECD countries attributable to treating patients who experienced a safety event, many of which are preventable (OECD 2021). Patient safety indicators screen for events that patients experience during their hospital stays as a result of exposure to the health-care system - either adverse events that cannot be totally avoided or events that should never occur (OECD 2021).

The OECD published all patient safety indicators in OECD. Stat and a selection of these indicators in Health at a glance 2023. Australia submitted results for 6 of 8 patient safety indicators requested:

- Retained surgical item or unretrieved device fragment
- Post-operative pulmonary embolism hip and knee replacement hospitalisations
- Post-operative deep vein thrombosis hip and knee replacement hospitalisations
- Post-operative sepsis abdominal hospitalisations
- Obstetric trauma after vaginal delivery with instrument
- Obstetric trauma after vaginal delivery without instrument.

The indicator definitions can be viewed here: Patient safety indicator definitions

### Overall data comparability and methods

The most recent data supplied by Australia for the patient safety indicators were for 2020-21. These data are recorded as 2020 data in the OECD. Stat database, and so are described in that way here. Data from other OECD countries published on OECD. Stat for 2020 are used for comparison and calculation of OECD averages in this section. These data were extracted from the OECD. Stat database in January 2024, and may not reflect subsequent updates made to the database.

The OECD requested patient safety data for adults aged 15 and over, disaggregated by age and sex. These indicator rates were not age-sex standardised by the OECD. The indicators are presented on the same basis here.

It should be noted that data from the AIHW's National Hospital Morbidity Database (NHMD) are collected primarily for the purposes of recording care provided to admitted patients, and that use of the data for HCQO purposes has not been validated for accuracy in Australia. The results should therefore be treated with caution. Health at a glance 2021 notes that 'variations in definitions and medical recording practices between countries can affect calculation of rates and limit data comparability in some cases' (OECD 2021:28). It further notes that 'higher adverse event rates may signal more developed patient safety monitoring systems and a stronger patient safety culture rather than worse care' (OECD 2021:28).

In Australia, there is a lack of financial disincentives connected to the reporting of adverse events, and this may have contributed to some relatively high rates reported for Australia. It is also possible that efforts to improve coding quality and to improve the focus on patient safety in Australia in recent years could have led to increased reporting of patient safety events in Australia compared with some other OECD countries.

A number of features of Australian patient safety monitoring would support the claim that Australia is one of those countries that has a more developed patient safety monitoring system. Australia employs specially trained staff to identify and code information from patient records. It is also likely that in Australia additional diagnoses are generally well recorded at the national level due to the ability to record up to 99 additional diagnoses for reporting to the NHMD.

The AIHW endeavoured to apply all specifications as supplied by the OECD; however, there were some parts where this was not able to be achieved. The OECD specifications for the patient safety indicators requested identification of readmissions in order to identify any subsequent related admissions to hospital within 30 days of the original hospital admission, as some adverse events are likely to manifest in the period following discharge from hospital. Australia's national data collection for admitted patients (the NHMD) is based on a single episode of care as the statistical unit (as described in the Acute care section). Therefore, Australia was unable to meet this requirement, and could only include instances that occurred within the one (hospital) episode of care in the calculations of the patient safety indicators.

The OECD specifications also requested the exclusion of some cases where the condition of interest was present on admission; however, due to data quality issues, the AIHW did not do this, as not all cases that arose during the episode were flagged as such.

# Retained surgical item or unretrieved device fragment

Sentinel events are a subset of adverse patient safety events that are wholly preventable and result in serious harm to, or death of, a patient (ACSQHC 2020). The 'unintended retention of a foreign object in a patient after surgery or other invasive procedure resulting in severe harm or death' is listed as one of the 10 sentinel events that are recommended for monitoring and reporting in Australia to drive national improvements in patient safety (ACSQHC 2020).

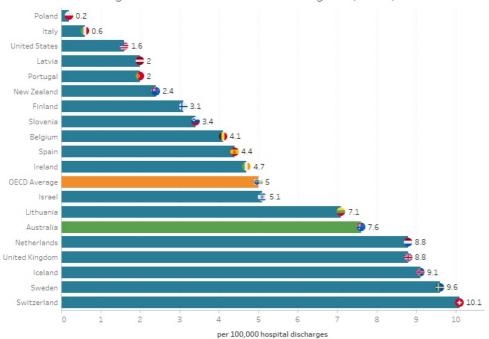
In Australia, the rate of retained surgical item or unretrieved device fragment for people aged 15 and over was 7.6 per 100,000 hospitalisations in 2020, higher than the OECD average of 5 per 100,000 hospitalisations. Australia had one of the highest rates of retained foreign objects among the OECD countries that submitted data for 2020 and Poland had the lowest rate with 0.2 per 100,000 hospitalisations.

In Australia, the rate has fluctuated over time in the past decade, ranging from 9.7 per 100,000 hospitalisations in 2013 to 7.4 per 100,000 hospitalisations in 2015.

Interactive PS1.1 below compares OECD countries that submitted data for this indicator for 2020, while PS1.2 presents Australia's 10-year trend for this indicator.

#### Figures PS1.1 and PS1.2

PS1.1 presents OECD countries with data available for retained surgical item or unretrieved device fragment indicator in 2020, which shows Australia had the highest rate. PS1.2 presents Australia's 10-year trend for this indicator, which shows a fluctuating trend over time.



PS1.1: Retained surgical item or unretrieved device fragment, OECD, 2020

### Post-operative pulmonary embolism and deep vein thrombosis - hip and knee replacement hospitalisations

Pulmonary embolism (PE) is a blood clot that breaks off from the deep veins and travels round the circulatory system to block the arteries in the lung. Deep vein thrombosis (DVT) is a blockage in the deep veins of the legs, thighs, or pelvis, caused by the clotting of blood. Most deaths arising from DVT are caused by PE (NICE 2018).

The risk of PE and DVT following hip and knee replacement procedures is higher than following other surgical procedures (OECD 2013). Both conditions may result in pain, decreased mobility, and sometimes death, but both can be prevented by anticoagulants and other measures (OECD 2021).

In Australia, the rate of PE after hip or knee replacement for people aged 15 and over was 556 per 100,000 hospitalisations in 2020, higher than the OECD average of 366 per 100,000 hospitalisations. Australia had the second highest rate of PE after hip or knee replacement among the OECD countries that submitted data for 2020 and Poland had the lowest rate with 15 per 100,000 hospitalisations.

In Australia, the rate has fluctuated over time in the past decade, ranging from 560 per 100,000 hospitalisations in 2013 to 472 per 100,000 hospitalisations in 2015.

Interactive PS2.1 below compares OECD countries that submitted data for 2020 for this indicator, while PM3.2 presents Australia's 10-year trend for this indicator.

In Australia, the rate of DVT after hip and knee replacement for people aged 15 and over was 635 per 100,000 hospitalisations in 2020, higher than the OECD average of 163 per 100,000 hospitalisations. Australia had the highest rate of PE after hip or knee replacement among the OECD countries that submitted data for 2020 and Italy had the lowest rate with 20 per 100,000 hospitalisations.

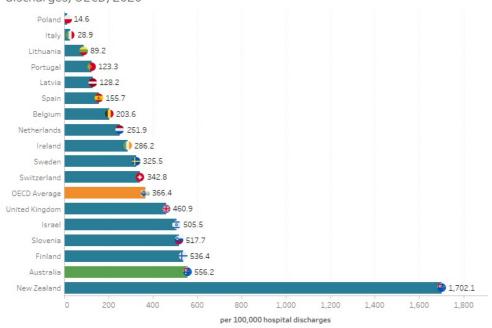
In Australia, the rate has reduced over the past decade from 1,187 per 100,000 hospitalisations in 2011.

Interactive PS3.1 below compares OECD countries that submitted data for 2020 for this indicator, while PS3.2 presents Australia's 10-year trend for this indicator.

# Figures PS2.1 and PS2.2

PS2.1 presents OECD countries with data available for post-operative PE in hip and knee replacement hospitalisations indicator in 2020, which shows Australia had the highest rate. PS2.2 presents Australia's 10-year trend for this indicator, which shows a fluctuating trend over time

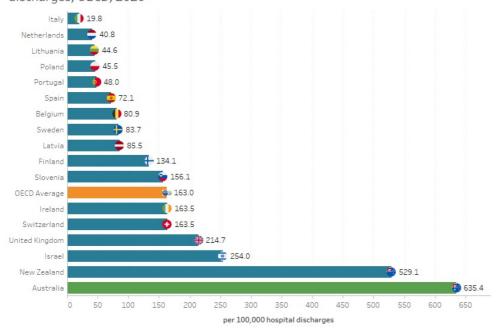
PS2.1: Post-operative pulmonary embolism -- hip and knee replacement discharges, OECD, 2020



### Figures PS3.1 and PS3.2

PS3.1 presents OECD countries with data available for post-operative DVT in hip and knee replacement hospitalisations indicator in 2020, which shows Australia had the highest rate. PS3.2 presents Australia's 10-year trend for this indicator, which shows an overall decrease since 2010.

PS3.1: Post-operative deep vein thrombosis -- hip and knee replacement discharges, OECD, 2020



Refer to the Data tables for more information.

### Post-operative sepsis - abdominal hospitalisations

Sepsis is the systematic response to an infection manifested by organ dysfunction, hypoperfusion or hypotension combined with one or more of the following: fever, tachypnoea, elevated white cell count (Antibiotic Expert Groups 2014). In many cases, post-operative sepsis can be prevented by prophylactic antibiotics, sterile surgical techniques, and good postoperative care (OECD 2017). The risk of sepsis following abdominal surgery is greater than following other surgical procedures (OECD 2015).

In Australia, the rate of post-operative sepsis for abdominal hospitalisations for people aged 15 was 3,416.5 per 100,000 hospitalisations in 2020, higher than the OECD average of 2,387 per 100,000 hospitalisations. Australia had one of the highest rates among OECD countries that submitted data, while Poland had the lowest rate (201 per 100,000 hospitalisations).

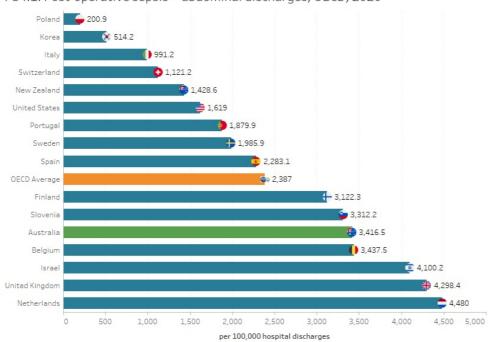
In Australia, the rate has increased from 2,641.5 per 100,000 hospitalisations in 2011 but has decreased from 4,190 per 100,000 hospitalisations in 2018.

Abdominopelvic procedure codes were required for the calculation of this indicator. The AIHW found that mapping was not straightforward in this instance as the ICD-9-CM codes supplied by the OECD did not map directly to the Australian Classification of Health Interventions (ACHI) code list used in Australia. The effect of this on the comparability of data is unknown.

Interactive P4.1 below compares OECD countries that submitted data for this indicator for 2020, while PS4.2 presents Australia's 10-year trend for this indicator.

### Figures PS4.1 and PS4.2

PS4.1 presents OECD countries with data available for post-operative sepsis in abdominal hospitalisations in 2020, which shows Australia had the 2<sup>nd</sup> highest rate. PS4.2 presents Australia's 10-year trend for this indicator, which shows an overall increase since 2011.



PS4.1: Post-operative sepsis -- abdominal discharges, OECD, 2020

Refer to the Data tables for more information.

# Obstetric trauma with and without instrument

A woman's safety during childbirth can be assessed by looking at potentially preventable, severe tearing of the perineum during vaginal delivery (OECD 2021). These types of tears cannot be completely prevented but can be reduced through appropriate labour management and high-quality obstetric care (OECD 2021).

Health at a glance 2023 recognised differences in data collection methods for obstetric trauma indicators among countries. According to the report, 'for Australia, Portugal, and the United States, data include women aged 15 and over, while in all other countries, the data pertain to women aged 18 years and above.'

The obstetric trauma with and without instrument indicators measure third and fourth degree tearing of the perineum during instrument-assisted (such as use of forceps or vacuum extraction) or non-assisted vaginal deliveries.

In Australia, the rate of obstetric trauma with instrument was 5.5 per 100 vaginal deliveries in 2020, lower than the OECD average of 5.9 per 100 vaginal deliveries. Among the OECD countries that submitted data for 2020 Poland had the lowest obstetric trauma rate (1 per 100 vaginal deliveries).

In Australia, the rate of obstetric trauma with instrument has reduced over the past decade from 7.5 per 100 vaginal deliveries in 2011.

Interactive PS5.1 below compares OECD countries that submitted data for 2020 for this indicator, while PS5.2 presents Australia's 10-year trend for this indicator.

In Australia, the rate of obstetric trauma without instrument was 2.2 per 100 vaginal deliveries in 2020, higher than the OECD average of 1.4 per 100 vaginal deliveries. Among the OECD countries that submitted data for 2020 Poland had the lowest obstetric trauma rate (0.2 per 100 vaginal deliveries).

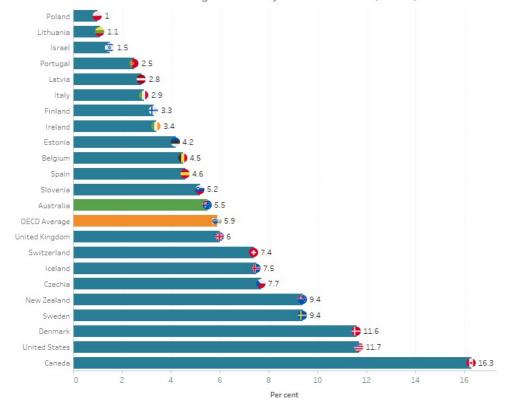
In Australia, the rate has remained relatively stable over the past decade.

Interactive PS6.1 below compares OECD countries that submitted data for 2020 for this indicator, while PS6.2 presents Australia's 10-year trend for this indicator.

## Figures PS5.1 and PS5.2

PS5.1 presents OECD countries with data available for obstetric trauma with instrument indicator in 2020, which shows Australia had a higher rate than the OECD average. PS5.2 presents Australia's 10-year trend for this indicator, which shows an overall decrease since 2010.

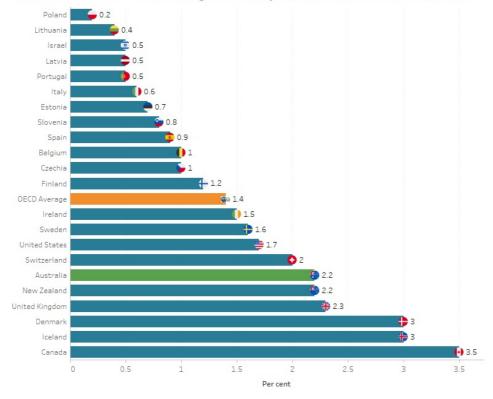




### Figures PS6.1 and PS6.2

PS6.1 presents OECD countries with data available for obstetric trauma without instrument indicator in 2020, which shows Australia had the 3<sup>rd</sup> highest rate. PS6.2 presents Australia's 10-year trend for this indicator, which has remained between 2.3 and 2.5 per 100 vaginal deliveries since 2010.





### References

ACSQHC (Australian Commission on Safety and Quality in Health Care) 2020. <u>Australian sentinel events list. Version 2</u>. Sydney: ACSQHC. Viewed 18 January 2024.

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# Prescribing in primary care

This section presents data for the prescribing in primary care indicators supplied by Australia to the HCQO collection. It compares these data with the HCQO results for other OECD countries, and comments on the comparability of the data provided to the OECD specification (OECD 2021).

Medicines can contribute to quality of life by curing or relieving the symptoms of illness. They can also prevent complications in existing health conditions or delay the onset of disease. However, the overuse, underuse, or misuse of prescription medicines may lead to health hazards and wasteful expenditure (OECD 2021).

The OECD published all prescribing in primary care indicators in OECD. Stat and a selection of these indicators in Health at a glance 2023. Australia submitted data for all 11 prescribing in primary care indicators:

- People with diabetes with at least one prescription of cholesterol lowering medication
- People with diabetes with prescription of first choice antihypertensive medication
- Older adults with prescription of long-term benzodiazepines or related drugs
- Older adults with prescription of long-acting benzodiazepines or related drugs
- Proportion of older adults prescribed antipsychotics
- · Patients with long-term prescription of any anticoagulating drug in combination with an oral nonsteroidal anti-inflammatory drug (NSAID)
- Total volume of antibiotics for systemic use
- Volume of second line antibiotics as a share of total volume
- Polypharmacy among people aged 75 and over
- Overall volume of opioids prescribed
- Proportion of the population who are chronic opioid users.

See Prescribing indicator definitions.

## Overall data comparability and methods

The most recent data supplied by Australia for the prescribing in primary care indicators were for 2022. Data from other OECD countries published on OECD. Stat for 2022 are used for comparison and calculation of OECD averages in this section. These data were extracted from the OECD. Stat database in January 2024, and may not reflect subsequent updates made to the database.

The OECD requested primary care prescribing data, disaggregated by age and sex. These indicator rates were not age-sex standardised by the OECD. The indicators are presented on the same basis here.

A number of the primary care prescribing indicators specify the denominators to be calculated based on selected cohorts 'in the prescribing database'. For Australia, this was calculated as a count of people who were dispensed medicines covered under PBS arrangements in the relevant year.

Health at a glance 2023 advised interpreting the data with caution 'as variations may reflect differences in disease burden and clinical practice. Moreover, the same medicine can be used to treat multiple diseases, which may result in overreporting of consumption levels' (OECD 2023).

<u>Defined daily dose (DDD)</u> is the assumed average dose per day for a drug when used for its main indication in adults (OECD 2021:156). DDDs do not necessarily reflect the true average daily dose used in a given country.

# People with diabetes

Diabetes is a chronic condition marked by high levels of glucose in the blood. It is caused either by the inability to produce insulin (a hormone made by the pancreas to control blood glucose levels) or by the body not being able to use insulin effectively, or both.

Diabetes may result in a range of health complications, including heart disease, kidney disease, blindness, and lower limb amputation. It is frequently associated with other chronic health conditions, such as cardiovascular disease and chronic kidney disease.

In Australia, the percentage of people with diabetes dispensed at least one prescription of cholesterol lowering medication was 80%, higher than the OECD average of 64.5% of people with diabetes. Among the OECD countries that reported 2022 data for this indicator patients, Australia had the highest proportion.

In Australia, the percentage of people with diabetes dispensed at least one prescription of cholesterol lowering medication has stayed relatively stable since 2013. The percentage was higher for males (82%) than females (78%) in 2022.

Interactive PR1.1 below compares OECD countries that submitted data for 2022 for this indicator, while PR1.2 presents Australia's 10-year trend for this indicator.

For people with diabetes and hypertension concurrently, angiotensin-converting enzyme inhibitors (ACE-Is) or angiotensin receptor blockers (ARBs) are recommended in most national guidelines as first-line medications for reducing blood pressure (OECD 2021).

In Australia, the percentage of diabetic patients that were dispensed at least one prescription for a first-line antihypertensive medication was 88%, slightly lower than the OECD average of 89.5% of people with diabetes. Among the OECD countries that reported 2022 data for this indicator patients, Australia had the third highest proportion, behind Finland (118% of diabetic patients) and Slovenia (89.5% of diabetic patients).

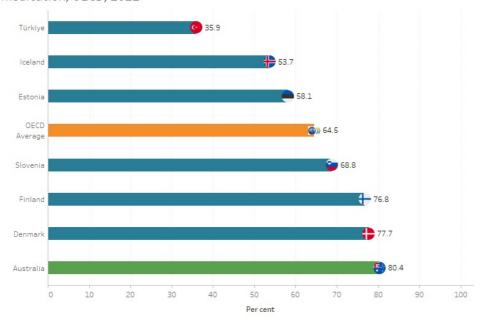
In Australia, the percentage of diabetic patients that were dispensed at least one prescription for a for a first-line antihypertensive medication has stayed relatively stable since 2013 with the highest being 91% in 2013. In 2022, this percentage was higher for males (89%) than females (86%).

Interactive PR2.1 below compares OECD countries that submitted data for 2022 for this indicator, while PR2.2 presents Australia's 10-year trend for this indicator.

### Figures PR1.1 and PR1.2

PR1.1 presents OECD countries with data available for 'people with diabetes with at least one prescription of cholesterol lowering medication' indicator in 2022, which shows Australia had the highest rate. PR1.2 presents Australia's 10-year trend for this indicator, which has remained between 78% and 82% since 2011.

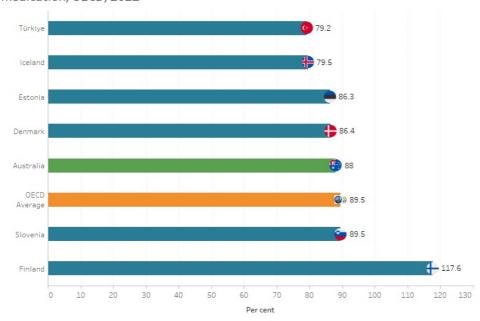
PR1.1: People with diabetes with at least one prescription of cholesterol lowering medication, OECD, 2022



# Figures PR2.1 and PR2.2

PR2.1 presents OECD countries with data available for 'people with diabetes with prescription of first choice antihypertensive medication' indicator in 2022, which shows Australia had the third highest rate. PR2.2 presents Australia's 10-year trend for this indicator, which shows a gradual decrease since 2013.

PR2.1: People with diabetes with prescription of first choice antihypertensive medication, OECD, 2022



Refer to the Data tables for more information.

### Benzodiazepine use among older adults

Benzodiazepine is a type of sedative, a group of drugs that cause calming and sedative effects due to their depressive activity on the central nervous system. It is commonly prescribed for older adults with anxiety and sleep problems. However, long-term use of benzodiazepines can lead to adverse events such as falls, road accidents and overdose, tolerance, dependence, and dose escalation (OECD 2017).

Long-acting benzodiazepines are not recommended for older adults as they take longer for the body to eliminate (OECD 2017). For this indicator, 'older adults' are defined as people aged 65 years and over and chronic benzodiazepine use is defined as  $\geq$ 365 DDDs in one year.

In Australia, the rate of older patients with a prescribing pattern indicating long-term use of benzodiazepines or related drugs was 1.9 per 1,000 older adults, lower than the OECD average of 21 per 1,000 older adults. Australia had the lowest rate among the OECD countries that reported data for this indicator.

In Australia, the rate has decreased from 6.0 per 1,000 older adults in 2013. The rate was higher for females than males (2.1 and 1.6 per 1,000 older adults, respectively), although the gap between males and females has narrowed over the past decade.

Interactive PR3.1 below compares OECD countries that submitted data for 2022 for this indicator, while PR3.2 presents Australia's 10-year trend for this indicator.

In Australia, the rate of older adults who received a prescription for long-acting benzodiazepines or related drugs was 44 per 1,000 older adults, slightly lower than the OECD average of 45 per 1,000 older adults. Among the OECD countries that reported data for this indicator, Finland had the lowest rate with 5.1 per 1,000 older adults.

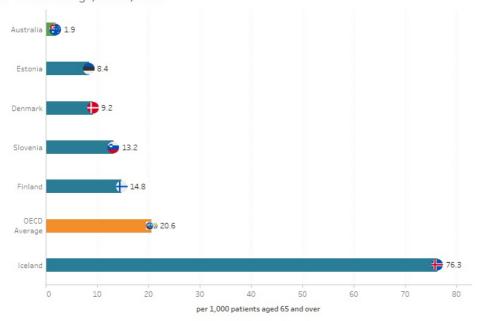
In Australia, the rate has decreased from 61 per 1,000 older adults in 2013. The rate was higher for females than males (52 and 34 per 1,000 older adults, respectively).

Interactive PR4.1 below compares OECD countries that submitted data for 2022 for this indicator, while PR4.2 presents Australia's 10-year trend for this indicator.

### Figures PR3.1 and PR3.2

PR3.1 presents OECD countries with data available for 'Older adults with prescription of long-term benzodiazepines or related drugs' indicator in 2022, which shows Australia had the lowest rate. PR3.2 presents Australia's 10-year trend for this indicator, which shows an overall decrease since 2013.

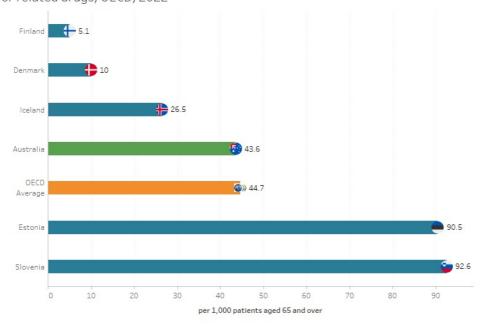
PR3.1: Older patients with prescription of long-term benzodiazepines or related drugs, OECD, 2022



### Figures PR4.1 and PR4.2

PR4.1 presents OECD countries with data available for 'Older adults with prescription of long-acting benzodiazepines or related drugs' indicator in 2022, which shows Australia had a similar rate to the OECD average. PR4.2 presents Australia's 10-year trend for this indicator, which shows an overall decrease since 2013.

PR4.1: Older patients with prescription of long-acting benzodiazepines or related drugs, OECD, 2022



### Antipsychotic use among older adults

People with dementia may experience changed behaviours, such as aggression, agitation, and delusions, commonly known as behavioural and psychological symptoms of dementia. To manage these symptoms, non-pharmacological interventions are recommended, but medical professionals may prescribe antipsychotics to people with behavioural and psychological symptoms of dementia as a last resort.

Inappropriate prescribing of antipsychotic medicines may be a problem among older people living in residential aged care and was a key issue raised in the Royal Commission into Aged Care Quality and Safety (Royal Commission 2021). For this indicator, 'older people' are defined as people aged 65 years and over.

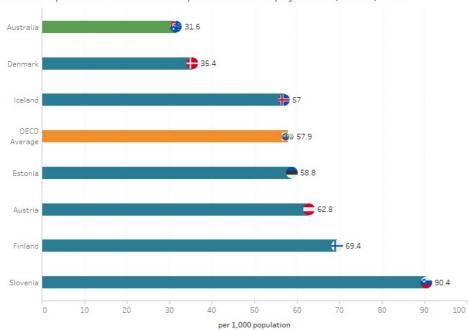
In Australia, the rate of older adults prescribed antipsychotics in 2022 was 32 per 100,000 older adults, lower than the OECD average of 58 per 100,000 older adults. Australia had the lowest rate among the countries that reported data for this indicator.

In Australia, the rate has decreased from 39 per 100,000 older adults in 2013. Females were more likely to be prescribed antipsychotics than males (33 and 30 per 100,000 older adults, respectively).

Interactive PR5.1 below compares OECD countries that submitted data for 2022 for this indicator, while PR5.2 presents Australia's 10-year trend for this indicator.

### Figures PR5.1 and PR5.2

PR5.1 presents OECD countries with data available for 'Proportion of older adults prescribed antipsychotics' indicator in 2022, which shows Australia had a lower rate than the OECD average. PR5.2 presents Australia's 10-year trend for this indicator, which shows a gradual decrease from 2011.



PR5.1: Proportion of older adults prescribed antipsychotics, OECD, 2022

## Polypharmacy among people aged 75 years and over

Polypharmacy is the use of multiple medications concurrently. The OECD indicator measures the proportion of people aged 75 years and over who are taking more than five medications concurrently. Although polypharmacy is often necessary for people with many chronic health conditions, it increases the risk of medicines-related harm because of the greater chance of drug interaction and making mistakes with medicines (ACSQHC 2021).

In Australia, the proportion of older adults who were dispensed more than 5 medications concurrently was 40%, higher than the OECD average of 32%. Among the countries that reported data for this indicator Türkiye had the lowest rate with 5.4% of people aged 75 and over.

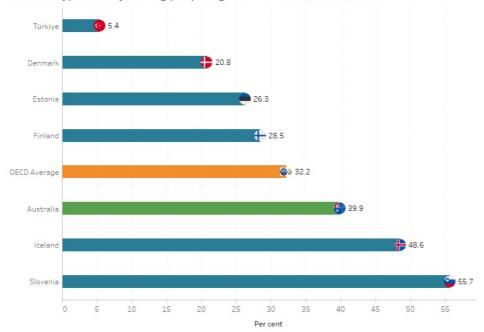
In Australia, the trend has remained relatively stable since 2016. The gap between males and females has narrowed over the past decade, with the two groups having the same proportions (41%) in 2022.

Interactive PR6.1 below compares OECD countries that submitted data for 2022 for this indicator, while PR6.2 presents Australia's 10-year trend for this indicator.

### Figures PR6.1 and PR6.2

PR6.1 presents OECD countries with data available for 'Polypharmacy among people aged 75 and over' indicator in 2020, which shows Australia had a lower rate than the OECD average. PR6.2 presents Australia's 10-year trend for this indicator, which has remained between 40% and 41% since 2016.

PR6.1: Polypharmacy among people aged 75 and over, OECD, 2022



# Long-term prescription of anticoagulants in combination with an oral non-steroidal anti-inflammatory drug

Anticoagulants are medicines that prevent or reduce the risk of blood clotting, such as warfarin. NSAIDs are widely used medications for treating pain, inflammation, and fever, such as aspirin and ibuprofen. The concurrent use of anticoagulants and NSAIDs can increase the risk of major bleeding and stroke (Kent et al. 2018).

In Australia, 11 per 100 long-term users of anticoagulants had at least one prescription of NSAID dispensed in 2022, lower than the OECD average of 13 per 100 long-term users of anticoagulants. Among the countries that submitted data, Finland had the lowest rate (5.2 per 100 long-term users of anticoagulants).

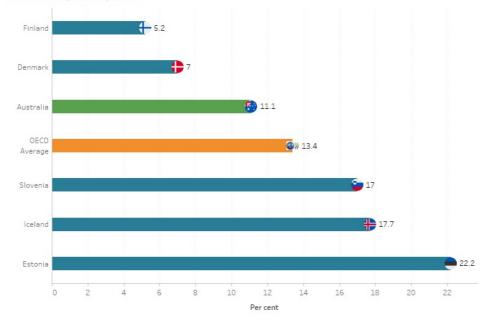
In Australia, the rate has decreased from 14 per 100 long-term users of anticoagulants in 2014 but is similar to the rate seen in 2011. The rate in 2022 was similar for males and females (11 per 100 long-term users of anticoagulants).

Interactive PR7.1 below compares OECD countries that submitted data for 2022 for this indicator, while PR7.2 presents Australia's 10-year trend for this indicator.

### Figures PR7.1 and PR7.2

PR7.1 presents OECD countries with data available for 'Long-term prescription of anticoagulants in combination with an oral non-steroidal anti-inflammatory drug' indicator in 2022, which shows Australia had a similar rate to the OECD average. PR7.2 presents Australia's 10-year trend for this indicator, which shows a decrease since 2014.

PR7.1: Long-term prescription of anticoagulants in combination with an oral NSAID, OECD, 2022



Refer to the Data tables for more information.

### Antibiotic use

Antibiotics are medicines that destroy or slow the growth of bacteria. They are often prescribed to treat infection sites and infected wounds. However, unnecessary prescribing of antibiotics can increase anti-microbial resistance within the population (AIHW 2018a).

In Australia, the rate of total volume of antibiotics prescribed in primary care in 2022 was 28 DDDs per 1,000 population per day, higher than the OECD average of 15 DDDs per 1,000 population per day. Among the OECD countries that reported data for this indicator, Australia had the highest rate while Austria and Estonia had the lowest rate of 8.5 DDDs per 1,000 population per day.

Australia's rate has fluctuated over time in the past decade, ranging between 34 DDDs per 1,000 population per day in 2014 and 2015 to 26 in 2021. Females were more likely to be prescribed antibiotics than males (30 and 24 DDDs per 1,000 population per day, respectively).

Interactive PR8.1 below compares OECD countries that submitted data for 2022 for this indicator, while PR8.2 presents Australia's 10-year trend for this indicator.

Second-line antibiotics are antibiotics that are given when the initial prescription of antibiotics was not effective.

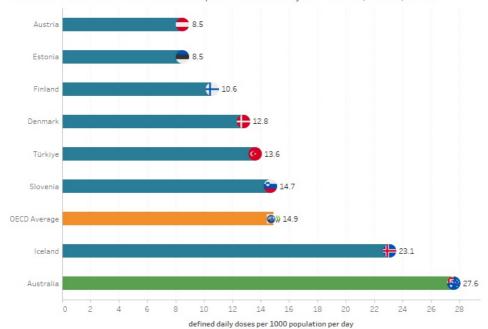
In Australia, the rate of volume of second-line antibiotics was 16% of the total volume of antibiotics prescribed in 2022, higher than the OECD average of 15% of the total volume of antibiotics prescribed. Among the countries that reported 2022 data for this indicator, Denmark had the lowest rate with 2.7% of the total volume of antibiotics prescribed.

In Australia, the trend has remained relatively stable since 2013, ranging between 15% to 17% since 2012. The rate was the same for males and females (16% of the total volume of antibiotics prescribed).

Interactive PR9.1 below compares OECD countries that submitted data for 2022 for this indicator, while PR9.2 presents Australia's 10-year trend for this indicator.

### Figures PR8.1 and PR8.2

PR8.1 presents OECD countries with data available for 'Total volume of antibiotics for systemic use' indicator in 2022, which shows Australia had the highest rate. PR8.2 presents Australia's 10-year trend for this indicator, which shows a fluctuating trend over time.

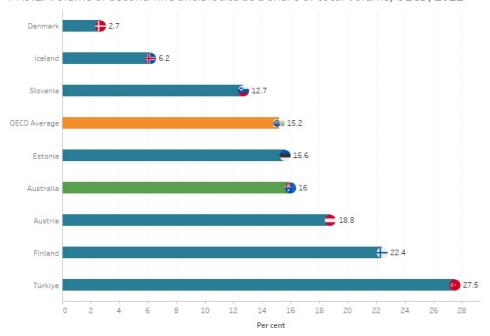


PR8.1: Total volume of antibiotics prescribed for systemic use, OECD, 2022

# Figures PR9.1 and PR9.2

PR9.1 presents OECD countries with data available for 'Volume of second line antibiotics as a share of total volume' indicator in 2022, which shows Australia had a similar rate to the OECD average. PR9.2 presents Australia's 10-year trend for this indicator, which has remained between 15% and 17% since 2013.

PR9.1: Volume of second-line antibiotics as a share of total volume, OECD, 2022



Refer to the Data tables for more information.

### Opioid use

Opioids are chemical substances that have a morphine-type action in the body. They are commonly prescribed for pain relief, but can lead to dependence, breathing difficulties, and death (OECD 2019). Opioid drugs can be obtained either illicitly or via prescription. Legal or pharmaceutical opioids (including codeine and oxycodone) are responsible for significantly more deaths and poisoning hospitalisations than illicit opioids (such as heroin) (AIHW 2018b).

In Australia, the overall volume of opioids prescribed in primary care for people aged 18 and over was 21.5 DDDs per 1,000 population per day in 2022, higher than the OECD average of 15 DDDs per 1,000 population per day. Among the countries that reported data for this indicator, Türkiye had the lowest rate with 0.2 DDDs per 1,000 population per day.

In Australia, the overall volume of opioids prescribed in primary care for people aged 18 and over has decreased from 31 DDDs per 1,000 population per day in 2013. The rate was similar for males and females (21% and 22%, respectively).

Interactive PR10.1 below compares OECD countries that submitted data for 2022 for this indicator, while PR10.2 presents Australia's 10-year trend for this indicator.

In Australia, the proportion of people aged 18 and over who were chronic opioid users was 4.8% in 2022, same as the OECD average of 4.8%. Among the countries that reported data for chronic opioid users aged 18 years and over, Slovenia had the lowest rate with 2.3 DDD per 1,000 people/day.

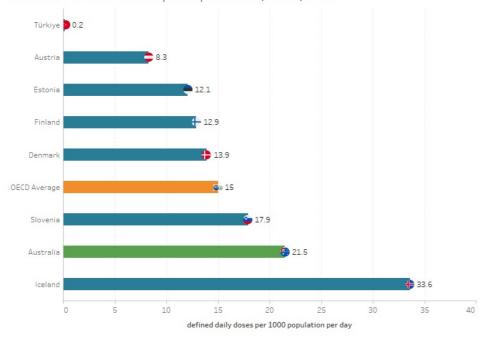
In Australia the rate has remained relatively stable since 2013. The rate was similar for males and females (4.5 and 5.1 DDDs per 1,000 population per day, respectively).

Interactive PR11.1 below compares OECD countries that submitted data for 2022 for this indicator, while PR11.2 presents Australia's 10-year trend for this indicator.

# Figures PR10.1 and PR10.2

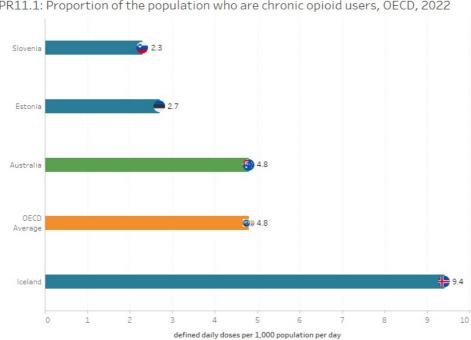
PR10.1 presents OECD countries with data available for 'Overall volume of opioids prescribed' indicator in 2022, which shows Australia had a higher rate than the OECD average. PR10.2 presents Australia's 10-year trend for this indicator, which shows a gradual decrease since 2013.

PR10.1: Overall volume of opioids prescribed, OECD, 2022



Figures PR11.1 and PR11.2

PR11 presents the three OECD countries with data available for 'Proportion of the population who are chronic opioid users' indicator in 2022.



PR11.1: Proportion of the population who are chronic opioid users, OECD, 2022

Refer to the <u>Data tables</u> for more information.

### References

NACA (2022) Australian Asthma Handbook, Version 2.2. Melbourne: National Asthma Council Australia, accessed 6 October 2023.

Narres M, Kvitkina T, Claessen H et al. 2017. Incidence of lower extremity amputation in the diabetic compared with the non-diabetic population: a systematic review. PLoS One 12(8): e0182081.

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NCCH 2012. Australian Coding Standards for ICD-10-AM and ACHI, eighth edition. Sydney: NCCH.

OECD 2021. Health at a glance 2021: OECD indicators. Paris: OECD.

OECD 2023. Health at a glance 2023: OECD indicators. Paris: OECD.

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# Primary care - avoidable hospital admissions

This section presents data for the primary care indicators supplied by Australia to the OECD collection. It compares these data with the HCQO results for OECD countries and comments on the comparability of the data provided to the OECD specification (OECD 2021).

The OECD HCQOs for primary care include rates of avoidable hospital admissions for a range of conditions. Rates of avoidable hospital admissions serve as measures of the effectiveness of the primary health care system, as access to a high-performing primary care system can decrease acute deterioration and hospital admissions among people with the examined conditions (OECD 2021).

The OECD published all primary care indicators in OECD. Stat and a selection of primary care indicators in Health at a glance 2023. Australia calculated and submitted 6 of the 7 primary care indicators requested:

- Asthma hospital admission rates
- Chronic obstructive pulmonary disease (COPD) hospital admission rates
- Congestive heart failure (CHF) hospital admission rates
- Hypertension hospital admission rates
- Diabetes hospital admission rates
- Diabetes lower extremity amputation rates.

See: Primary care indicator definitions.

## Overall data comparability and methods

The most recent data supplied by Australia for the acute care indicators was for 2020. These data are recorded as 2020 data in the OECD. Stat database, and so are described in that way here. Data from other OECD countries published on OECD. Stat for 2020 are used for comparison and calculation of OECD averages in this section. These data were extracted from the OECD. Stat database in January 2024, and may not reflect subsequent updates made to the database.

The OECD requested primary care data for adults aged 15 and over only, disaggregated by age and sex. The OECD then calculated age-sex standardised rates (standardised to the equivalent 2015 OECD population) for these indicators based on the supplied data. The indicators are presented on the same basis here.

Health at a glance 2023 notes that disease prevalence and availability of hospital care, differences in coding practices, and differences in hospital data coverage may affect the comparability of the data (OECD 2023). To prevent double counting, countries were asked to exclude the transfer of patients between hospitals from the calculations for primary care indicators.

The counting unit in the NHMD is the hospital separation which indicates the end of an episode of admitted patient care. Hence, Australia's separation data are used in the calculation of hospital admission rates. Diagnosis and procedure codes are assigned after separation, when all information regarding the episode of care is available. This enables for more accurate capture of information.

#### Asthma hospital admission rate

Asthma is a common chronic condition that affects the airways (the breathing passage that carries air into our lungs). People with asthma experience episodes of wheezing, shortness of breath, coughing, chest tightness and fatigue due to widespread narrowing of the airways (NACA 2022).

In Australia, the asthma hospital admission rate reported for people aged 15 and over was 42 asthma hospital admissions per 100,000 population in 2020, higher than the OECD average of 23 asthma hospital admissions per 100,000 population. Among the countries that submitted data for this indicator, Japan reported the lowest rate with 0.7 per 100,000 population.

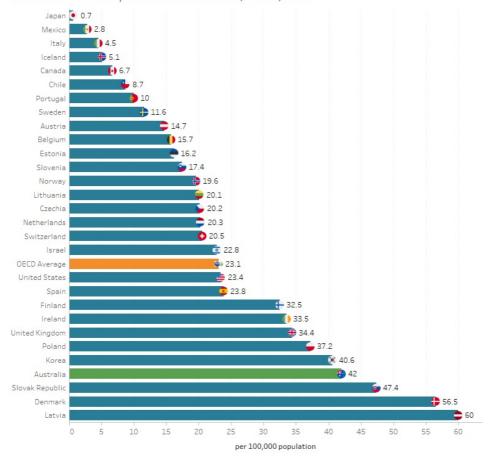
In Australia, the asthma hospital admission rate reported for people aged 15 and over decreased from 71 per 100,000 population in 2011. The rate for females was higher than that for males (58 and 24 per 100,000 population, respectively).

Interactive AA1.1 below compares OECD countries that submitted data for 2020 for this indicator, while AA1.2 presents Australia's 10-year trend for this indicator where data are available.

### Figures AA1.1 and AA1.2

AA1.1 presents OECD countries with data published for asthma hospital admission rate in 2020, which shows Australia had a higher rate than the OECD average. AA1.2 presents Australia's 10-year trend for this indicator, which shows an overall decrease from 2011.

AA1.1: Asthma hospital admission rates, OECD, 2020



## Chronic obstructive pulmonary disease hospital admission rate

Chronic obstructive pulmonary disease (COPD) is a preventable and treatable lung disease characterised by chronic obstruction of lung airflow that interferes with normal breathing and is not fully reversible.

In Australia, the COPD hospital admission rate reported for people aged 15 and over was 229 per 100,000 population in 2020, higher than the OECD average of 112 per 100,000 population. Among the OECD countries that submitted data for this indicator, Italy had the lowest rate with 20 per 100,000 population.

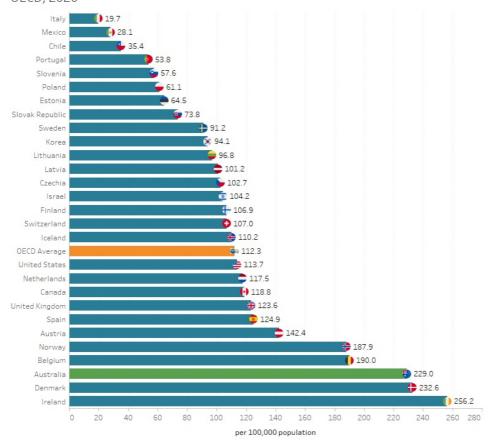
In Australia, the COPD hospital admission rate reported for people aged 15 and over has decreased from 340 per 100,000 population in 2011. The rate was higher for males than females (242 and 224 per 100,000 population, respectively) - a gap which has narrowed over the past decade.

Interactive AA2.1 below compares OECD countries that submitted data for 2020 for this indicator, while AA2.2 presents Australia's 10-year trend for this indicator where data are available.

### Figures AA2.1 and AA2.2

AA2.1 presents OECD countries with data published for COPD hospital admission rate in 2020, which shows Australia had a higher rate than the OECD average. AA2.2 presents Australia's 10-year trend for this indicator, which shows an overall decrease from 2011.

AA2.1: Chronic obstructive pulmonary disease hospital admission rates, OECD, 2020



## Congestive heart failure hospital admission rate

CHF is a chronic condition in which the pumping power of the heart muscle is weakened.

In Australia, the CHF hospital admission rate reported for people aged 15 and over was 227 per 100,000 population in 2020, higher than the OECD average of 206 per 100,000 population. Among the OECD countries that submitted data for this indicator, Mexico had the lowest rate with 32.5 per 100,000 population.

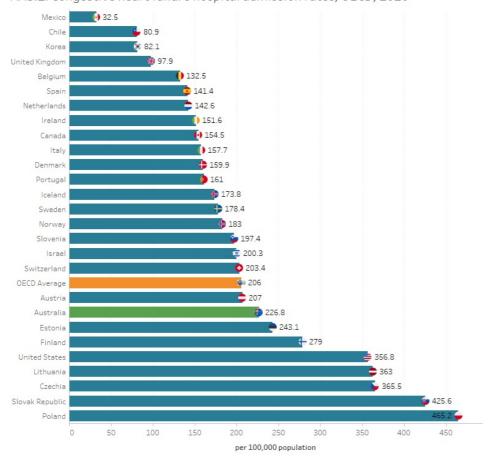
In Australia, the CHF hospital admission rate reported for people aged 15 and over has fluctuated over the past decade, with the highest rate being 244.5 per 100,000 population in 2016. The rate was higher for males than females (273 and 195 per 100,000 population, respectively).

Interactive AA3.1 below compares OECD countries that submitted data for 2020 for this indicator, while AA3.2 presents Australia's 10-year trend for this indicator where data are available.

## Figures AA3.1 and AA3.2

AA3.1 presents OECD countries with data published for CHF hospital admission rate in 2020, which shows Australia had a lower rate than the OECD average. AA3.2 presents Australia's 10-year trend for this indicator, which shows a fluctuating trend over time.

AA3.1: Congestive heart failure hospital admission rates, OECD, 2020



### Hypertension hospital admission rate

Hypertension, also known as high blood pressure, is a major risk factor for chronic conditions such as coronary heart disease and chronic kidney disease.

In Australia, the hypertension hospital admission rate reported for people aged 15 and over was 46 per 100,000 population in 2020, higher than the OECD average of 51 per 100,000 population. Among the OECD countries that submitted data for this indicator, Spain and Italy had the lowest rates (4.8 and 7.6 per 100,000 population, respectively).

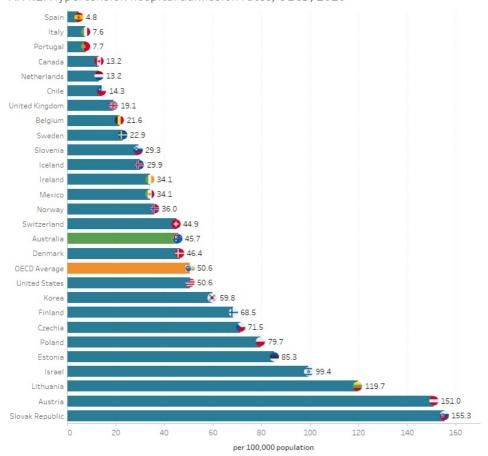
In Australia, the hypertension hospital admission rate reported for people aged 15 and over has increased from 38 per 100,000 population in 2011. The rate for females was higher than that for males (55 and 31 per 100,000 population, respectively).

Interactive AA4.1 below compares OECD countries that submitted data for 2020 for this indicator, while AA4.2 presents Australia's 10-year trend for this indicator where data are available.

### Figures AA4.1 and AA4.2

AA4.1 presents OECD countries with data published for hypertension hospital admission rate in 2020, which shows Australia had a lower rate than the OECD average. AA4.2 presents Australia's 10-year trend for this indicator, which shows an overall increase over time.

AA4.1: Hypertension hospital admission rates, OECD, 2020



### Diabetes hospital admission rate

Diabetes is a chronic condition marked by high levels of glucose in the blood. Effective management of diabetes aims to maintain healthy blood glucose levels to prevent both short- and long-term complications, such as heart disease, kidney disease, blindness, and lower limb amputation.

In Australia, the diabetes hospital admission rate reported for people aged 15 and over was 157 per 100,000 population in 2020, higher than the OECD average of 102 per 100,000 population. Among the OECD countries that submitted data for this indicator, Japan had the lowest rate with 11 per 100,000 population.

In Australia, the diabetes hospital admission rate reported for people aged 15 and over has increased from 137 per 100,000 population in 2011. The rate for males was higher than that for females (207 admissions and 116 admissions per 100,000 population, respectively).

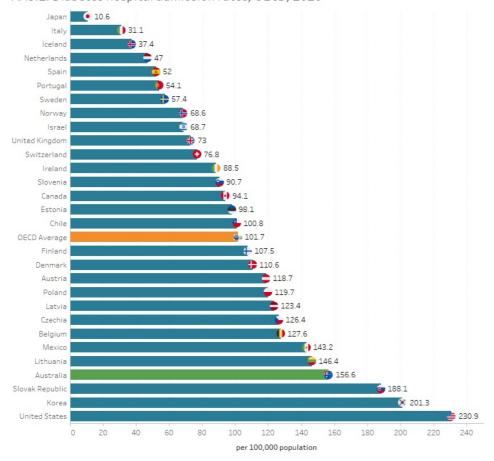
It should be noted that changes to the Australian Coding Standards between 2009 and 2013 have affected the comparability of data reported over time for diabetes (NCCH 2008, NCCH 2010, NCCH 2013). The AIHW also recommends that some caution should be taken when comparing data from before and after 2012 due to further changes in the coding standards relating to diabetes from 1 July 2012.

Interactive AA5.1 below compares OECD countries that submitted data for 2020 for this indicator, while AA5.2 presents Australia's 10-year trend for this indicator where data are available.

# Figures AA5.1 and AA5.2

AA5.1 presents OECD countries with data published for diabetes hospital admission rate in 2020, which shows Australia had a higher rate than the OECD average. AA5.2 presents Australia's 10-year trend for this indicator, which shows a gradual increase since 2013.

AA5.1: Diabetes hospital admission rates, OECD, 2020



## Diabetes lower extremity amputation rate

Individuals with diabetes have a higher risk of lower limb amputation than people without diabetes (Narres et al. 2017).

In Australia, the rate for diabetes-related lower extremity amputation was 4.1 per 100,000 population in 2020, lower than the OECD average of 8.5 per 100,000 population. Among the OECD countries that submitted data for this indicator, Iceland, Italy, and Korea had the lowest rates (0.7, 2.5 and 2.5 per 100,000 population, respectively).

In Australia, the rate for diabetes-related lower extremity amputation has remained relatively stable since 2015. The rate for males was more than 3 times higher than that for females (6.8 and 2.0 per 100,000 population, respectively).

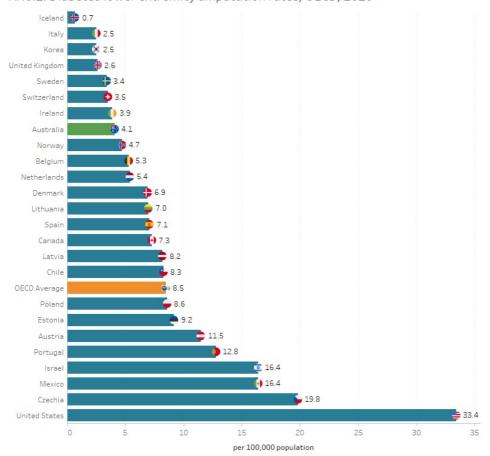
As outlined in the Diabetes hospital admission section, caution should be taken when comparing diabetes data because of changes to the Australian Coding Standards, which affected the recording of data relating to diabetes.

Interactive AA6.1 below compares OECD countries that submitted data for 2020 for this indicator, while AA6.2 presents Australia's 10-year trend for this indicator where data are available.

#### Figures AA6.1 and AA6.2

AA6.1 presents OECD countries with data published for diabetes lower extremity amputation rate in 2020, which shows Australia had a lower rate than the OECD average. AA6.2 presents Australia's 10-year trend for this indicator, which shows a stable trend since 2015.

AA6.1: Diabetes lower extremity amputation rates, OECD, 2020



#### References

NACA (2022) Australian Asthma Handbook, Version 2.2. Melbourne: National Asthma Council Australia, accessed 6 October 2023.

Narres M, Kvitkina T, Claessen H et al. 2017. Incidence of lower extremity amputation in the diabetic compared with the non-diabetic population: a systematic review. PLoS One 12(8): e0182081.

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# **Technical notes**

## Abbreviations

ABS	Australian Bureau of Statistics
ACE-I	Angiotensin-converting enzyme inhibitor
ACHI	Australian Classification of Health Interventions
ACSQHC	Australian Commission on Safety and Quality in Health Care
AIHW	Australian Institute of Health and Welfare
AMI	Acute myocardial infarction
ARB	Angiotensin receptor blocker
CHF	Congestive heart failure
COPD	Chronic obstructive pulmonary disease
DDDs	Defined daily dose
DVT	Deep vein thrombosis
GP	General practitioner
HCQO	Health Care Quality and Outcomes
ICD-9-CM	International Statistical Classification of Diseases, 9 <sup>th</sup> Revision, Clinical Modification
ICD-10-CM	International Statistical Classification of Diseases, 10th Revision, Clinical Modification
NCCH	National Centre for Classification in Health
NHMD	National Hospital Morbidity Database
NMDS	National Minimum Data Set
NSAID	Nonsteroidal anti-inflammatory drug
OECD	Organisation for Economic Co-operation and Development
PBS	Pharmaceutical Benefits Scheme
PE	Pulmonary embolism
PREM	(Mental health) Patient-Reported Experience Measure
RPBS	Repatriation Pharmaceutical Benefits Scheme
YES	Your Experience of Service survey





# Technical notes

## National Hospital Morbidity Database

The National Hospital Morbidity Database (NHMD) is a collection of records from admitted patient data collection systems in Australian hospitals. The data supplied to the Australian Institute of Health and Welfare in the NHMD are based on the National Minimum Data Set (NMDS) for Admitted patient care and include demographic and administrative data, as well as data on the diagnoses of patients, the procedures they underwent in hospital and external causes of injury and poisoning.

The scope of the NMDS is episodes of care for admitted patients in all public and private acute and psychiatric hospitals, free-standing day hospital facilities and alcohol and drug treatment centres in Australia. Hospitals operated by the Australian Defence Force, corrections authorities and in Australia's offshore territories are not in scope, but some are included.

As noted, the statistical unit for the NHMD is an episode of care, which can be a total hospital stay from admission to discharge, transfer or death, or a portion of a hospital stay beginning or ending in a change of type of care for example, from acute to rehabilitation. The data are collated and reported at the end of the episode of care (i.e., at separation). The OECD indicators are, however, specified in terms of 'admissions' and 'discharges'. In the analyses presented here using data from the NHMD, all calculations are done on the episodes of care using the separations data. These are broadly equivalent to (but not exactly the same as) admissions/discharges.

Further information about the National Hospitals Data Collection.

### Pharmaceutical Benefits Scheme (PBS) data collection

The Australian Government subsidises the cost of prescription medicines through two schemes, the Pharmaceutical Benefits Scheme (PBS) and the Repatriation Pharmaceutical Benefits Scheme (RPBS) for eligible war veterans and their dependants.

Services Australia processes information about all prescriptions dispensed under the PBS and RPBS and provides these data to the Department of Health. The PBS data collection holds information on the medication prescribed, the prescribing practitioner and the characteristics of the person who was prescribed the medicine.

PBS/RPBS data does not include information about the following:

- private prescriptions, i.e., the medicine is not listed in the PBS Schedule of Pharmaceutical Benefits
- 'over the counter' medicines
- medicines supplied to public hospital inpatients.

Further information about the Pharmaceutical Benefits Scheme data collection.

### Patient Experience Survey

The Patient Experience Survey is conducted annually by the Australian Bureau of Statistics (ABS) and collects data from a nationally representative sample of people on access and barriers to a range of health care services.

The survey collects data from people aged 15 years and over who accessed health services in the last 12 months, as well as from those who did not, and enables analysis of health service information in relation to particular population groups. Data are also collected on aspects of communication between patients and health professionals.

The 2020-21 and 2021-22 Patient Experience Survey collected information from around 28,800 people across Australia.

Further information about the Patient Experience Survey.

## Your Experience of Service (YES) Survey

The Your Experience of Service (YES) survey collects information from people receiving public mental health care about their experience of care. The survey was designed to help Australian mental health services and consumers work together to improve services. It is based on the recovery principles of the 2010 National Standards for Mental Health Services (DoHAC 2010). Three participating Australian states (New South Wales, Victoria, and Queensland) (AIHW 2023) provide data to the AIHW under the National Best Endeavours Data Set (YES NBEDS) for the Experience of Service Survey Database.

Further information about the <u>Your Experience of Service (YES) survey</u>.





# **Technical notes**

Age-sex standardisation: A set of techniques used to remove, as far as possible, the effects of differences in age and sex when comparing two or more populations.

Older adults: People aged 65 and over.

Separation: An episode of care for an admitted patient, which can be a total hospital stay (from admission to discharge, transfer or death) or a portion of a hospital stay beginning or ending in a change of type of care (for example, from acute to rehabilitation). Separation also means the process by which an admitted patient completes an episode of care either by being discharged, dying, transferring to another hospital or by changing type of care.

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# **Data**

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# Report editions

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• OECD health-care quality indicators for Australia 2015 |

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• OECD health-care quality indicators for Australia 2011-12 |

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