



Cultural and Linguistic Characteristics of People Using Mental Health Services and Prescription Medications

2011

4329.0.00.001

AUSTRALIAN BUREAU OF STATISTICS

EMBARGO: 11.30AM (CANBERRA TIME) FRIDAY 03 JUNE 2016

ABS Catalogue No. 4329.0.00.001

© Commonwealth of Australia 2016

This work is copyright. Apart from any use as permitted under the *Copyright Act 1968*, no part may be reproduced by any process without prior written permission from the Commonwealth. Requests and inquiries concerning reproduction and rights in this publication should be addressed to The Manager, Intermediary Management, Australian Bureau of Statistics, Locked Bag 10, Belconnen ACT 2616, by telephone (02) 6252 6998, fax (02) 6252 7102, or email: <intermediary.management@abs.gov.au>.

In all cases the ABS must be acknowledged as the source when reproducing or quoting any part of an ABS publication or other product.

Produced by the Australian Bureau of Statistics.

INQUIRIES

For further information about these and related statistics, contact the National Information and Referral Service on 1300 135 070.

CULTURAL AND LINGUISTIC CHARACTERISTICS OF PEOPLE USING MENTAL HEALTH SERVICES AND PRESCRIPTION MEDICATIONS, 2011

INTRODUCTION

The whole Australian population is culturally and linguistically diverse with characteristics varying amongst the population. People may face language and cultural barriers when accessing mental health care (Endnote 1). Cultural beliefs about what constitutes mental illness and how to respond to it can affect how people explain symptoms, seek help, and access health services (Endnote 2).

This publication is the fourth in a series of analyses based on data from the 2011 Mental Health Services-Census Integrated Dataset. It explores cultural and linguistic characteristics of people using Medicare Benefits Schedule (MBS) subsidised mental health-related services and Pharmaceutical Benefits Scheme (PBS) subsidised mental health-related medications in 2011, building upon previous releases from the Integrated Dataset. These are:

- Characteristics of People using Mental Health Services and Prescription Medication, 2011 (cat. no. 4329.0)
- Patterns of Use of Mental Health Services and Prescription Medications, 2011 (cat. no. 4329.0.00.003)
- Housing Circumstances of People Using Mental Health Services and Prescription Medications, 2011 (cat. no. 4329.0.00.002)

MBS subsidised mental health-related services are those provided by psychiatrists, general practitioners (GPs), clinical psychologists, other psychologists and other allied health professionals. PBS subsidised mental health-related medications comprise antipsychotics, anxiolytics/hypnotics and sedatives, antidepressants, and psychostimulants, agents used for ADHD and nootropics. See Appendix 1 and Appendix 2 respectively for more detail about mental health-related services and medications listed on the MBS and PBS.

The 2011 Census of Population and Housing asked several questions to provide a picture of Australia's cultural and linguistic diversity (Endnote 3). For the purpose of analyses in this publication, the Australian population has been divided into four groups based on country of birth and language spoken at home:

- Born in Australia, speaks English at home
- Born in Australia, speaks a language other than English at home
- Born overseas, speaks English at home
- Born overseas, speaks a language other than English at home

In the Integrated Dataset, the Census of Population and Housing provides insight into a range of socio-demographic characteristics including age, sex, remoteness, socio-economic disadvantage, household income, labour force status, educational attainment and others.

CULTURAL AND LINGUISTIC CHARACTERISTICS OF PEOPLE USING MENTAL HEALTH SERVICES AND PRESCRIPTION MEDICATIONS, 2011

DATA QUALITY CONSIDERATIONS

There are a number of factors that should be considered when interpreting information presented in this publication.

While the MBS items included in analysis include a range of subsidised mental health-related services provided in Australia, consultations with some medical practitioners such as paediatricians were not captured in the Mental Health Services-Census Integrated Dataset, even if they were related to mental health. Consultations with GPs that may have involved discussion of mental health issues but were not recorded as mental health-related services were also not captured.

For certain countries, the Australian Government's Reciprocal Health Care Agreement (RHCA) allows visitors to access MBS and PBS subsidised services and medications. Australia currently has RHCAs with the United Kingdom, Ireland, New Zealand, Malta, Italy, Sweden, the Netherlands, Finland, Norway, Belgium and Slovenia. Overseas-born people living in Australia who are not eligible for MBS or PBS subsidised services or medications are not in scope of the Mental Health Services-Census Integrated Dataset, but are included in Census counts on which rates of use of MBS or PBS subsidised services or medications are based (Endnote 4).

A person's use of mental health-related services or medications does not imply a diagnosis of a mental health condition. For information on people who reported having a mental or behavioural condition in Australia in 2014-15 (4.0 million people) see National Health Survey: First Results, 2014-15 (cat. no. 4364.0.55.001).

CULTURAL AND LINGUISTIC CHARACTERISTICS OF PEOPLE USING MENTAL HEALTH SERVICES AND PRESCRIPTION MEDICATIONS, 2011

ABOUT THE MENTAL HEALTH SERVICES-CENSUS INTEGRATED DATASET

The Mental Health Services-Census Data Integration project brings together the breadth of 2011 Census of Population and Housing (Census) data with administrative information on people accessing subsidised mental health-related MBS services and PBS prescription medications. The project was initiated on behalf of the National Mental Health Commission (NMHC) with the aim of informing the National Review of Mental Health Programmes and Services.

Integrating a selected subset of data items from the MBS, PBS and 2011 Census has greatly increased the power of the data to support analysis of the circumstances and characteristics of people experiencing mental ill-health as they interact with the health care system. The Mental Health Services-Census Integrated Dataset includes people who responded to the 2011 Census and those who accessed subsidised mental health-related items listed on the MBS or PBS in 2011.

This Integrated Dataset contributes significantly to the pool of mental health-related data available in Australia to assist in the development and evaluation of mental health programs and support services now and into the future. Questions can be answered about people accessing subsidised mental health-related services and medications with evidence that up until now has not been available. For example, analysis of the integrated data answers questions about the relationship between mental health-related services, medication use and key socio-economic information such as education, employment and housing.

The confidentiality of these data are protected by the Census and Statistics Act (1905) and the Privacy Act (1988). MBS and PBS information provided by the Department of Health and the Department of Human Services to the ABS is treated in the strictest confidence as is required by the National Health Act (1953) and the Health Insurance Act (1973).

CULTURAL AND LINGUISTIC CHARACTERISTICS OF PEOPLE USING MENTAL HEALTH SERVICES AND PRESCRIPTION MEDICATIONS, 2011

OVERVIEW OF PEOPLE FROM CULTURALLY AND LINGUISTICALLY DIVERSE BACKGROUNDS

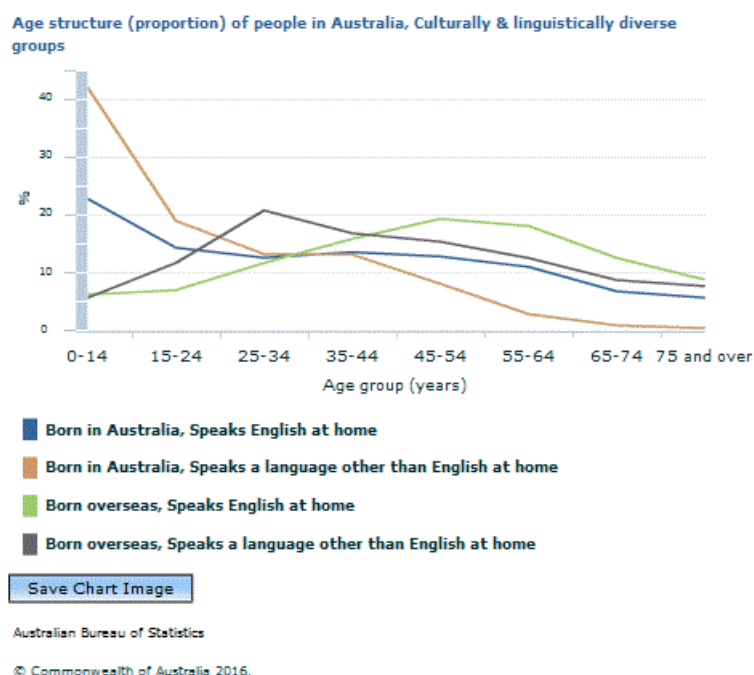
The cultural and linguistic diversity of Australia's population has been shaped by historical events and policies both in Australia and other parts of the world (Endnote 5). In particular, successive waves of migration since World War II have contributed to the make-up of the overseas-born population in Australia in 2011 (Endnote 3). Initially most of these migrants were born in countries in North-West Europe such the United Kingdom and Germany, and were then followed by large numbers of migrants born in Southern and Eastern Europe, including Italy, Greece and Yugoslavia. In the 1970s, many migrants arrived in Australia from South-East Asian countries, including Vietnam, the Philippines and Cambodia, and more recently, from North-East and Southern Asian countries such as China and India.

In 2011, around one-quarter (25%) of the Australian population were born overseas, while around one-fifth (18%) spoke a language other than English at home. Of people born overseas, one-fifth (21%) were born in the United Kingdom, 9% were born in New Zealand, 6% in China and India each, and 4% in Italy. Amongst people who spoke a language other than English at home, 9% spoke Mandarin, followed by people who spoke Italian (8%), Arabic or Cantonese (both 7%), or Greek (6%).

When country of birth and language spoken at home are considered together, 64% of the population were born in Australia and spoke English at home, 5% were born in Australia and spoke a language other than English at home, 11% were born overseas and spoke English at home, and 13% were born overseas and spoke a language other than English at home.

Across Australia, the age structures of groups of people from different cultural and linguistic backgrounds differ. For example, in 2011, people born in Australia who spoke a language other than English at home were considerably younger (a median age of 18 years) than people born in Australia who spoke English at home (35 years). People born overseas who spoke a language other than English at home had a median age of 41 years, while people born overseas who spoke English at home had the highest median age, of 49 years.

CULTURAL AND LINGUISTIC CHARACTERISTICS OF PEOPLE USING MENTAL HEALTH SERVICES AND PRESCRIPTION MEDICATIONS, 2011



Source(s): 2011 Census of Population and Housing

Given the relationship between demographic characteristics such as age and the use of MBS and PBS subsidised mental health-related treatments (Endnote 6), it is important to take these into consideration when interpreting data presented in this publication on the use of mental health-related treatments by specific populations such as people from culturally and linguistically diverse backgrounds.

CULTURAL AND LINGUISTIC CHARACTERISTICS OF PEOPLE USING MENTAL HEALTH SERVICES AND PRESCRIPTION MEDICATIONS, 2011

MBS SUBSIDISED MENTAL HEALTH-RELATED SERVICES

There were 1.5 million people (7.2% of all Australians) who used at least one MBS subsidised mental health-related service in 2011. Rates of use differed amongst people from culturally and linguistically diverse backgrounds.

In 2011, 8.0% of people born in Australia who spoke English at home accessed an MBS subsidised mental health-related service. Similarly, 7.5% of people born overseas who spoke English at home accessed mental health-related services. Around 6.0% of people born in Australia who spoke a language other than English at home accessed a mental health-related service in 2011, while 5.6% of people born overseas who spoke a language other than English at home did so.

PEOPLE WHO ACCESSED AT LEAST ONE MBS SUBSIDISED MENTAL HEALTH-RELATED SERVICE IN 2011, Culturally and linguistically diverse groups

	2011 Census counts			People who accessed at least one MBS subsidised mental health- related service in 2011	
	Number '000	Median age years	Sex ratio ratio(a)	Number '000	Proportion %(b)
Born in Australia(c)					
Speaks English at home	13 802.2	35	97.0	1 097.9	8.0
Speaks a language other than English at home	1 070.7	18	100.5	64.6	6.0
Born overseas					
Speaks English at home	2 472.0	49	101.1	185.7	7.5
Speaks a language other than English at home	2 764.4	41	91.1	155.4	5.6
Totals					
Born in Australia(c)(d)	15 021.8	33	97.5	1 169.0	7.8
Born overseas(d)	5 280.4	45	95.9	342.9	6.5
Speaks English at home(e)	16 509.3	38	97.4	1 302.2	7.9
Speaks a language other than English at home(e)	3 904.3	36	93.6	224.7	5.8
Total all persons	21 507.7	37	97.8	1 540.8	7.2

(a) Males per 100 females.

(b) Proportion of population (2011 Census counts).

(c) Includes External Territories.

(d) Includes not stated and inadequately described language spoken at home.

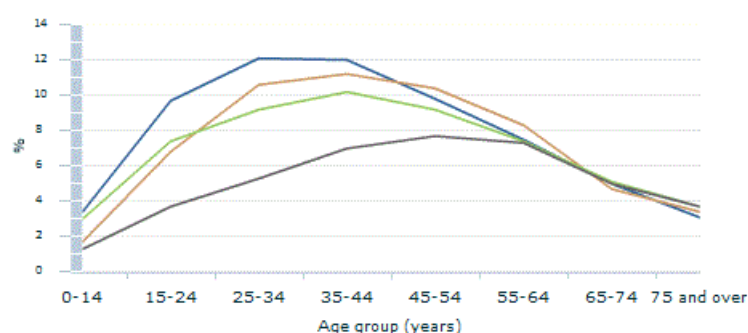
(e) Includes not stated and inadequately described country of birth.

CULTURAL AND LINGUISTIC CHARACTERISTICS OF PEOPLE USING MENTAL HEALTH SERVICES AND PRESCRIPTION MEDICATIONS, 2011

Across ages, the pattern of people accessing mental health-related services was broadly similar amongst the four groupings of people from differing culturally and linguistically diverse backgrounds, with rates of use generally highest amongst people aged 25-54 years and lowest amongst children and older people.

People born overseas who spoke a language other than English at home had considerably lower rates of use between the ages of 15 to 54 years. In 2011, 6.0% of 15-54 year old people born overseas who spoke a language other than English at home used at least one MBS subsidised mental health-related service, compared with 10.9% of people born in Australia who spoke English at home, 9.4% of people born in Australia who spoke a language other than English at home, and 9.3% of people born overseas who spoke English at home.

Proportion of pop. accessing MBS mental health-related services in 2011, Culturally & linguistically diverse groups



- Born in Australia, Speaks English at home
- Born in Australia, Speaks a language other than English at home
- Born overseas, Speaks English at home
- Born overseas, Speaks a language other than English at home

Save Chart Image

Australian Bureau of Statistics

© Commonwealth of Australia 2016.

Source(s): *Mental Health Services-Census Integrated Dataset, 2011*

CULTURAL AND LINGUISTIC CHARACTERISTICS OF PEOPLE USING MENTAL HEALTH SERVICES AND PRESCRIPTION MEDICATIONS, 2011

COUNTRY OF BIRTH

Of the five most common countries of birth (other than Australia), 7.6% of people born in the United Kingdom used at least one MBS subsidised mental health-related service in 2011, followed by people born in New Zealand (6.9%) and Italy (6.0%). People born in China (3.4%) or India (3.9%) had lower rates of use.

People born in Turkey had the highest rate of use of mental health-related services in 2011 (14.2%), followed by people born in Bosnia and Herzegovina (13.4%) or Iraq (12.1%). In general, people born in Asia had relatively low rates of use of mental health-related services, with 4.6% of people born in South-East Asia, 3.8% of people born in North-East Asia, and 4.6% of people born in Southern and Central Asia using at least one mental health-related service in 2011.

PEOPLE WHO ACCESSED AT LEAST ONE MBS SUBSIDISED MENTAL HEALTH-RELATED SERVICE IN 2011, Country of birth

	2011 Census counts			People who accessed at least one MBS subsidised mental health-related service in 2011	
	Number '000	Median age years	Sex ratio ratio(a)	Number '000	Proportion %(b)
Most common countries of birth of Australians					
Australia (includes External Territories)	15 021.8	33	97.5	1 169.0	7.8
United Kingdom	1 101.1	54	101.7	83.6	7.6
New Zealand	483.4	40	102.8	33.4	6.9
China (excludes SARs and Taiwan)	319.0	35	79.8	11.0	3.4
India	295.4	31	125.5	11.6	3.9
Italy	185.4	68	104.7	11.1	6.0
Vietnam	185.0	43	84.6	9.0	4.9
Philippines	171.2	39	60.6	7.7	4.5
South Africa	145.7	39	97.0	12.0	8.3
Malaysia	116.2	39	83.5	5.3	4.6
Germany	108.0	62	90.6	7.0	6.5
Countries of birth with highest rates of use(c)					
Turkey	32.8	45	106.3	4.6	14.2
Bosnia and Herzegovina	25.7	46	97.1	3.5	13.4
Iraq	48.2	37	106.6	5.8	12.1
Chile	24.9	48	91.8	3.0	11.8
Argentina	12.0	47	91.9	1.4	11.6
Total persons born overseas	5 280.4	45	95.9	342.9	6.5
Total persons	21 507.7	37	97.8	1 540.8	7.2

(a) Males per 100 females.

(b) Proportion of population (2011 Census counts).

(c) Of countries with populations of greater than 9,500 people in Australia.

Note: see Datacube Table 6 for a more extensive list of countries of birth.

CULTURAL AND LINGUISTIC CHARACTERISTICS OF PEOPLE USING MENTAL HEALTH SERVICES AND PRESCRIPTION MEDICATIONS, 2011

LANGUAGE SPOKEN AT HOME

In 2011, people who spoke a language other than English at home were less likely to access MBS subsidised mental health-related services than people who spoke English at home (5.8% compared with 7.9% respectively). Rates of use differed amongst people who spoke different languages.

Of the five most common languages spoken at home (other than English), 3.2% of people who spoke Mandarin at home accessed a mental health-related service in 2011, while 7.7% of people who spoke Italian, 7.7% of people who spoke Arabic, 4.0% of people who spoke Cantonese, and 7.9% of people who spoke Greek accessed mental health-related services.

People who spoke Bosnian, Hebrew or Turkish at home had the highest rates of use of mental health-related services in 2011 (12.3%, 12.2% and 12.1% respectively). In general, people who spoke Asian languages had relatively low rates of use of mental health-related services, with 3.9% of people who spoke a Southeast Asian language, 3.8% of people who spoke a Southern Asian language, and 3.6% of people who spoke an Eastern Asian language using at least one mental health-related service in 2011.

CULTURAL AND LINGUISTIC CHARACTERISTICS OF PEOPLE USING MENTAL HEALTH SERVICES AND PRESCRIPTION MEDICATIONS, 2011

PEOPLE WHO ACCESSED AT LEAST ONE MBS SUBSIDISED MENTAL HEALTH-RELATED SERVICE IN 2011,

Language spoken at home

	2011 Census counts			People who accessed at least one MBS subsidised mental health-related service in 2011	
	Number	Median age	Sex ratio	Number	Proportion
	'000	years	ratio(a)	'000	% (b)
Most common languages spoken at home					
English	16 509.3	38	97.4	1 302.2	7.9
Mandarin	336.4	29	84.7	10.8	3.2
Italian	299.8	56	92.9	23.0	7.7
Arabic	287.2	29	105.2	22.2	7.7
Cantonese	263.7	38	88.5	10.7	4.0
Greek	252.2	46	95.9	20.0	7.9
Vietnamese	233.4	32	90.8	9.7	4.2
Spanish	117.5	38	90.6	11.3	9.6
Hindi	111.4	31	108.4	4.9	4.4
Tagalog	81.5	38	70.0	3.3	4.1
German	80.4	51	84.8	5.2	6.4
Languages spoken at home: highest rates of use(c)					
Bosnian	16.3	36	96.7	2.0	12.3
Hebrew	9.7	35	110.7	1.2	12.2
Turkish	59.6	33	100.6	7.2	12.1
Serbian	55.1	41	98.0	5.7	10.3
Spanish	117.5	38	90.6	11.3	9.6
Total languages other than English	3 904.3	36	93.6	224.7	5.8
Total persons	21 507.7	37	97.8	1 540.8	7.2

(a) Males per 100 females.

(b) Proportion of population (2011 Census counts).

(c) Of languages spoken at home by more than 9,500 people in Australia.

Note: see Datacube Table 7 for a more extensive list of languages spoken at home.

CULTURAL AND LINGUISTIC CHARACTERISTICS OF PEOPLE USING MENTAL HEALTH SERVICES AND PRESCRIPTION MEDICATIONS, 2011

PBS SUBSIDISED MENTAL HEALTH-RELATED MEDICATIONS

In 2011, 10.9% (2.4 million people) of all Australians had at least one script filled for a PBS subsidised mental health-related medication such as an antidepressant. Rates of use differed amongst people from different culturally and linguistically diverse backgrounds.

Of all people born in Australia who spoke English at home, 11.6% accessed a PBS subsidised mental health-related medication in 2011, while 13.1% of people born overseas who spoke English at home accessed mental health-related medications. Around 9.8% of people born overseas who spoke a language other than English at home accessed mental health-related medications, while 4.6% of people born in Australia who spoke a language other than English at home did so.

It is important to consider the age structures of these groups when interpreting their rates of accessing mental health-related medications. For example, the relatively low rate (4.6%) for people born in Australia who spoke a language other than English at home was largely related to the young age structure of this population (a median age of 18 years). Conversely, the higher rate (13.1%) for people born overseas who spoke English at home was influenced by their older age structure (a median age of 49 years).

PEOPLE WHO ACCESSED AT LEAST ONE PBS SUBSIDISED MENTAL HEALTH-RELATED MEDICATION IN 2011, Culturally and linguistically diverse groups

	2011 Census counts			People who accessed at least one PBS subsidised mental health- related medication in 2011	
	Number '000	Median age years	Sex ratio ratio(a)	Number '000	Proportion %(b)
Born in Australia(c)					
Speaks English at home	13 802.2	35	97.0	1 607.8	11.6
Speaks a language other than English at home	1 070.7	18	100.5	49.6	4.6
Born overseas					
Speaks English at home	2 472.0	49	101.1	325.0	13.1
Speaks a language other than English at home	2 764.4	41	91.1	271.5	9.8
Totals					
Born in Australia(c)(d)	15 021.8	33	97.5	1 673.4	11.1
Born overseas(d)	5 280.4	45	95.9	602.0	11.4
Speaks English at home(e)	16 509.3	38	97.4	1 979.7	12.0
Speaks a language other than English at home(e)	3 904.3	36	93.6	330.0	8.5
Total all persons	21 507.7	37	97.8	2 354.1	10.9

(a) Males per 100 females.

(b) Proportion of population (2011 Census counts).

(c) Includes External Territories.

(d) Includes not stated and inadequately described language spoken at home.

(e) Includes not stated and inadequately described country of birth.

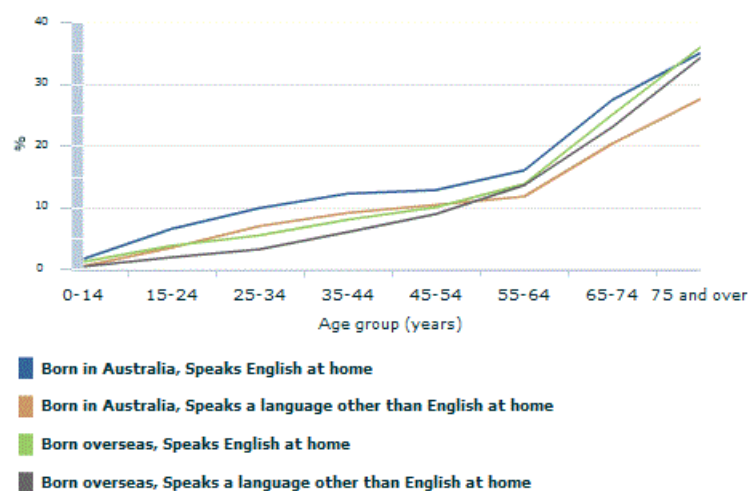
CULTURAL AND LINGUISTIC CHARACTERISTICS OF PEOPLE USING MENTAL HEALTH SERVICES AND PRESCRIPTION MEDICATIONS, 2011

Across age, the pattern of people accessing mental health-related medications was broadly similar amongst the four groupings of people from differing culturally and linguistically diverse backgrounds, with rates of use increasing with age.

People born in Australia who spoke English at home had the highest rates of accessing mental health-related medications for all age groups other than 75 years and over. Amongst 15-54 year olds, people born overseas who spoke a language other than English at home had the lowest rates of accessing mental health-related medications.

In 2011, 10.4% of people aged 15-54 years who were born in Australia and spoke English at home accessed at least one mental health-related medication, compared with 5.2% of people of the same age who were born overseas and spoke a language other than English at home. People aged 15-54 years who were born in Australia and spoke English at home or those who were born overseas and spoke English at home had relatively similar rates of accessing mental health-related medications (6.9% and 7.7% respectively).

Proportion of pop. accessing PBS mental health-related medications in 2011, Culturally & linguistically diverse groups



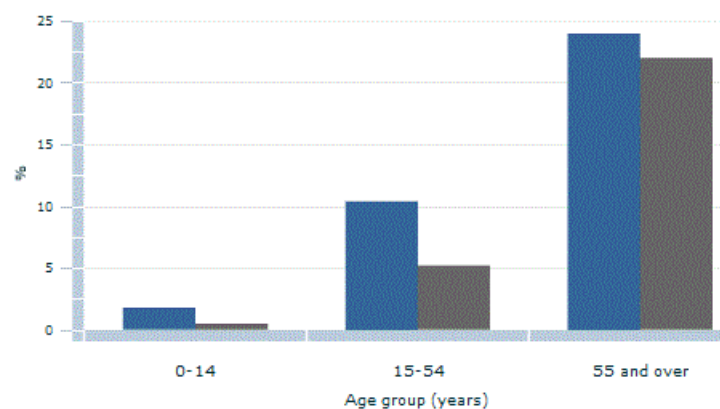
Australian Bureau of Statistics

© Commonwealth of Australia 2016.

Source(s): *Mental Health Services-Census Integrated Dataset, 2011*

CULTURAL AND LINGUISTIC CHARACTERISTICS OF PEOPLE USING MENTAL HEALTH SERVICES AND PRESCRIPTION MEDICATIONS, 2011

Proportion of pop accessing PBS mental health-related medications in 2011, Culturally & linguistically diverse groups



■ Born in Australia, Speaks English at home

■ Born overseas, Speaks a language other than English at home

Save Chart Image

Australian Bureau of Statistics

© Commonwealth of Australia 2016.

Source(s): *Mental Health Services-Census Integrated Dataset, 2011*

CULTURAL AND LINGUISTIC CHARACTERISTICS OF PEOPLE USING MENTAL HEALTH SERVICES AND PRESCRIPTION MEDICATIONS, 2011

COUNTRY OF BIRTH

Of the five most common countries of birth (other than Australia), 16.3% of people born in the United Kingdom accessed at least one PBS subsidised mental health-related medication in 2011, while 8.3% of people born in New Zealand, 24.4% of people born in Italy, 4.3% of people born in China and 4.2% of people born in India accessed mental health-related medications.

People born in Hungary had the highest rate of use of mental health-related medications in 2011 (25.5%), followed by Italy (24.4%) and Malta (23.8%). In general, people born in Asia had relatively low rates of use of mental health-related medications, with 6.2% of people born in South-East Asia, 4.1% of people born in North-East Asia, and 5.1% of people born in Southern and Central Asia using at least one mental health-related service in 2011.

PEOPLE WHO ACCESSED AT LEAST ONE PBS SUBSIDISED MENTAL HEALTH-RELATED MEDICATION IN 2011, Country of birth

	2011 Census counts			People who accessed at least one PBS subsidised mental health-related service in 2011	
	Number '000	Median age years	Sex ratio ratio(a)	Number '000	Proportion %(b)
Most common countries of birth of Australians					
Australia (includes External Territories)	15 021.8	33	97.5	1 673.4	11.1
United Kingdom	1 101.1	54	101.7	179.3	16.3
New Zealand	483.4	40	102.8	40.3	8.3
China (excludes SARs and Taiwan)	319.0	35	79.8	13.6	4.3
India	295.4	31	125.5	12.5	4.2
Italy	185.4	68	104.7	45.2	24.4
Vietnam	185.0	43	84.6	16.4	8.9
Philippines	171.2	39	60.6	8.3	4.9
South Africa	145.7	39	97.0	11.8	8.1
Malaysia	116.2	39	83.5	5.8	5.0
Germany	108.0	62	90.6	19.6	18.2
Countries of birth with highest rates of use(c)					
Hungary	19.1	66	100.7	4.9	25.5
Italy	185.4	68	104.7	45.2	24.4
Malta	41.3	64	103.5	9.8	23.8
Netherlands	76.0	64	103.6	17.1	22.4
Greece	99.9	67	95.5	20.8	20.9
Total persons born overseas	5 280.4	45	95.9	342.9	6.5
Total persons	21 507.7	37	97.8	1 540.8	7.2

(a) Males per 100 females.

(b) Proportion of population (2011 Census counts).

(c) Of countries with populations of greater than 9,500 people in Australia.

Note: see Datacube Table 6 for a more extensive list of countries of birth.

CULTURAL AND LINGUISTIC CHARACTERISTICS OF PEOPLE USING MENTAL HEALTH SERVICES AND PRESCRIPTION MEDICATIONS, 2011

LANGUAGE SPOKEN AT HOME

Of the five most common languages spoken at home (other than English), 2.9% of people who spoke Mandarin at home accessed a mental health-related medication in 2011, while 18.5% of people who spoke Italian, 9.7% of people who spoke Arabic, 4.8% of people who spoke Cantonese, and 13.3% of people who spoke Greek accessed mental health-related medications.

People who spoke Hungarian had the highest rate of use of mental health-related medications in 2011 (22.6%), followed by people who spoke Maltese (21.8%) or Dutch (20.3%). In general, people who spoke Asian languages had relatively low rates of use, with 5.3% of people who spoke a Southeast Asian language, 3.2% of people who spoke a Southern Asian language, and 3.7% of people who spoke an Eastern Asian language using at least one mental health-related medication in 2011.

PEOPLE WHO ACCESSED AT LEAST ONE PBS SUBSIDISED MENTAL HEALTH-RELATED SERVICE IN 2011, Language spoken at home

	2011 Census counts			People who accessed at least one PBS subsidised mental health-related service in 2011	
	Number '000	Median age years	Sex ratio ratio(a)	Number '000	Proportion %(b)
Most common languages spoken at home					
English	16 509.3	38	97.4	1,979.7	12.0
Mandarin	336.4	29	84.7	9.8	2.9
Italian	299.8	56	92.9	55.5	18.5
Arabic	287.2	29	105.2	27.8	9.7
Cantonese	263.7	38	88.5	12.7	4.8
Greek	252.2	46	95.9	33.7	13.3
Vietnamese	233.4	32	90.8	15.8	6.8
Spanish	117.5	38	90.6	12.7	10.8
Hindi	111.4	31	108.4	3.9	3.5
Tagalog	81.5	38	70.0	3.3	4.1
German	80.4	51	84.8	12.3	15.3
Languages spoken at home: highest rates of use(c)					
Hungarian	20.9	57	82.2	4.7	22.6
Maltese	34.4	61	92.9	7.5	21.8
Dutch	37.2	59	81.5	7.6	20.3
Italian	299.8	56	92.9	55.5	18.5
Polish	50.7	53	78.2	8.8	17.3
Total languages other than English	3 904.3	36	93.6	224.7	5.8
Total persons	21 507.7	37	97.8	1 540.8	7.2

(a) Males per 100 females.

(b) Proportion of population (2011 Census counts).

(c) Of languages spoken at home by more than 9,500 people in Australia.

Note: see Datacube Table 7 for a more extensive list of languages spoken at home.

CULTURAL AND LINGUISTIC CHARACTERISTICS OF PEOPLE USING MENTAL HEALTH SERVICES AND PRESCRIPTION MEDICATIONS, 2011

EXPLANATORY NOTES

INTRODUCTION

1 The Mental Health Services-Census Data Integration project combined data from the 2011 Census of Population and Housing with a subset of data from the Medical Benefits Schedule (MBS) and Pharmaceutical Benefits Scheme (PBS). De-identified transaction information from the MBS and PBS was transformed to person-level information. Probabilistic linkage techniques were used to combine this information with person-records from the Census to create the Mental Health Services-Census Integrated Dataset, 2011.

DATA

2 Data were produced using the following sources:

- 2011 Census of Population and Housing. The 2011 Census measured the number and key characteristics of people who were in Australia on Census night 9 August 2011. For information about the 2011 Census please refer to Census 2011 Reference and Information and Census Data Quality on the ABS website.
- Medicare Benefits Schedule data. The Department of Human Services collects data on the activity of all persons making claims through the Medicare Benefits Scheme and provides this information to the Department of Health. Information collected includes the type of service provided (MBS item number) and the benefit paid by Medicare for the service. The item numbers and benefits paid by Medicare are based on the Medicare Benefits Schedule which is a listing of the Medicare services subsidised by the Australian Government. The Mental Health Services-Census Integrated Dataset includes those MBS subsidised mental health-related services as defined in Appendix 1;
- Pharmaceutical Benefits Scheme data. The Department of Human Services provides data on prescriptions funded through the Pharmaceutical Benefits Scheme to the Department of Health. The PBS lists all of the medicines available to be dispensed to patients at a Government-subsidised price. The Government is advised by the Pharmaceutical Benefits Advisory Committee (PBAC) regarding which drugs should be listed on the PBS Scheme. The Mental Health Services-Census Integrated Dataset includes those PBS subsidised mental health-related medications as defined in Appendix 2.

SCOPE

3 The scope of the data is restricted to persons who responded to the 2011 Census of Population and Housing and who accessed subsidised mental health-related items listed on the MBS or PBS datasets in 2011. Data excludes:

- persons whose Census record indicated that they were an overseas visitor on Census night;
- persons who were out of the country on Census night; and
- persons who were not enumerated in the 2011 Census.

4 Data also excludes:

- persons who received services provided by hospital doctors to public patients in public hospitals, or services that qualify for a benefit under the Department of Veterans' Affairs National Treatment Account;
- the Repatriation Pharmaceutical Benefits Scheme which is subsidised by the Department of Veterans' Affairs;
- persons who were supplied medications or accessed services only through programs that do not use the Medicare processing system; for example, Aboriginal and Torres Strait Islander Health Programmes;
- persons accessing private prescription drugs, over the counter drugs, and drugs that cost less than the co-payment.

5 These exclusions are discussed further in the Data Quality section.

CULTURAL AND LINGUISTIC CHARACTERISTICS OF PEOPLE USING MENTAL HEALTH SERVICES AND PRESCRIPTION MEDICATIONS, 2011

LINKAGE RESULTS

6 At the completion of the linkage process:

- 1,072,284 person-records (69.6%) of the 1,540,836 person-records on the MBS dataset were linked to the 2011 Census;
- 1,669,278 person-records (70.9%) of the 2,354,118 person-records on the PBS dataset were linked to the 2011 Census; and
- 2,279,863 person-records (70.6%) of the 3,226,815 person-records on the combined MBS/PBS dataset were linked to the 2011 Census.

METHODOLOGY

Overview of data integration

7 Statistical data integration involves combining information from different administrative and/or statistical sources to provide new datasets for statistical and research purposes (Endnote 7).

8 Data linking is a key part of statistical data integration and involves the technical process of combining records from different source datasets using variables that are shared between the sources. Data linkage is typically performed on records that represent individual persons, rather than aggregates. Two common methods used to link records are deterministic and probabilistic linkage. Deterministic linkage links person-records on exact matches using a unique identifier (such as a social security number or a created unique identifier such as a linkage key). Probabilistic linkage links person-records on close matches based on the relative likelihood that two records refer to the same person, using a number of linking variables (such as date of birth, sex, geographic area).

9 For further information on data integration see Glossary and the National Statistical Service website – Data Integration.

Integration method

10 The Department of Health provided the ABS with de-identified MBS and de-identified PBS data extracts, while the Department of Human Services extracted and provided the associated de-identified demographic data extract on behalf of the Department of Health. This data was de-identified in that it did not include name, address, Medicare Number or Pharmaceutical Benefits number. ABS then transformed this administrative data from transaction-level to person-level.

11 Data from the 2011 Census, and the transformed MBS and PBS data, were brought together using probabilistic linkage. The variables used to link the MBS and PBS data to the Census were date of birth, sex and Mesh Block. The method involved linking without the use of name and address; this information was destroyed at the end of the 2011 Census processing cycle.

12 The process also placed importance on accuracy and uniqueness. Only records that matched exactly on the linkage variables and were unique matches were retained. In this linkage project, a unique match was defined as instances where a record on the MBS or PBS file had only one matching record on the Census, and that same Census record does not match to any other record on the MBS or PBS file.

CULTURAL AND LINGUISTIC CHARACTERISTICS OF PEOPLE USING MENTAL HEALTH SERVICES AND PRESCRIPTION MEDICATIONS, 2011

13 Before records between datasets are compared, the contents of the linking variables of each dataset need to be as consistent as possible to facilitate comparison. This process is known as standardisation. The standardisation procedure for the Mental Health Services-Census Data Integration project included coding imputed and invalid values on the data to a common missing value. These variables included date of birth, age, sex, Mesh Block, Statistical Area Level 1 (SA1) and postcode.

14 The table below lists the variables used to link in each pass. Each record pair required exact matching of all variables used in the pass in order for a link to be created.

LINKING VARIABLES USED FOR EACH PASS				
	Pass 1	Pass 2	Pass 3	Pass 4
Sex	Y	Y	Y	Y
Date of birth	Y	Y	Y	
Age				Y
Mesh Block	Y			Y
SA1		Y		
Postcode			Y	

Representativeness

15 The linkage rates that were achieved for the MBS and PBS datasets were in line with expected results, and were relatively consistent across most sub-populations -- the exceptions were Northern Territory, Remote, Very Remote, and younger adults, which had lower linkage rates.

Linkage accuracy

16 False links can occur during the linkage process because, even when a record pair matches on all linking fields, the records may not actually belong to the same individual. While the methodology is designed to ensure that the majority of links are true some false links will be present within the dataset.

Unlinked records

17 There are three main reasons why records from the MBS and PBS datasets were not linked to a 2011 Census record:

- records belonging to the same individual were present in the MBS or PBS dataset and the 2011 Census but these records failed to be linked because they contained missing or inconsistent information in one or more of the datasets.
- there was no 2011 Census record corresponding to an MBS or PBS record because the person was not counted in the Census.
- there were more than one Census records that agreed on the same linkage variables – only unique matches were retained.

CULTURAL AND LINGUISTIC CHARACTERISTICS OF PEOPLE USING MENTAL HEALTH SERVICES AND PRESCRIPTION MEDICATIONS, 2011

Weighting

18 Some groups of records were more likely to link, or conversely less likely to link, than other groups of records. This resulted in over representation of some groups and under representation of others. Records are more difficult to link when a person has poorly reported, poorly coded, missing or non-applicable values for linking variables. The non-random distribution of links has the potential to cause bias.

19 To compensate for differences in propensity to link, the data were weighted to represent the original MBS and PBS datasets.

20 Weighting is the process of adjusting a sample to infer results for the relevant population. To do this, a 'weight' is allocated to each sample unit - in this case, persons. The weight can be considered an indication of how many people in the relevant population are represented by each person in the sample.

21 For this project, estimates were created by weighting the linked records to represent the original MBS and PBS datasets, using: age group, sex, State/Territory, Remoteness Area, SEIFA, and broad groups for services and medications. For a relatively small number of records some of these variables were imputed for weighting purposes.

DATA QUALITY

22 All data collections are subject to sampling and non-sampling error. Non-sampling error may occur in any data collection. Possible sources of non-sampling error include errors in reporting or recording of information, occasional errors in coding and processing data, and errors introduced by the linkage process (discussed above).

23 A small number of geographies (State and Remoteness Area) were imputed, and a very small number of unusual records were removed prior to linkage.

MBS data

24 The Department of Human Services collects data on the activity of all persons making claims through the Medicare Benefits Scheme and provides this information to the Department of Health. Information collected includes the type of service provided (MBS item number) and the benefit paid by Medicare for the service. The item numbers and benefits paid by Medicare are based on the Medicare Benefits Schedule which is a listing of the Medicare services subsidised by the Australian Government.

25 MBS data includes Medicare-subsidised mental health-related services provided by psychiatrists, general practitioners (GPs), psychologists and other allied health professionals—including mental health nurses, occupational therapists, some social workers, and Aboriginal health workers. These services are defined in the Medicare Benefits Schedule (See Appendix 1).

26 Medicare data covers services that are provided out-of-hospital (e.g. in doctors' consulting rooms) as well as in-hospital services provided to private patients whether they are treated in a private or public hospital. The figures do not include services provided to public patients in public hospitals or services that qualify for a benefit under the Department of Veterans Affairs National Treatment Account. The States and Territories are the custodians of public hospital data (Endnote 8).

CULTURAL AND LINGUISTIC CHARACTERISTICS OF PEOPLE USING MENTAL HEALTH SERVICES AND PRESCRIPTION MEDICATIONS, 2011

PBS data

27 The Department of Human Services provides data on prescriptions funded through the Pharmaceutical Benefits Scheme (PBS) to the Department of Health. The PBS lists all of the medicines available to be dispensed to patients at a Government-subsidised price. The Government is advised by the Pharmaceutical Benefits Advisory Committee (PBAC) regarding which drugs should be listed on the PBS Scheme.

28 PBS data include subsidised prescription medication from the following groups: Antipsychotics, Anxiolytics, Hypnotics and Sedatives, Antidepressants, and Psychostimulants, agents used for ADHD and nootropics (see Appendix 2).

29 The data refer only to prescriptions scripted by registered medical practitioners who are approved to work within the PBS and to paid services processed from claims presented by approved pharmacists who comply with certain conditions. They exclude adjustments made against pharmacists' claims, any manually paid claims or any benefits paid as a result of retrospective entitlement or refund of patient contributions (Endnote 9).

30 The PBS data exclude non-subsidised medications, such as private and over-the-counter medications. Under co-payment prescriptions (where the patient co-payment covers the total costs of the prescribed medication) data are available from mid-2012; and therefore not available for 2011 (Endnote 9).

31 Data does not include the Repatriation Pharmaceutical Benefits Scheme (RPBS) which is subsidised by the Department of Veterans' Affairs (Endnote 10).

32 Whilst data on medication dosage was obtained, it has not been considered in analyses in this publication.

Census of Population and Housing

33 The 2011 Census measured the number and key characteristics of people who were in Australia on Census night 9 August 2011. For information about the 2011 Census please refer to Census 2011 Reference and Information and Census Data Quality on the ABS website.

34 Cultural and linguistic diversity can be measured using multiple data items that capture the cultural and linguistic characteristics of a person. For the purpose of this publication, the Australian population has been divided into four groups based on country of birth and language spoken at home:

- Born in Australia, speaks English at home
- Born in Australia, speaks a language other than English at home
- Born overseas, speaks English at home
- Born overseas, speaks a language other than English at home

35 For more information, see Standards for Statistics on Cultural and Language Diversity, 1999 (cat. no. 1289.0).

36 While Indigenous status is a core data item in determining an individual's cultural and linguistic background, data for Aboriginal and Torres Strait Islander Australians are not presented in this publication. The Aboriginal Health Services Program, funded by the PBS, does not use the Medicare PBS processing system (Endnote 9). Medications provided through this program are therefore not captured in the Mental Health Services-Census Integrated Dataset. Most affected are data for Remote and Very Remote areas and data for the Northern Territory.

CULTURAL AND LINGUISTIC CHARACTERISTICS OF PEOPLE USING MENTAL HEALTH SERVICES AND PRESCRIPTION MEDICATIONS, 2011

Geography

37 The Mesh Block information used in the linkage process may not be aligned between the MBS and PBS files, and the Census, for a range of reasons, including:

- differences arising because MBS and PBS mesh block are based on postal address whereas the Census mesh block was based on the usual residential address;
- persons may have changed their address but not updated their Medicare records.

38 Medicare claims data used in this dataset are based on the Mesh Block of the enrolment address of the patient. As clients may receive services in locations other than where they live, these data do not necessarily reflect the location in which services were received. The data therefore reflects geographic information about the patient, rather than where they received each service; for example, the data does not show GP services by state, but rather the GP services provided to patients in each state.

Remoteness Areas

39 People living in Remote and Very Remote areas of Australia are under-represented in the data. This may be for a number of reasons including:

- GPs are less likely to charge Medicare in Remote areas (Endnote 11).
- non-metropolitan hospitals are more likely to admit patients, and people in Remote areas are more likely to attend hospital accident and emergency departments for primary care medical consultations than people from Major Cities (Endnote 11). People accessing these hospital services may be public inpatients and therefore not in scope. States and Territories are the custodians for this data and it is not included in the dataset.
- in 2010-11, despite there being more GPs in Remote areas, there were about half the GP services provided per person in Very Remote areas as in Major Cities (Endnote 12).
- the Aboriginal Health Services Program is funded by the PBS however person-level data is not in the PBS processing system. Data from Remote and Very Remote areas, and the data from the Northern Territory are most affected (Endnote 9).
- Section 100 of the National Health Act, 1953 allows for the Minister to make special arrangements for the supply of medications to people living in isolated areas. These medications do not appear in the PBS data.

40 The Census also undercounts the number of people living in some areas of Australia more than others. In 2011, the Northern Territory recorded the highest net undercount rate of all states and territories (6.9%) and showed the largest difference in the net undercount rate between its greater capital city and rest of state region (3.7% and 10.9% respectively) (Endnote 13).

ROUNDING

41 Estimates presented in this publication have been rounded. Proportions are based on unrounded estimates. Calculations using rounded estimates may differ from those published.

CULTURAL AND LINGUISTIC CHARACTERISTICS OF PEOPLE USING MENTAL HEALTH SERVICES AND PRESCRIPTION MEDICATIONS, 2011

ACKNOWLEDGEMENT

42 The ABS acknowledges the continuing support provided by the National Mental Health Commission and the Department of Health for this project. The provision of data by the Department of Health and the Department of Human Services as well as funding from the National Mental Health Commission was essential to enable this important work to be undertaken. The enhancement of mental health statistics through data linkage by the ABS would not be possible without their cooperation and support.

43 The ABS also acknowledges the importance of the information provided freely by individuals in the course of the 2011 Census. Census information provided by individuals to the ABS is treated in the strictest confidence as is required by the Census and Statistics Act (1905). MBS and PBS information provided by the Department of Health and the Department of Human Services to the ABS is treated in the strictest confidence as is required by the National Health Act (1953) and the Health Insurance Act (1973).

CULTURAL AND LINGUISTIC CHARACTERISTICS OF PEOPLE USING MENTAL HEALTH SERVICES AND PRESCRIPTION MEDICATIONS, 2011

ENDNOTES

- 1 Department of Health and Ageing, November 2009, Review of the Multicultural Mental Health Australia (MMHA) Project, viewed 30 May 2016, <<http://www.health.gov.au/internet/main/publishing.nsf/content/mental-multi-review>>
- 2 Mental Health in Multicultural Australia (MHIMA), 2014, Framework for Mental Health in Multicultural Australia: Towards culturally inclusive service delivery, viewed 30 May 2016, <<http://framework.mhima.org.au/framework/index.htm>>
- 3 Australian Bureau of Statistics, 2012, Cultural Diversity in Australia, Reflecting a Nation: Stories from the 2011 Census, 2012-2013, cat. no. 2071.0, viewed 30 May 2016, <<http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/2071.0main+features902012-2013>>
- 4 Department of Human Services, 2016, Health care for visitors to Australia, viewed 30 May 2016, <<https://www.humanservices.gov.au/customer/enablers/health-care-visitors-australia>>
- 5 Australian Bureau of Statistics, 2010, Migration, Australia, 2009-10, cat. no. 3412.0, viewed 30 May 2016, <<http://www.abs.gov.au/ausstats/abs@.nsf/Products/3E70795D258987A3CA2578B000119787?opendocument>>
- 6 Australian Bureau of Statistics, 2014, Characteristics of People Using Mental Health Services and Prescription Medication, 2011, cat. no. 4329.0, viewed 30 May 2016, <<http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/4329.0~2011~Main%20Features~Introduction%20~1>>
- 7 National Statistical Service, 2016, Statistical Data Integration involving Commonwealth Data, viewed 30 May 2016, <<http://www.nss.gov.au/nss/home.nsf/pages/Data+Integration+Landing+Page?OpenDocument>>
- 8 Department of Human Services, 2014, Medicare Item Reports, viewed 30 May 2016, <https://www.medicareaustralia.gov.au/statistics/mbs_item.shtml>
- 9 Australian Institute of Health and Welfare, 2014, Medicare-subsidised mental health-related prescriptions, viewed 30 May 2016, <<https://mhsa.aihw.gov.au/resources/prescriptions/>>
- 10 Department of Veterans' Affairs, 2014 Repatriation Pharmaceutical Benefits Scheme, viewed 30 May 2016, <<http://www.dva.gov.au/about-dva/accountability-and-reporting/annual-reports/annual-reports-2012-13/departments-veterans-12>>
- 11 Australian Institute of Health and Welfare, 2005, Rural, regional and remote health: Information framework and indicators, Rural Health Series Number 6, viewed 30 May 2016, <<http://www.aihw.gov.au/WorkArea/DownloadAsset.aspx?id=6442459707>>
- 12 Australian Institute of Health and Welfare, Jun 2014, Australia's Health 2014, Chapter 5: Health behaviours and other risks to health: Health in regional and remote areas, viewed 30 May 2016, <<http://www.aihw.gov.au/australias-health/2014/health-behaviours/#t6>>
- 13 Australian Bureau of Statistics, 2012, Estimates of Net Undercount, Census of Population and Housing - Details of Undercount, 2011, cat. no. 2940.0, viewed 30 May 2016, <<http://www.abs.gov.au/ausstats/abs@.nsf/Products/2940.0~2011~Main+Features~Estimates+of+net+undercount?OpenDocument>>

FOR MORE INFORMATION . . .

www.abs.gov.au the ABS website is the best place for data from our publications and information about the ABS.

INFORMATION AND REFERRAL SERVICE

Our consultants can help you access the full range of information published by the ABS that is available free of charge from our website. Information tailored to your needs can also be requested as a 'user pays' service. Specialists are on hand to help you with analytical or methodological advice.

POST Client Services, ABS, GPO Box 796, Sydney NSW 2001

FAX 1300 135 211

EMAIL client.services@abs.gov.au

PHONE 1300 135 070

FREE ACCESS TO STATISTICS

All ABS statistics can be downloaded free of charge from the ABS web site.

WEB ADDRESS www.abs.gov.au