

# National Summary

# Australia

## Paediatric health

Antibiotics dispensing in children  
9 years and under

Lowest  
SA3 rate  
per 100,000

9,707

Highest  
SA3 rate  
per 100,000

159,688

National  
magnitude  
of variation

16.5

National rate  
per 100,000

96,721

Proton pump inhibitor medicines dispensing  
1 year and under

N/A

N/A

N/A

3,628

## Gastrointestinal investigations and treatments

Proton pump inhibitor medicines dispensing  
18 years and over

Lowest  
SA3 rate  
per 100,000

34,489

Highest  
SA3 rate  
per 100,000

172,780

National  
magnitude  
of variation

5.0

National rate  
per 100,000

105,294

Colonoscopy hospitalisations  
all ages

622

4,607

7.4

2,881

Gastroscopy hospitalisations  
all ages

444

3,297

7.4

1,931

## Thyroid investigations and treatments

Thyroid stimulating hormone tests  
18 years and over

Lowest  
SA3 rate  
per 100,000

15,735

Highest  
SA3 rate  
per 100,000

40,814

National  
magnitude  
of variation

2.6

National rate  
per 100,000

28,742

Thyroid function tests  
18 years and over

6,425

16,077

2.5

12,116

Neck ultrasound  
18 years and over

513

2,893

5.6

1,606

Thyroidectomy hospitalisations  
18 years and over

28

130

4.6

62

## Cardiac tests

Cardiac stress tests and imaging<sup>†</sup>  
18 years and over

Lowest  
SA3 rate  
per 100,000

1,184

Highest  
SA3 rate  
per 100,000

11,568

National  
magnitude  
of variation

9.8

National rate  
per 100,000

4,575

Stress echocardiography  
18 years and over

104

4,894

47.1

1,491

Myocardial perfusion scans  
18 years and over

29

1,652

57.0

384

Standard echocardiography  
18 years and over

2,279

7,957

3.5

4,599

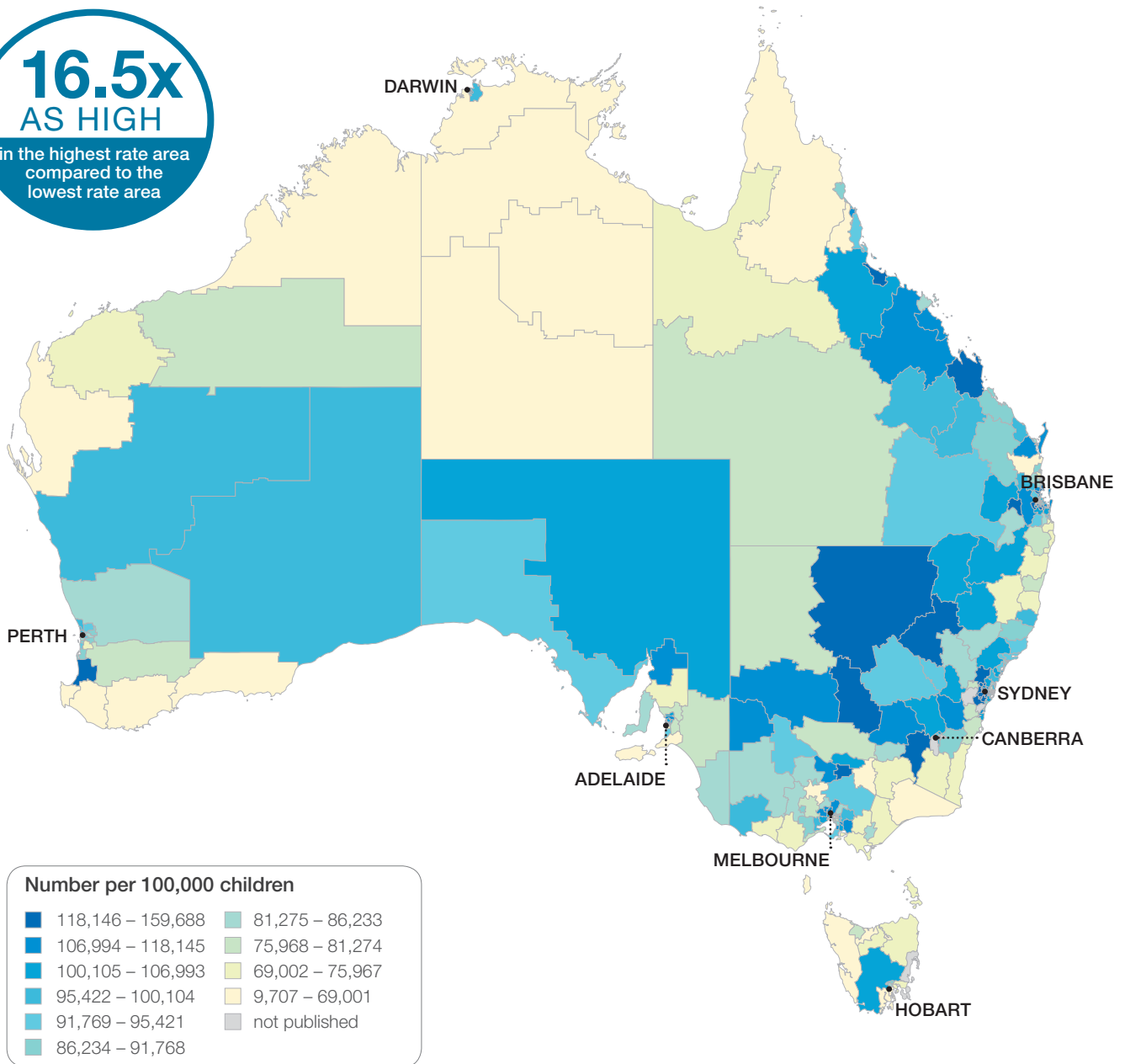
<sup>†</sup> exercise ECG, stress echocardiography, myocardial perfusion scans, computed tomography coronary arteries

Some of the published SA3 rates were considered more volatile than others. These rates are excluded from the calculation of the difference between the highest and lowest SA3 rates in Australia.

# Antibiotics dispensing in children 9 years and under

Number of PBS prescriptions dispensed for antibiotics per 100,000 children aged 9 years and under, age and sex standardised, by Statistical Area Level 3 (SA3) of patient residence, 2016–17

**16.5x**  
**AS HIGH**  
in the highest rate area  
compared to the  
lowest rate area



State	Rate	Lowest SA3 rate	Highest SA3 rate	Prescriptions	Patients
New South Wales	101,950	66,391	159,688	1,023,567	469,118
Victoria	93,018	57,562	136,694	738,699	349,345
Queensland	102,339	48,065	142,207	664,062	303,366
Western Australia	87,662	35,930	121,012	302,588	146,159
South Australia	94,312	58,958	115,504	196,083	91,140
Tasmania	71,472	48,730	101,857	44,699	22,570
Australian Capital Territory	96,447	82,273	109,733	52,890	24,364
Northern Territory	69,015	9,707	119,885	26,240	12,152
<b>Australia</b>	<b>96,721</b>	<b>9,707</b>	<b>159,688</b>	<b>3,053,315</b>	<b>1,420,363</b>

## Variation in Australia

In Australia, the lowest rate for antibiotics dispensing in children was in **Daly - Tiwi - West Arnhem** (9,707 PBS prescriptions per 100,000 people) and the highest rate was in **St Marys** (159,688 PBS prescriptions per 100,000 people). The rate was **16.5 times as high** in the area with the highest rate compared to the area with the lowest rate.

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# Antibiotics dispensing in children 9 years and under

# Australia

## Lowest rate areas

The following areas had the 10 lowest rates in Australia.

SA3 area	Rate	Prescriptions
Daly - Tiwi - West Arnhem (NT)	9,707	316
East Arnhem (NT)	13,446	375
Barkly (NT)	23,535	271
Katherine (NT)	24,302	915
Alice Springs (NT)	29,028	1,741
Kimberley (WA)	35,930	2,319
Far North (Qld)	48,065	2,957
Huon - Bruny Island (Tas)	48,730	1,103
Esperance (WA)	50,215	1,125
Augusta - Margaret River - Busselton (WA)	54,387	4,029

## Highest rate areas

The following areas had the 10 highest rates in Australia.

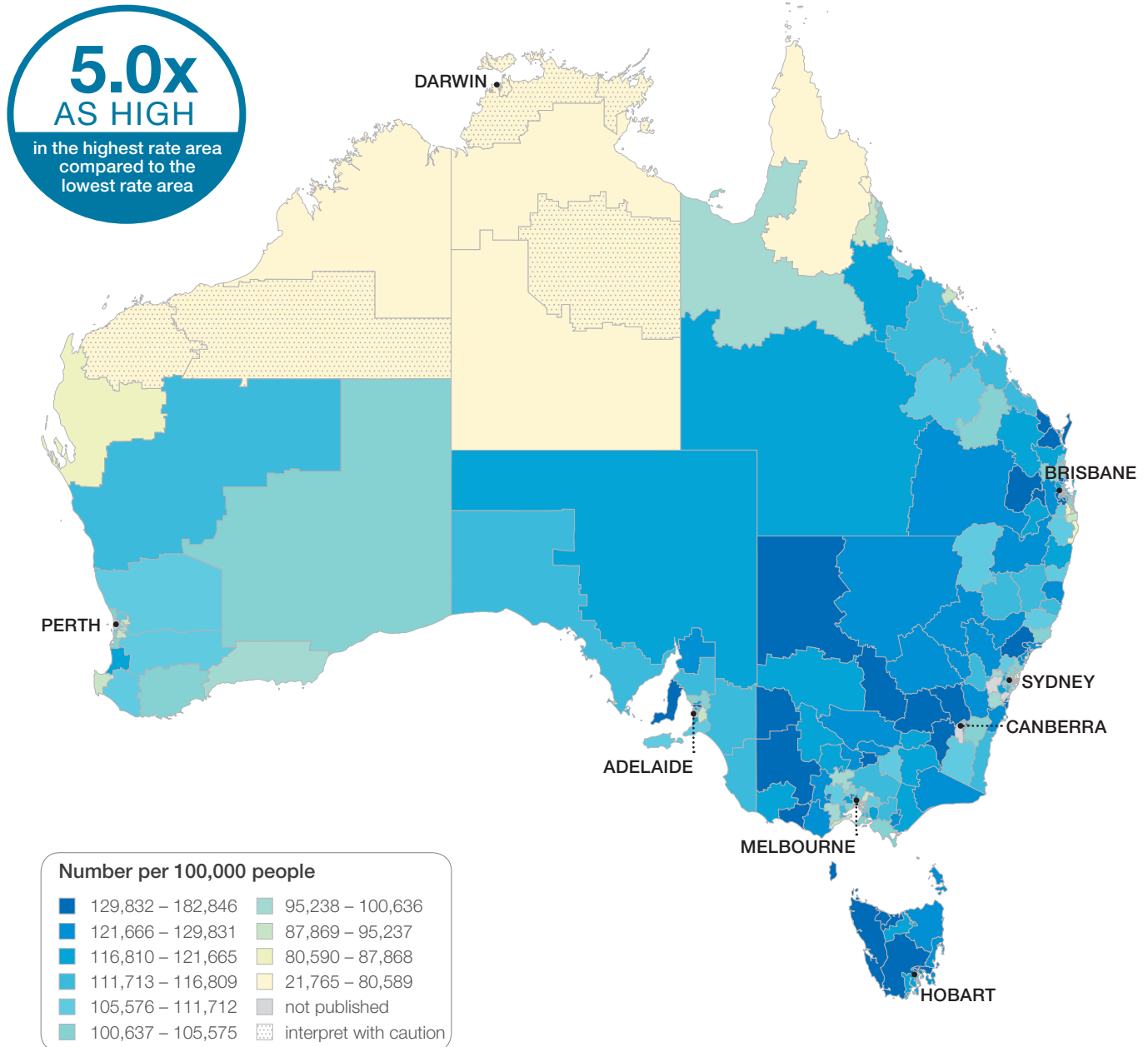
SA3 area	Rate	Prescriptions
St Marys (NSW)	159,688	13,152
Fairfield (NSW)	154,713	37,602
Griffith - Murrumbidgee (West) (NSW)	152,566	10,681
Campbelltown (NSW)	142,501	35,189
Bribie - Beachmere (Qld)	142,207	4,113
Mount Druitt (NSW)	141,411	27,748
Liverpool (NSW)	137,887	26,855
Shepparton (Vic)	136,694	12,329
Merrylands - Guildford (NSW)	136,160	33,383
Penrith (NSW)	132,552	29,335

# Proton pump inhibitor medicines dispensing

18 years and over

Australia

Number of PBS prescriptions dispensed for proton pump inhibitor medicines per 100,000 people aged 18 years and over, age and sex standardised, by Statistical Area Level 3 (SA3) of patient residence, 2016–17



State	Rate	Lowest SA3 rate	Highest SA3 rate	Prescriptions	Patients
New South Wales	105,543	66,462	145,767	7,159,289	994,065
Victoria	104,408	71,488	136,475	5,482,136	779,812
Queensland	108,660	67,992	147,767	4,384,675	609,569
Western Australia	95,806	43,023	119,093	1,948,629	290,178
South Australia	109,527	80,589	138,226	1,770,298	237,069
Tasmania	127,993	96,691	172,780	646,894	82,852
Australian Capital Territory	97,312	80,420	182,846*	288,088	41,108
Northern Territory	63,230	21,765*	82,423	83,684	14,550
<b>Australia</b>	<b>105,294</b>	<b>34,489</b>	<b>172,780</b>	<b>21,768,718</b>	<b>3,050,104</b>

## Variation in Australia

In Australia, the lowest rate for proton pump inhibitor medicines dispensing was in **Katherine** (34,489 PBS prescriptions per 100,000 people) and the highest rate was in **Brighton** (172,780 PBS prescriptions per 100,000 people). The rate was **5.0 times as high** in the area with the highest rate compared to the area with the lowest rate.

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Dotted areas and asterisks (\*) indicate rates that are considered more volatile than other published rates and should be interpreted with caution. These rates are excluded from the calculation of the difference between the highest and lowest SA3 rates in Australia.

Sources: AIHW analysis of Pharmaceutical Benefits Scheme data and ABS Estimated Resident Population 30 June 2016.

### Lowest rate areas

The following areas had the 10 lowest rates in Australia.

SA3 area	Rate	Prescriptions
East Arnhem (NT)	21,765*	1,389
Daly - Tiwi - West Arnhem (NT)	28,709*	2,540
Katherine (NT)	34,489	3,833
Christmas Island (OT)	40,006*	458
Kimberley (WA)	43,023	8,465
Barkly (NT)	48,081*	1,357
East Pilbara (WA)	52,214*	5,883
Alice Springs (NT)	52,876	11,836
Norfolk Island (OT)	52,947*	1,160
West Pilbara (WA)	54,586*	7,170

### Highest rate areas

The following areas had the 10 highest rates in Australia.

SA3 area	Rate	Prescriptions
Canberra East (ACT)	182,846*	1,923
Brighton (Tas)	172,780	21,338
Central Highlands (Tas.) (Tas)	163,948	16,813
Hobart - North West (Tas)	154,053	75,396
Jimboomba (Qld)	147,767	39,397
Sorell - Dodges Ferry (Tas)	147,423	22,622
Maitland (NSW)	145,767	87,845
Wagga Wagga (NSW)	143,082	124,185
Ipswich Inner (Qld)	141,639	116,319
Griffith - Murrumbidgee (West) (NSW)	141,624	62,654

Asterisks (\*) indicate rates that are considered more volatile than other published rates and should be interpreted with caution. These rates are excluded from the calculation of the difference between the highest and lowest SA3 rates in Australia.  
OT represents Other Territories.

Sources: AIHW analysis of Pharmaceutical Benefits Scheme data and ABS Estimated Resident Population 30 June 2016.

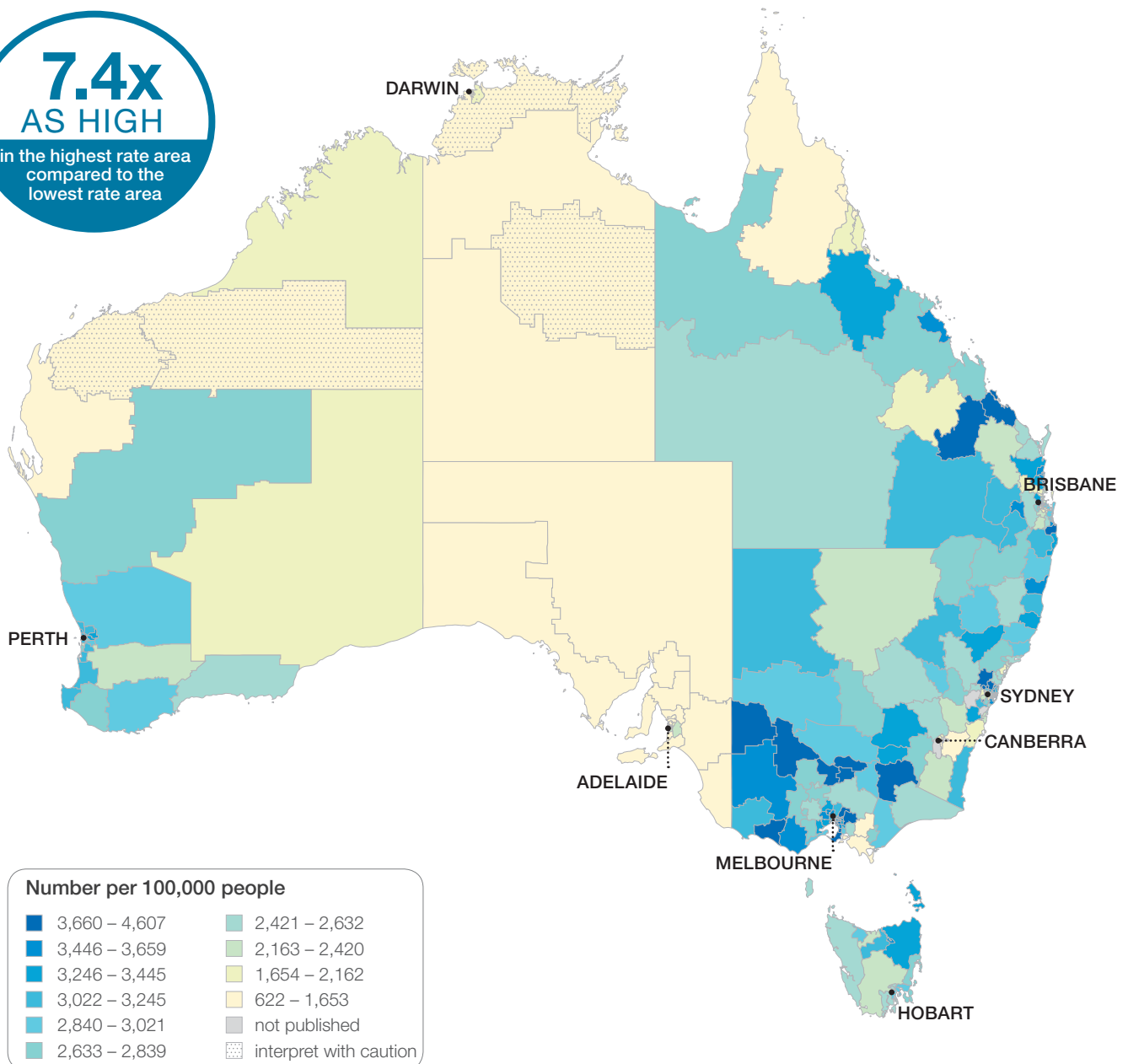
# Colonoscopy hospitalisations

## all ages

# Australia

Number of hospitalisations for colonoscopy per 100,000 people of all ages, age and sex standardised, by Statistical Area Level 3 (SA3) of patient residence, 2016–17

**7.4x**  
**AS HIGH**  
in the highest rate area compared to the lowest rate area



State	Rate	Lowest SA3 rate	Highest SA3 rate	Hospitalisations
New South Wales	2,814	1,389	4,607	242,070
Victoria	3,371	878	4,579	225,764
Queensland	2,851	1,172	3,797	150,784
Western Australia	3,051	1,420*	3,969	82,217
South Australia	1,814	1,117	2,674	37,203
Tasmania	2,885	2,198	3,488	18,529
Australian Capital Territory	1,144	622	1,743	4,557
Northern Territory	1,860	952*	2,146	3,833
<b>Australia</b>	<b>2,881</b>	<b>622</b>	<b>4,607</b>	<b>765,411</b>

### Variation in Australia

In Australia, the lowest rate for colonoscopy hospitalisations was in **Woden Valley** (622 hospitalisations per 100,000 people) and the highest rate was in **Hawkesbury** (4,607 hospitalisations per 100,000 people). The rate was **7.4 times as high** in the area with the highest rate compared to the area with the lowest rate.

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Dotted areas and asterisks (\*) indicate rates that are considered more volatile than other published rates and should be interpreted with caution. These rates are excluded from the calculation of the difference between the highest and lowest SA3 rates in Australia.

Sources: AIHW analysis of National Hospital Morbidity Database and ABS Estimated Resident Population 30 June 2016.

## Lowest rate areas

The following areas had the 10 lowest rates in Australia.

SA3 area	Rate	Hospitalisations
Woden Valley (ACT)	622	244
Tuggeranong (ACT)	656	586
Weston Creek (ACT)	673	187
South Canberra (ACT)	724	227
Baw Baw (Vic)	878	543
Barkly (NT)	952*	48
Eyre Peninsula and South West (SA)	1,117	782
Far North (Qld)	1,172	342
Murray and Mallee (SA)	1,179	1,149
Port Douglas - Daintree (Qld)	1,184	175

## Highest rate areas

The following areas had the 10 highest rates in Australia.

SA3 area	Rate	Hospitalisations
Hawkesbury (NSW)	4,607	1,227
Shepparton (Vic)	4,579	3,332
Eastern Suburbs - North (NSW)	4,547	6,530
Campaspe (Vic)	4,534	2,193
Mornington Peninsula (Vic)	4,357	9,265
Richmond - Windsor (NSW)	4,241	1,638
Rouse Hill - McGraths Hill (NSW)	4,195	1,281
Moira (Vic)	4,142	1,572
Monash (Vic)	4,139	8,316
Frankston (Vic)	4,112	6,312

Asterisks (\*) indicate rates that are considered more volatile than other published rates and should be interpreted with caution. These rates are excluded from the calculation of the difference between the highest and lowest SA3 rates in Australia.

Sources: AIHW analysis of National Hospital Morbidity Database and ABS Estimated Resident Population 30 June 2016.

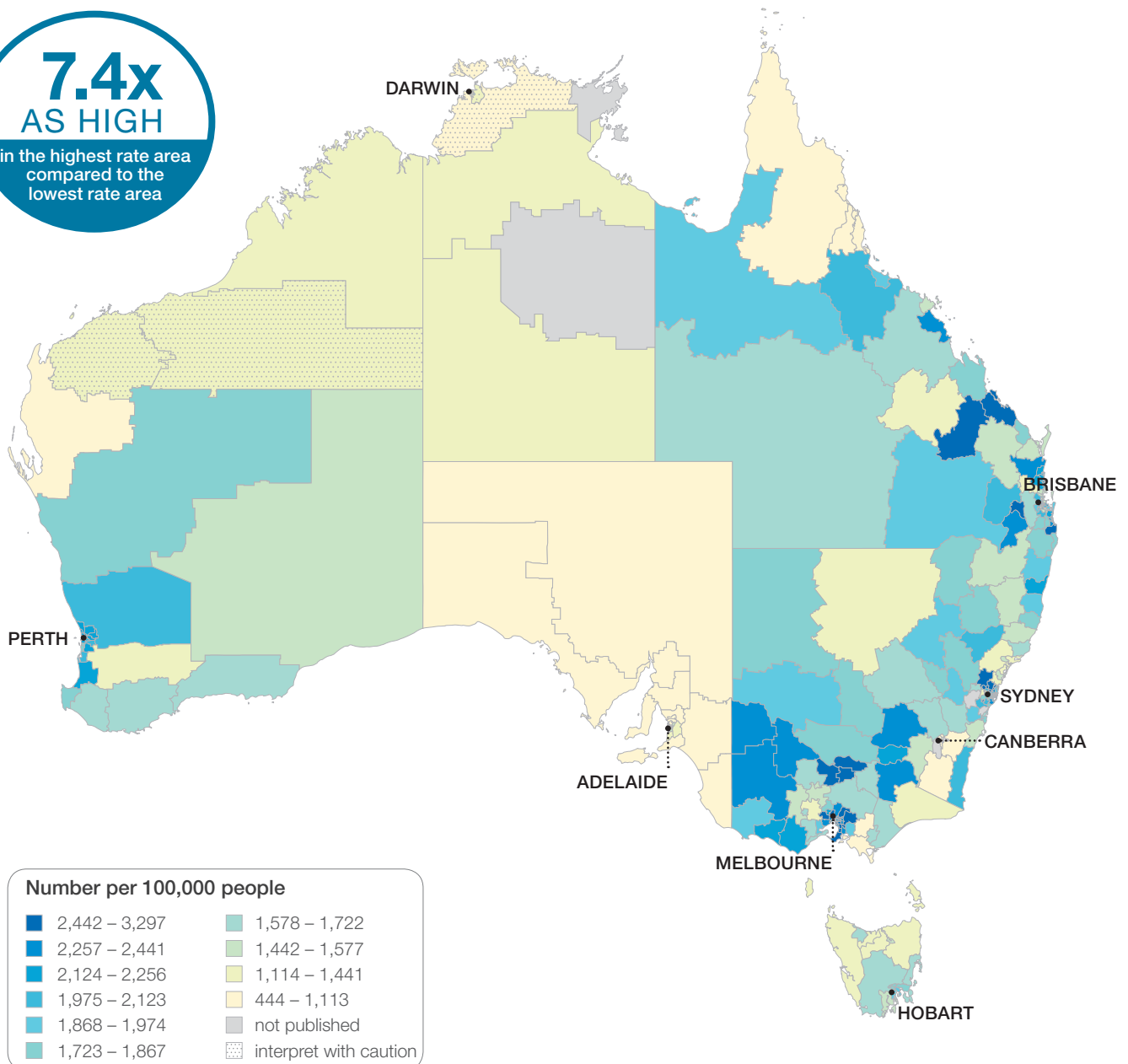
# Gastrosocopy hospitalisations

## all ages

# Australia

Number of hospitalisations for gastrosocopy per 100,000 people of all ages, age and sex standardised, by Statistical Area Level 3 (SA3) of patient residence, 2016–17

**7.4x**  
**AS HIGH**  
in the highest rate area compared to the lowest rate area



Number per 100,000 people	
2,442 – 3,297	1,578 – 1,722
2,257 – 2,441	1,442 – 1,577
2,124 – 2,256	1,114 – 1,441
1,975 – 2,123	444 – 1,113
1,868 – 1,974	not published
1,723 – 1,867	interpret with caution

State	Rate	Lowest SA3 rate	Highest SA3 rate	Hospitalisations
New South Wales	1,903	737	3,297	161,454
Victoria	2,259	625	3,142	149,455
Queensland	1,927	632	2,750	100,437
Western Australia	2,031	946	2,452	54,039
South Australia	1,211	602	1,675	24,009
Tasmania	1,618	1,233	1,921	10,077
Australian Capital Territory	701	444	1,019	2,784
Northern Territory	1,355	990*	1,659	2,822
<b>Australia</b>	<b>1,931</b>	<b>444</b>	<b>3,297</b>	<b>505,544</b>

### Variation in Australia

In Australia, the lowest rate for gastrosocopy hospitalisations was in **Weston Creek** (444 hospitalisations per 100,000 people) and the highest rate was in **Eastern Suburbs - North** (3,297 hospitalisations per 100,000 people). The rate was **7.4 times as high** in the area with the highest rate compared to the area with the lowest rate.

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Sources: AIHW analysis of National Hospital Morbidity Database and ABS Estimated Resident Population 30 June 2016.



### Lowest rate areas

The following areas had the 10 lowest rates in Australia.

SA3 area	Rate	Hospitalisations
Weston Creek (ACT)	444	118
Woden Valley (ACT)	450	172
Tuggeranong (ACT)	471	406
South Canberra (ACT)	533	158
Eyre Peninsula and South West (SA)	602	417
Baw Baw (Vic)	625	381
Port Douglas - Daintree (Qld)	632	89
Limestone Coast (SA)	682	551
Murray and Mallee (SA)	722	668
Queanbeyan (NSW)	737	446

### Highest rate areas

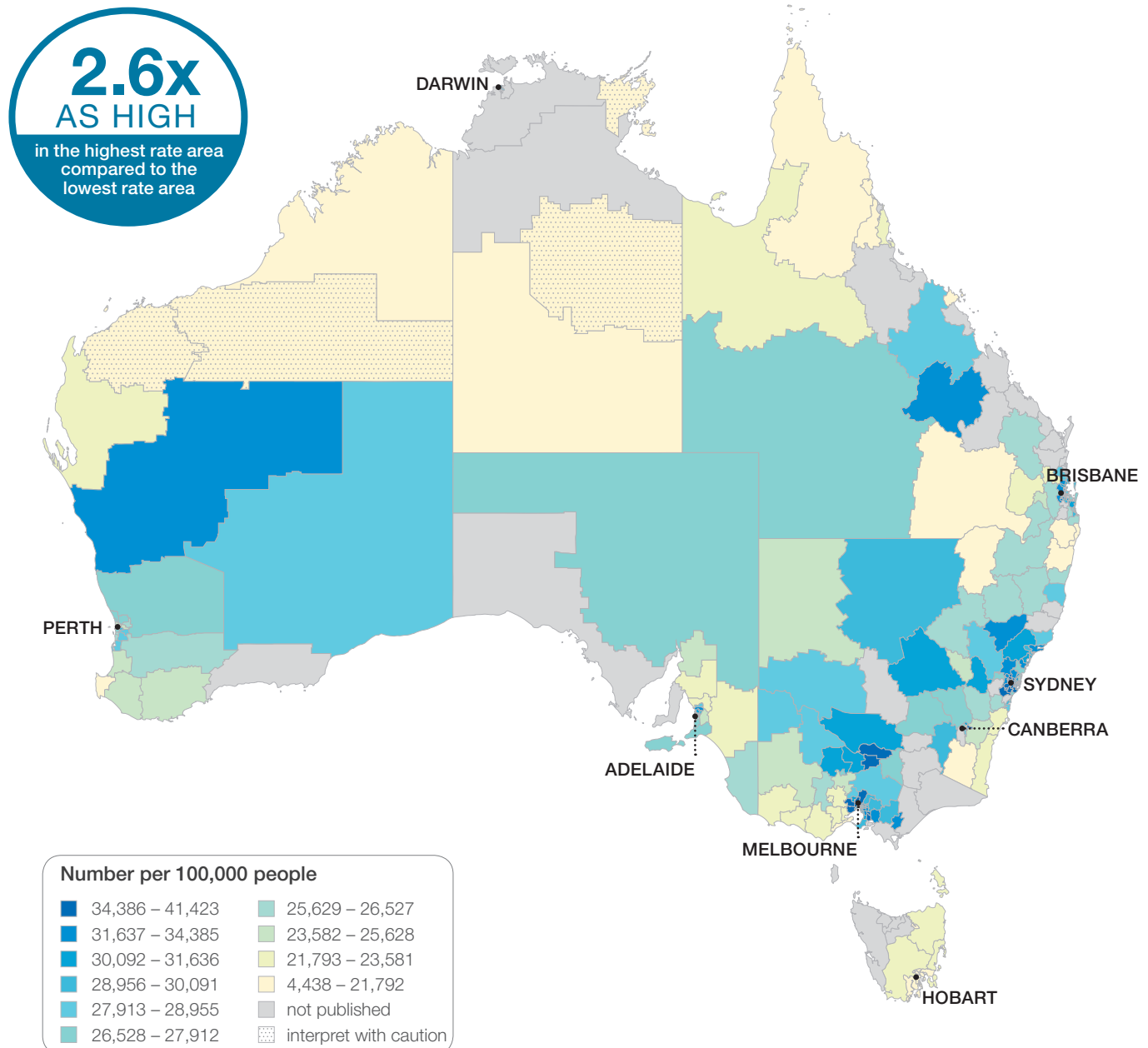
The following areas had the 10 highest rates in Australia.

SA3 area	Rate	Hospitalisations
Eastern Suburbs - North (NSW)	3,297	4,705
Hawkesbury (NSW)	3,208	832
Shepparton (Vic)	3,142	2,232
Dandenong (Vic)	3,039	6,195
Monash (Vic)	3,036	6,061
Rouse Hill - McGraths Hill (NSW)	3,021	924
Campaspe (Vic)	2,892	1,358
Frankston (Vic)	2,853	4,304
Mornington Peninsula (Vic)	2,823	5,764
Yarra Ranges (Vic)	2,822	4,731

# Thyroid stimulating hormone tests

## 18 years and over

Number of MBS-subsidised services for thyroid stimulating hormone tests per 100,000 people aged 18 years and over, age and sex standardised, by Statistical Area Level 3 (SA3) of patient residence, 2016–17



State	Rate	Lowest SA3 rate	Highest SA3 rate	Services
New South Wales	30,640	17,456	40,814	1,906,486
Victoria	29,899	21,613	40,033	1,471,039
Queensland	27,712	15,735	34,270	1,055,392
Western Australia	25,988	20,515*	32,010	514,853
South Australia	27,176	22,765	31,987	386,639
Tasmania	20,106	18,037	22,417	87,638
Australian Capital Territory	25,920	22,024	41,423*	79,354
Northern Territory	23,145	18,119*	29,270	37,837
<b>Australia</b>	<b>28,742</b>	<b>15,735</b>	<b>40,814</b>	<b>5,539,805</b>

### Variation in Australia

In Australia, the lowest rate for thyroid stimulating hormone tests was in **Whitsunday** (15,735 MBS services per 100,000 people) and the highest rate was in **Blacktown - North** (40,814 MBS services per 100,000 people). The rate was **2.6 times as high** in the area with the highest rate compared to the area with the lowest rate.

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Dotted areas and asterisks (\*) indicate rates that are considered more volatile than other published rates and should be interpreted with caution. These rates are excluded from the calculation of the difference between the highest and lowest SA3 rates in Australia.

Sources: AIHW analysis of Medicare Benefits Schedule data and ABS Estimated Resident Population 30 June 2016.

# Thyroid stimulating hormone tests

## 18 years and over

Australia

### Lowest rate areas

The following areas had the 10 lowest rates in Australia.

SA3 area	Rate	Services
Norfolk Island (OT)	4,438*	76
Whitsunday (Qld)	15,735	2,676
Far North (Qld)	16,950	3,568
Snowy Mountains (NSW)	17,456	2,906
Hobart Inner (Tas)	18,037	7,802
Barkly (NT)	18,119*	666
Alice Springs (NT)	18,685	5,264
Hobart - South and West (Tas)	19,048	5,039
Hobart - North East (Tas)	19,053	8,400
Tablelands (East) - Kuranda (Qld)	19,071	6,690

### Highest rate areas

The following areas had the 10 highest rates in Australia.

SA3 area	Rate	Services
Canberra East (ACT)	41,423*	421
Blacktown - North (NSW)	40,814	25,640
Fairfield (NSW)	40,033	60,113
Tullamarine - Broadmeadows (Vic)	40,033	47,297
Mount Druitt (NSW)	39,753	31,600
Merrylands - Guildford (NSW)	39,646	45,486
Blacktown (NSW)	39,481	41,021
Canterbury (NSW)	39,290	42,061
Bankstown (NSW)	38,944	52,385
Liverpool (NSW)	38,631	33,999
St Marys (NSW)	37,597	15,225

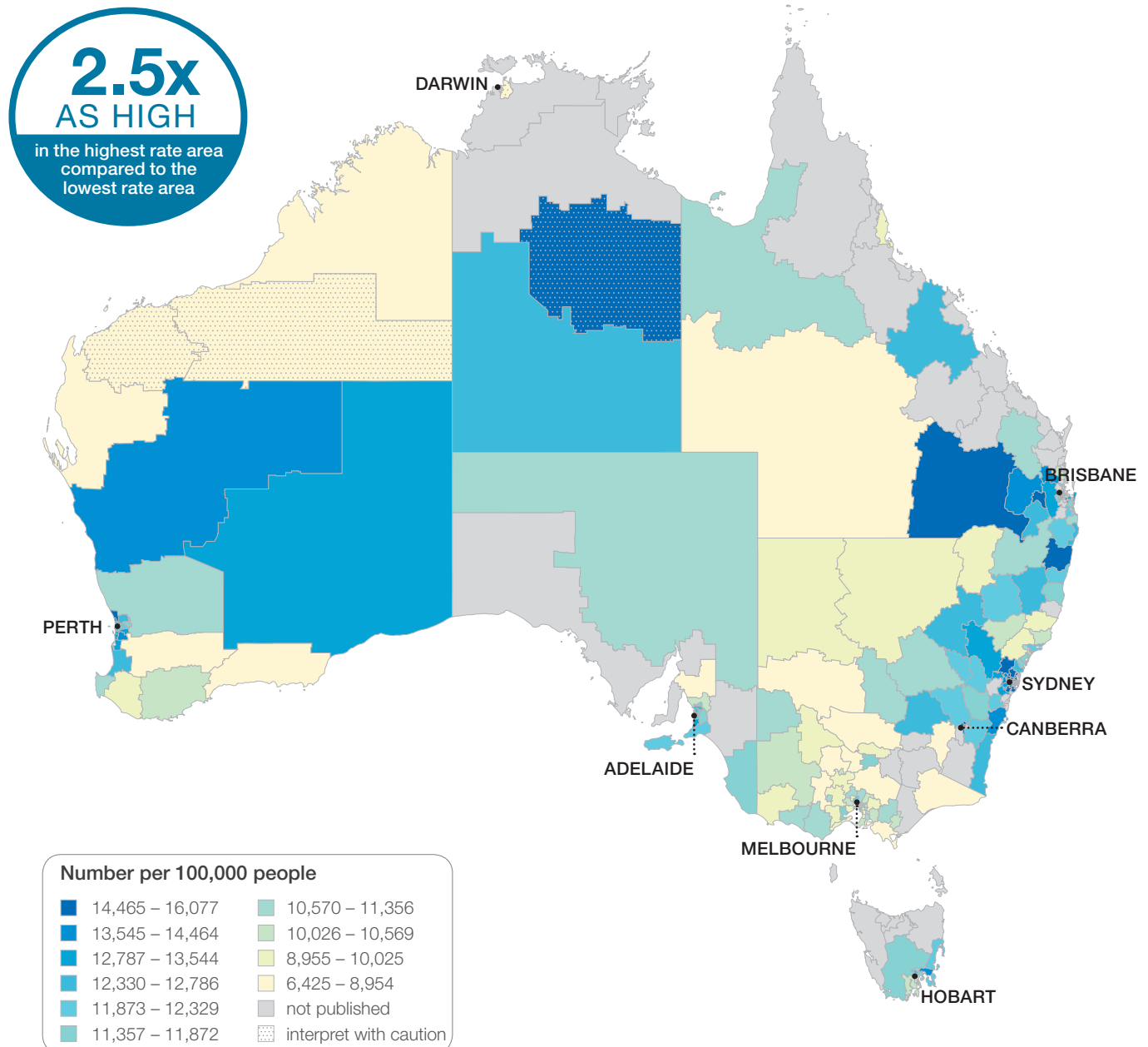
Asterisks (\*) indicate rates that are considered more volatile than other published rates and should be interpreted with caution. These rates are excluded from the calculation of the difference between the highest and lowest SA3 rates in Australia. OT represents Other Territories.

Sources: AIHW analysis of Medicare Benefits Schedule data and ABS Estimated Resident Population 30 June 2016.

# Thyroid function tests

## 18 years and over

Number of MBS-subsidised services for thyroid function tests per 100,000 people aged 18 years and over, age and sex standardised, by Statistical Area Level 3 (SA3) of patient residence, 2016–17



State	Rate	Lowest SA3 rate	Highest SA3 rate	Services
New South Wales	13,234	7,531	16,077	824,854
Victoria	10,105	7,487	12,214	500,080
Queensland	12,892	8,732	15,273	492,076
Western Australia	12,324	6,425	14,919	243,925
South Australia	12,027	8,749	13,074	173,540
Tasmania	11,978	10,317	13,917	53,280
Australian Capital Territory	13,866	13,211	15,983	42,246
Northern Territory	8,868	7,470*	16,038*	13,879
<b>Australia</b>	<b>12,116</b>	<b>6,425</b>	<b>16,077</b>	<b>2,344,089</b>

### Variation in Australia

In Australia, the lowest rate for thyroid function tests was in **Gascoyne** (6,425 MBS services per 100,000 people) and the highest rate was in **Dural - Wisemans Ferry** (16,077 MBS services per 100,000 people). The rate was **2.5 times as high** in the area with the highest rate compared to the area with the lowest rate.

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Dotted areas and asterisks (\*) indicate rates that are considered more volatile than other published rates and should be interpreted with caution. These rates are excluded from the calculation of the difference between the highest and lowest SA3 rates in Australia.

Sources: AIHW analysis of Medicare Benefits Schedule data and ABS Estimated Resident Population 30 June 2016.

### Lowest rate areas

The following areas had the 10 lowest rates in Australia.

SA3 area	Rate	Services
Gascoyne (WA)	6,425	459
Litchfield (NT)	7,470*	1,097
Gippsland - East (Vic)	7,487	3,229
Upper Murray exc. Albury (NSW)	7,531	3,143
Esperance (WA)	7,634	1,005
Darwin City (NT)	7,664	1,473
East Pilbara (WA)	8,051*	1,166
Maryborough - Pyrenees (Vic)	8,092	1,930
Melbourne City (Vic)	8,107	6,733
Kimberley (WA)	8,230	1,861

### Highest rate areas

The following areas had the 10 highest rates in Australia.

SA3 area	Rate	Services
Dural - Wisemans Ferry (NSW)	16,077	3,504
Barkly (NT)	16,038*	509
Gungahlin (ACT)	15,983	6,935
Sutherland - Menai - Heathcote (NSW)	15,927	14,081
Baulkham Hills (NSW)	15,897	18,342
Parramatta (NSW)	15,778	17,670
Clarence Valley (NSW)	15,598	7,337
Merrylands - Guildford (NSW)	15,587	17,807
Campbelltown (NSW)	15,493	18,504
Hawkesbury (NSW)	15,413	2,867

Asterisks (\*) indicate rates that are considered more volatile than other published rates and should be interpreted with caution. These rates are excluded from the calculation of the difference between the highest and lowest SA3 rates in Australia.

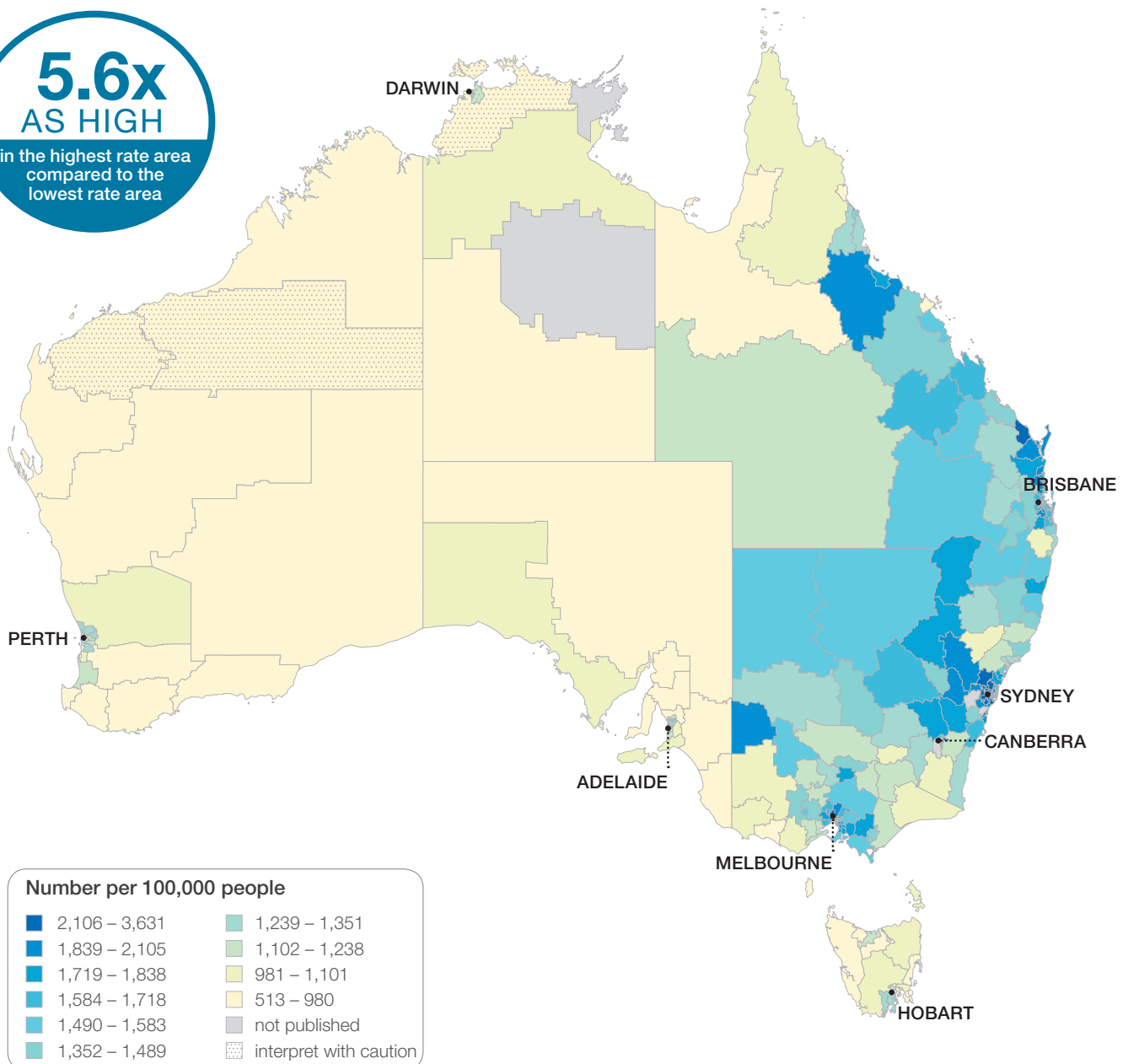
Sources: AIHW analysis of Medicare Benefits Schedule data and ABS Estimated Resident Population 30 June 2016.

# Neck ultrasound

## 18 years and over

Number of MBS-subsidised services for neck ultrasound per 100,000 people aged 18 years and over, age and sex standardised, by Statistical Area Level 3 (SA3) of patient residence, 2016–17

**5.6x**  
**AS HIGH**  
in the highest rate area  
compared to the  
lowest rate area



Number per 100,000 people	
2,106 – 3,631	1,239 – 1,351
1,839 – 2,105	1,102 – 1,238
1,719 – 1,838	981 – 1,101
1,584 – 1,718	513 – 980
1,490 – 1,583	not published
1,352 – 1,489	interpret with caution

State	Rate	Lowest SA3 rate	Highest SA3 rate	Services
New South Wales	1,946	995	2,893	120,072
Victoria	1,570	980	2,288	76,831
Queensland	1,650	896	2,205	63,006
Western Australia	1,125	618	1,339	22,211
South Australia	1,103	682	1,390	15,501
Tasmania	1,037	798	1,281	4,547
Australian Capital Territory	1,449	1,238	3,631*	4,444
Northern Territory	983	513	1,340	1,615
<b>Australia</b>	<b>1,606</b>	<b>513</b>	<b>2,893</b>	<b>308,247</b>

### Variation in Australia

In Australia, the lowest rate for neck ultrasound was in **Alice Springs** (513 MBS services per 100,000 people) and the highest rate was in **Fairfield** (2,893 MBS services per 100,000 people). The rate was **5.6 times as high** in the area with the highest rate compared to the area with the lowest rate.

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Dotted areas and asterisks (\*) indicate rates that are considered more volatile than other published rates and should be interpreted with caution. These rates are excluded from the calculation of the difference between the highest and lowest SA3 rates in Australia.

Sources: AIHW analysis of Medicare Benefits Schedule data and ABS Estimated Resident Population 30 June 2016.

### Lowest rate areas

The following areas had the 10 lowest rates in Australia.

SA3 area	Rate	Services
Alice Springs (NT)	513	143
Daly - Tiwi - West Arnhem (NT)	543*	61
Esperance (WA)	618	78
Outback - North and East (SA)	682	139
Mid North (SA)	684	166
Gascoyne (WA)	687	52
Wheat Belt - South (WA)	708	128
West Pilbara (WA)	738*	143
Lower North (SA)	740	153
East Pilbara (WA)	751*	117

### Highest rate areas

The following areas had the 10 highest rates in Australia.

SA3 area	Rate	Services
Canberra East (ACT)	3,631*	27
Fairfield (NSW)	2,893	4,315
Canterbury (NSW)	2,861	3,020
Liverpool (NSW)	2,858	2,525
Bankstown (NSW)	2,835	3,753
Merrylands - Guildford (NSW)	2,765	3,127
Bringelly - Green Valley (NSW)	2,685	2,001
Hurstville (NSW)	2,662	2,851
Blacktown (NSW)	2,637	2,745
Blacktown - North (NSW)	2,552	1,653

Asterisks (\*) indicate rates that are considered more volatile than other published rates and should be interpreted with caution. These rates are excluded from the calculation of the difference between the highest and lowest SA3 rates in Australia.

Sources: AIHW analysis of Medicare Benefits Schedule data and ABS Estimated Resident Population 30 June 2016.

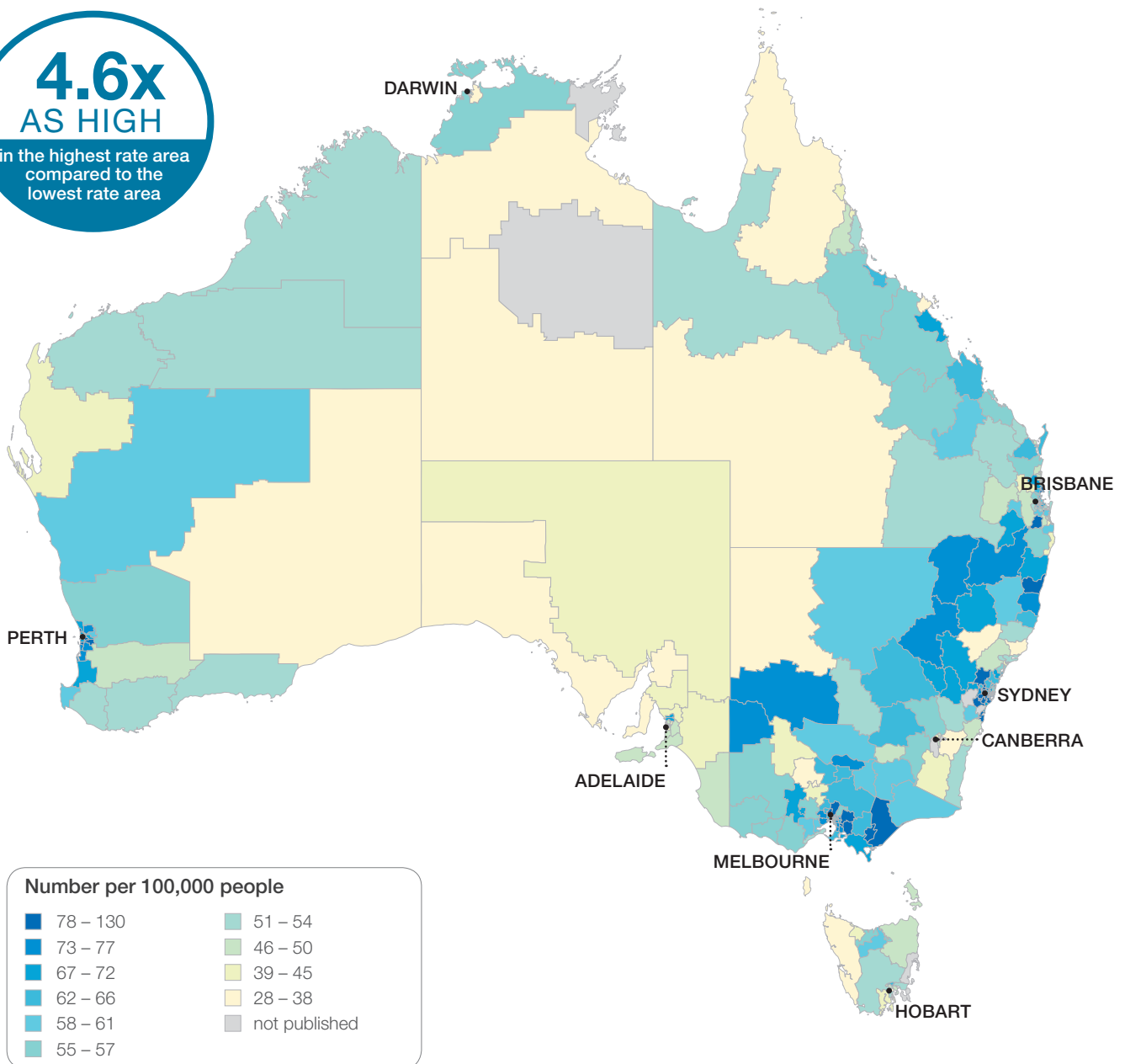
# Thyroidectomy hospitalisations

## 18 years and over

# Australia

Number of hospitalisations for thyroidectomy per 100,000 people aged 18 years and over, age and sex standardised, by Statistical Area Level 3 (SA3) of patient residence, 2014–15 to 2016–17

**4.6x**  
**AS HIGH**  
in the highest rate area compared to the lowest rate area



State	Rate	Lowest SA3 rate	Highest SA3 rate	Hospitalisations
New South Wales	68	29	104	12,485
Victoria	65	36	130	9,388
Queensland	55	28	101	6,217
Western Australia	66	38	91	3,879
South Australia	46	29	69	1,926
Tasmania	48	32	62	621
Australian Capital Territory	42	33	49	380
Northern Territory	45	31	60	222
<b>Australia</b>	<b>62</b>	<b>28</b>	<b>130</b>	<b>35,166</b>

### Variation in Australia

In Australia, the lowest rate for thyroidectomy hospitalisations was in **Outback - South** (28 hospitalisations per 100,000 people) and the highest rate was in **Latrobe Valley** (130 hospitalisations per 100,000 people). The rate was **4.6 times as high** in the area with the highest rate compared to the area with the lowest rate.

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Sources: AIHW analysis of National Hospital Morbidity Database and ABS Estimated Resident Population 30 June 2014 to 2016.



# Thyroidectomy hospitalisations 18 years and over

# Australia

## Lowest rate areas

The following areas had the 10 lowest rates in Australia.

SA3 area	Rate	Hospitalisations
Outback - South (Qld)	28	14
Great Lakes (NSW)	29	30
Yorke Peninsula (SA)	29	20
Mid North (SA)	30	24
Darwin City (NT)	31	19
Whitsunday (Qld)	32	17
West Coast (Tas)	32	14
Robina (Qld)	33	41
South Canberra (ACT)	33	22
Weston Creek (ACT)	33	19
Katherine (NT)	33	12
Broadbeach - Burleigh (Qld)	34	55
Hobart Inner (Tas)	34	43
Upper Hunter (NSW)	34	24
Eyre Peninsula and South West (SA)	35	49
Surfers Paradise (Qld)	35	38
Alice Springs (NT)	35	32
Far North (Qld)	35	21
Broken Hill and Far West (NSW)	35	20
Adelaide City (SA)	35	15
Melbourne City (Vic)	36	88
Queanbeyan (NSW)	36	50
Norwood - Payneham - St Peters (SA)	36	31
Litchfield (NT)	36	22
Bendigo (Vic)	37	82
Cairns - North (Qld)	37	49
North Canberra (ACT)	37	41
Loddon - Elmore (Vic)	37	15

## Highest rate areas

The following areas had the 10 highest rates in Australia.

SA3 area	Rate	Hospitalisations
Latrobe Valley (Vic)	130	242
Botany (NSW)	104	109
Beautesert (Qld)	101	33
Campbelltown (NSW)	92	325
Cronulla - Miranda - Caringbah (NSW)	92	258
Blacktown - North (NSW)	91	169
Kwinana (WA)	91	69
Camden (NSW)	90	119
Rouse Hill - McGraths Hill (NSW)	89	57
Dapto - Port Kembla (NSW)	88	166
Liverpool (NSW)	87	224
Kogarah - Rockdale (NSW)	86	286
Bringelly - Green Valley (NSW)	86	184

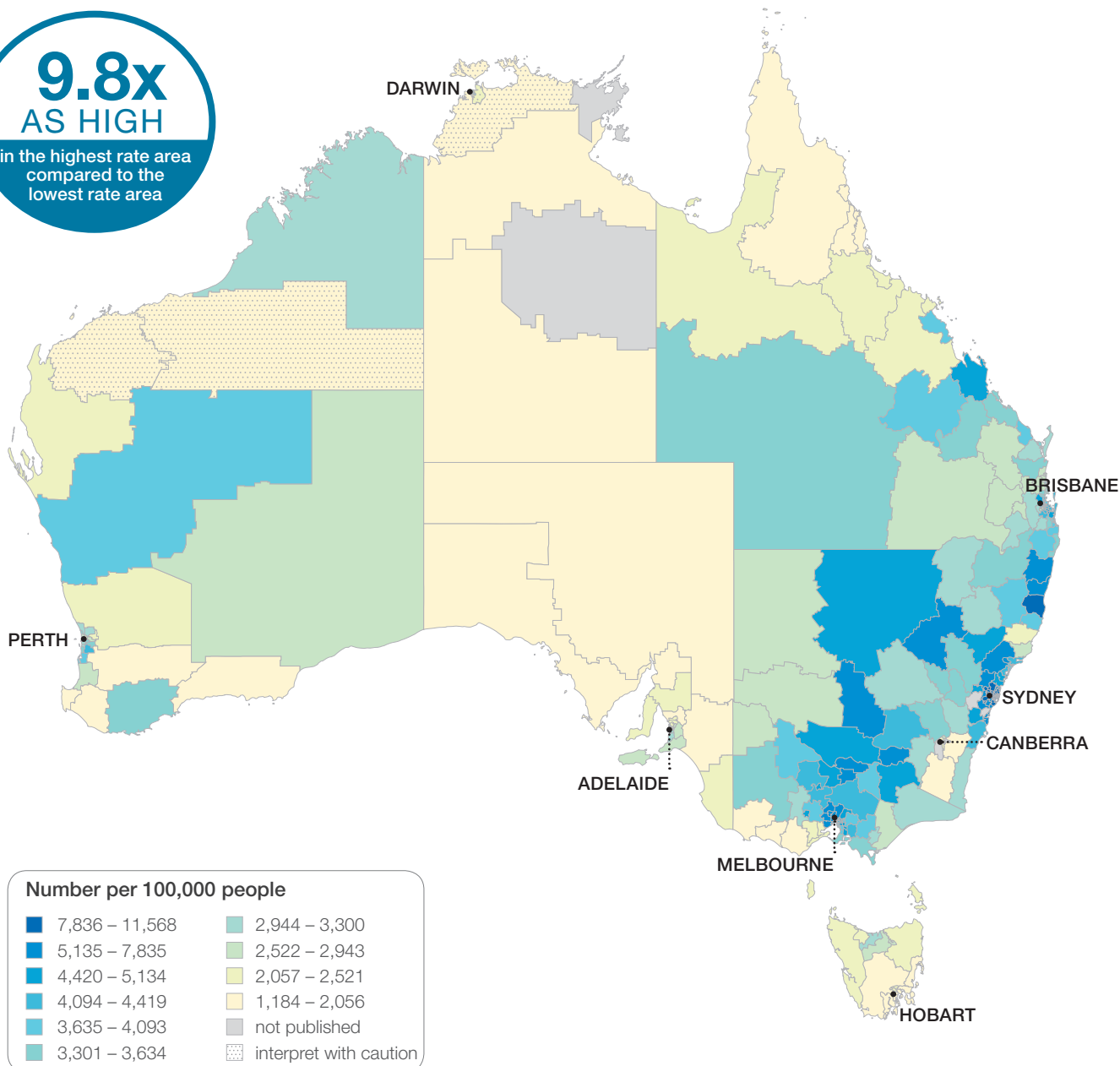
# Cardiac stress tests and imaging

## 18 years and over

# Australia

Number of MBS-subsidised services for cardiac stress tests and imaging per 100,000 people aged 18 years and over, age and sex standardised, by Statistical Area Level 3 (SA3) of patient residence, 2016–17

**9.8x**  
**AS HIGH**  
in the highest rate area compared to the lowest rate area



State	Rate	Lowest SA3 rate	Highest SA3 rate	Services
New South Wales	6,673	1,547	11,568	444,753
Victoria	4,268	1,923	7,376	216,856
Queensland	3,597	1,583	5,430	145,791
Western Australia	3,012	1,318*	4,170	62,080
South Australia	2,661	1,184	3,363	41,745
Tasmania	2,289	1,511	2,994	11,552
Australian Capital Territory	2,370	2,259	2,782	7,125
Northern Territory	2,450	1,269	3,451	3,739
<b>Australia</b>	<b>4,575</b>	<b>1,184</b>	<b>11,568</b>	<b>933,727</b>

### Variation in Australia

In Australia, the lowest rate for cardiac stress tests and imaging was in **Outback - North and East** (1,184 MBS services per 100,000 people) and the highest rate was in **Blacktown - North** (11,568 MBS services per 100,000 people). The rate was **9.8 times as high** in the area with the highest rate compared to the area with the lowest rate.

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Dotted areas and asterisks (\*) indicate rates that are considered more volatile than other published rates and should be interpreted with caution. These rates are excluded from the calculation of the difference between the highest and lowest SA3 rates in Australia.

Sources: AIHW analysis of Medicare Benefits Schedule data and ABS Estimated Resident Population 30 June 2016.

### Lowest rate areas

The following areas had the 10 lowest rates in Australia.

SA3 area	Rate	Services
Outback - North and East (SA)	1,184	271
Alice Springs (NT)	1,269	334
East Pilbara (WA)	1,318*	189
West Pilbara (WA)	1,351*	231
South East Coast (Tas)	1,511	149
Eyre Peninsula and South West (SA)	1,518	828
Mid North (SA)	1,547	441
Snowy Mountains (NSW)	1,547	303
Norfolk Island (OT)	1,553*	35
Katherine (NT)	1,558	207
Far North (Qld)	1,583	346

### Highest rate areas

The following areas had the 10 highest rates in Australia.

SA3 area	Rate	Services
Blacktown - North (NSW)	11,568	6,487
Fairfield (NSW)	11,267	17,772
Cronulla - Miranda - Caringbah (NSW)	10,917	11,694
Merrylands - Guildford (NSW)	10,722	12,094
Sutherland - Menai - Heathcote (NSW)	10,638	10,155
Blacktown (NSW)	10,518	10,912
Canterbury (NSW)	10,499	11,237
Baulkham Hills (NSW)	10,350	13,101
Parramatta (NSW)	10,293	10,195
Rouse Hill - McGraths Hill (NSW)	9,890	2,250

Asterisks (\*) indicate rates that are considered more volatile than other published rates and should be interpreted with caution. These rates are excluded from the calculation of the difference between the highest and lowest SA3 rates in Australia. OT represents Other Territories.

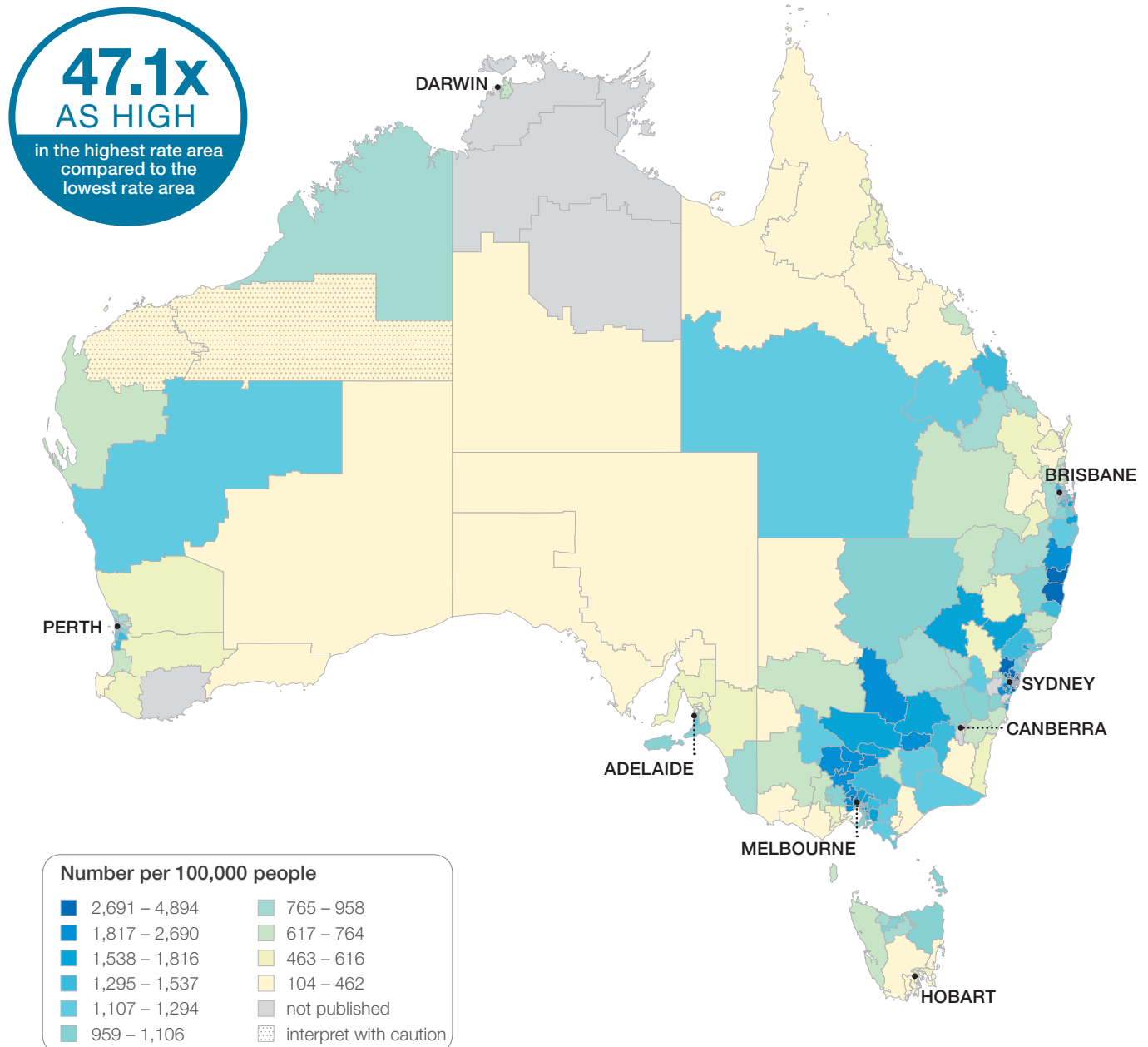
Sources: AIHW analysis of Medicare Benefits Schedule data and ABS Estimated Resident Population 30 June 2016.

# Stress echocardiography

## 18 years and over

# Australia

Number of MBS-subsidised services for stress echocardiography per 100,000 people aged 18 years and over, age and sex standardised, by Statistical Area Level 3 (SA3) of patient residence, 2016–17



State	Rate	Lowest SA3 rate	Highest SA3 rate	Services
New South Wales	2,265	399	4,894	150,723
Victoria	1,465	265	2,835	73,863
Queensland	1,014	252	1,871	41,160
Western Australia	920	129	1,440	18,942
South Australia	747	104	1,254	11,782
Tasmania	749	370	1,085	3,774
Australian Capital Territory	731	600	913	2,214
Northern Territory	698	457	912	1,042
<b>Australia</b>	<b>1,491</b>	<b>104</b>	<b>4,894</b>	<b>303,525</b>

### Variation in Australia

In Australia, the lowest rate for stress echocardiography was in **Eyre Peninsula and South West** (104 MBS services per 100,000 people) and the highest rate was in **Cronulla - Miranda - Caringbah** (4,894 MBS services per 100,000 people). The rate was **47.1 times as high** in the area with the highest rate compared to the area with the lowest rate.

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Dotted areas indicate rates that are considered more volatile than other published rates and should be interpreted with caution. These rates are excluded from the calculation of the difference between the highest and lowest SA3 rates in Australia.

Sources: AIHW analysis of Medicare Benefits Schedule data and ABS Estimated Resident Population 30 June 2016.

**Lowest rate areas**

The following areas had the 10 lowest rates in Australia.

SA3 area	Rate	Services
Eyre Peninsula and South West (SA)	104	60
Goldfields (WA)	129	32
Mid North (SA)	171	50
East Pilbara (WA)	227*	34
West Pilbara (WA)	235*	42
Esperance (WA)	248	40
Townsville (Qld)	252	356
Outback - North and East (SA)	258	60
Mildura (Vic)	265	127
Charters Towers - Ayr - Ingham (Qld)	285	121

**Highest rate areas**

The following areas had the 10 highest rates in Australia.

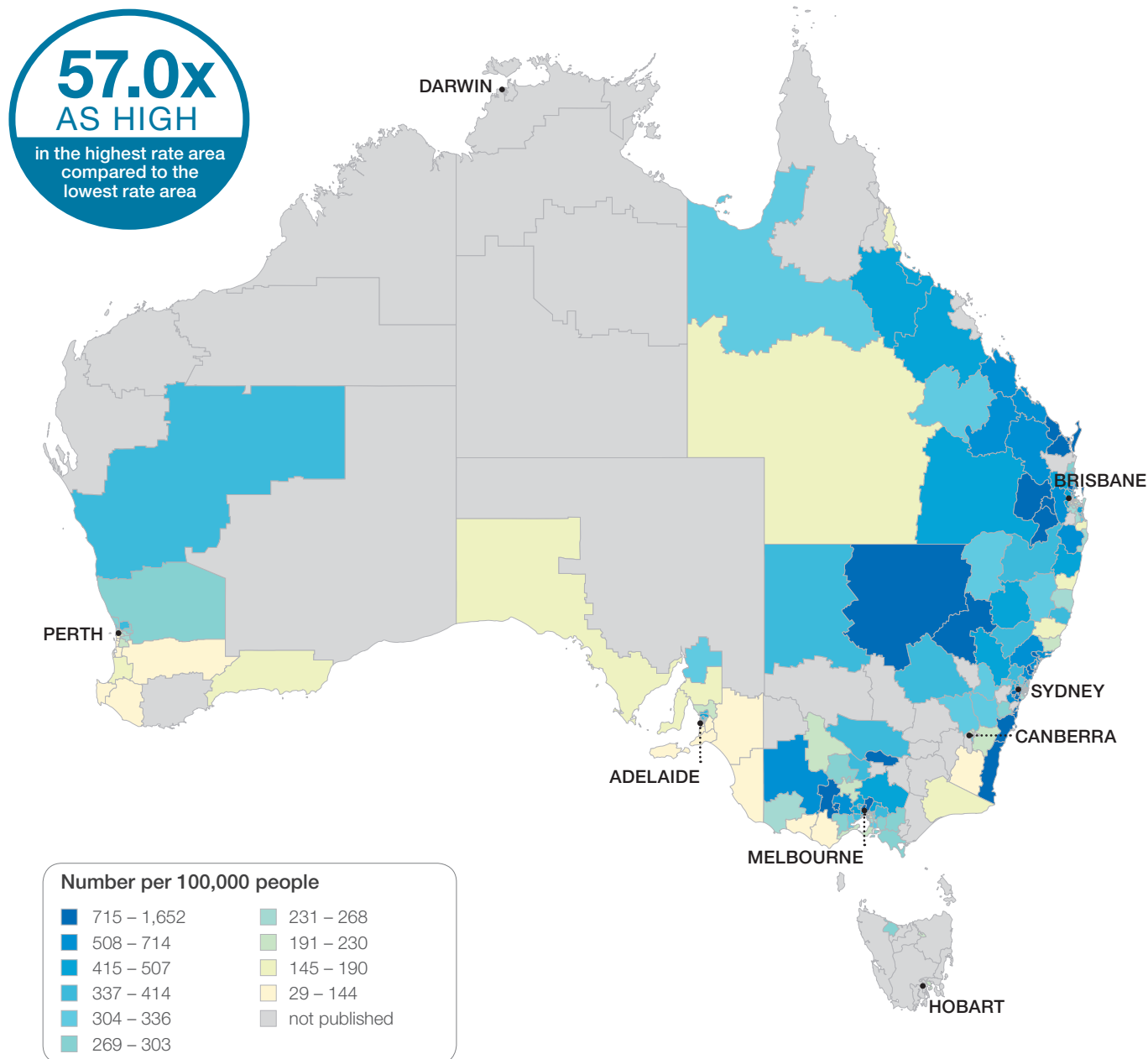
SA3 area	Rate	Services
Cronulla - Miranda - Caringbah (NSW)	4,894	5,234
Sutherland - Menai - Heathcote (NSW)	4,713	4,508
Blacktown - North (NSW)	4,261	2,438
Kempsey - Nambucca (NSW)	4,123	2,414
Baulkham Hills (NSW)	3,999	5,057
Canterbury (NSW)	3,998	4,276
Rouse Hill - McGraths Hill (NSW)	3,781	864
Eastern Suburbs - South (NSW)	3,768	4,147
Hurstville (NSW)	3,693	4,109
Dural - Wisemans Ferry (NSW)	3,606	959

Asterisks (\*) indicate rates that are considered more volatile than other published rates and should be interpreted with caution. These rates are excluded from the calculation of the difference between the highest and lowest SA3 rates in Australia.

Sources: AIHW analysis of Medicare Benefits Schedule data and ABS Estimated Resident Population 30 June 2016.

# Myocardial perfusion scans 18 years and over

Number of MBS-subsidised services for myocardial perfusion scans per 100,000 people aged 18 years and over, age and sex standardised, by Statistical Area Level 3 (SA3) of patient residence, 2016–17



State	Rate	Lowest SA3 rate	Highest SA3 rate	Services
New South Wales	485	144	1,652	33,155
Victoria	385	121	1,041	20,196
Queensland	418	71	1,033	17,112
Western Australia	206	86	372	4,227
South Australia	182	29	486	2,953
Tasmania	248	199	302	1,292
Australian Capital Territory	241	186	313	700
Northern Territory	193	n.p.	n.p.	262
<b>Australia</b>	<b>384</b>	<b>29</b>	<b>1,652</b>	<b>79,905</b>

## Variation in Australia

In Australia, the lowest rate for myocardial perfusion scans was in **Onkaparinga** (29 MBS services per 100,000 people) and the highest rate was in **Dubbo** (1,652 MBS services per 100,000 people). The rate was **57.0 times as high** in the area with the highest rate compared to the area with the lowest rate.

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Rates for the Northern Territory SA3s are not published for reliability and/or confidentiality reasons.

Sources: AIHW analysis of Medicare Benefits Schedule data and ABS Estimated Resident Population 30 June 2016.

**Lowest rate areas**

The following areas had the 10 lowest rates in Australia.

SA3 area	Rate	Services
Onkaparinga (SA)	29	45
Fleurieu - Kangaroo Island (SA)	43	27
Mitcham (SA)	44	30
Marion (SA)	60	47
Cairns - South (Qld)	71	59
Kenmore - Brookfield - Moggill (Qld)	76	32
Sherwood - Indooroopilly (Qld)	76	26
Murray and Mallee (SA)	78	61
Kwinana (WA)	86	n.p.
Fremantle (WA)	95	34
Manjimup (WA)	96	26
Brisbane Inner - East (Qld)	96	25

**Highest rate areas**

The following areas had the 10 highest rates in Australia.

SA3 area	Rate	Services
Dubbo (NSW)	1,652	1,102
Kiama - Shellharbour (NSW)	1,246	1,119
Fairfield (NSW)	1,190	1,859
Bourke - Cobar - Coonamble (NSW)	1,145	265
Dapto - Port Kembla (NSW)	1,104	822
Shoalhaven (NSW)	1,071	1,392
Ballarat (Vic)	1,041	984
Bundaberg (Qld)	1,033	1,037
Maryborough (Qld)	940	506
Toowoomba (Qld)	912	1,209

The number of services is not published for Kwinana for confidentiality reasons.

Sources: AIHW analysis of Medicare Benefits Schedule data and ABS Estimated Resident Population 30 June 2016.

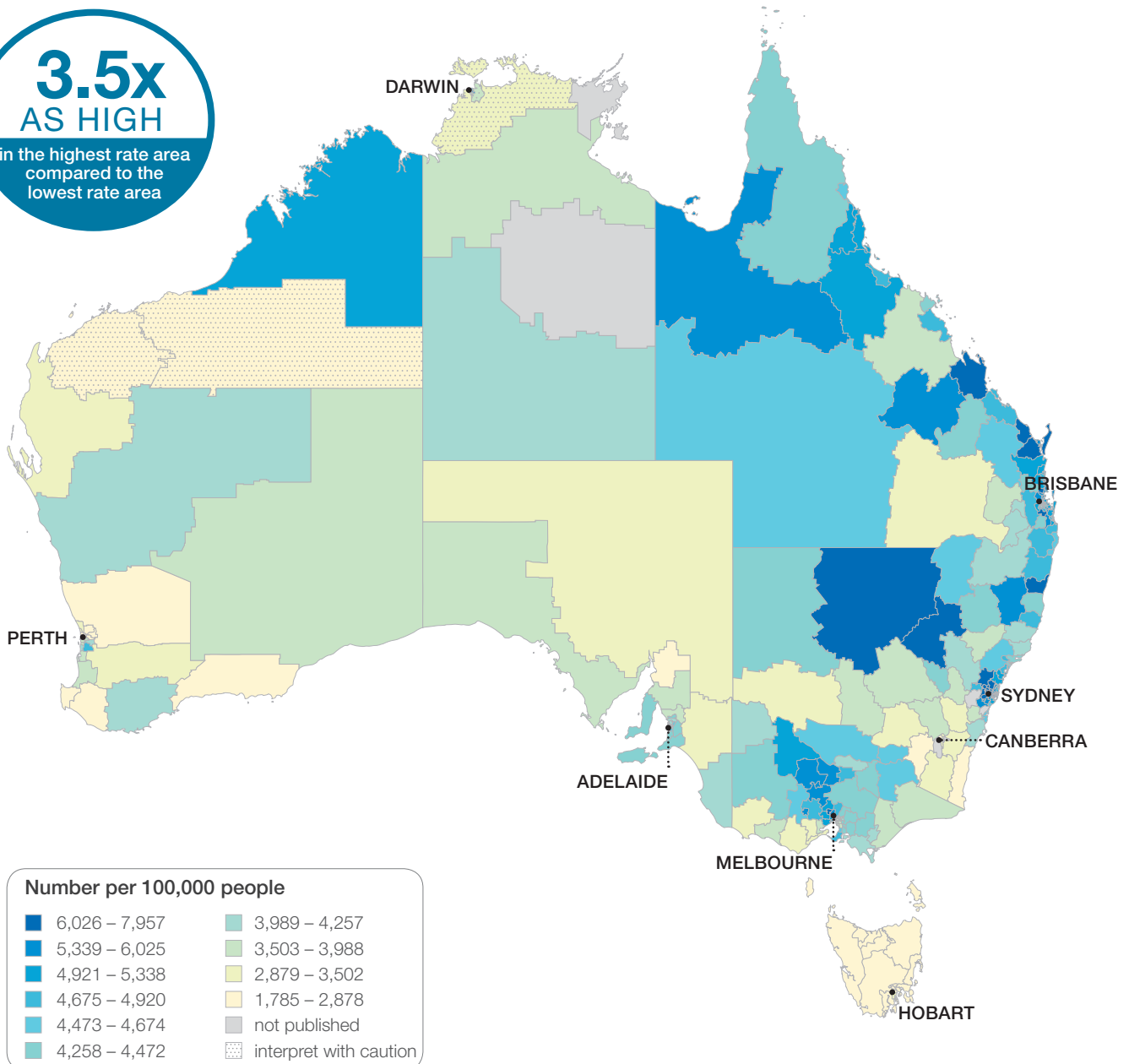
# Standard echocardiography

18 years and over

# Australia

Number of MBS-subsidised services for standard echocardiography per 100,000 people aged 18 years and over, age and sex standardised, by Statistical Area Level 3 (SA3) of patient residence, 2016–17

**3.5x**  
**AS HIGH**  
in the highest rate area compared to the lowest rate area



State	Rate	Lowest SA3 rate	Highest SA3 rate	Services
New South Wales	5,309	2,628	7,957	359,202
Victoria	4,316	3,010	6,320	224,211
Queensland	5,016	3,365	7,051	200,703
Western Australia	3,167	1,785*	5,149	64,222
South Australia	4,250	2,783	4,843	68,247
Tasmania	2,624	2,329	2,890	13,211
Australian Capital Territory	2,902	2,765	3,111	8,590
Northern Territory	4,499	3,307*	5,048	6,582
<b>Australia</b>	<b>4,599</b>	<b>2,279</b>	<b>7,957</b>	<b>945,056</b>

## Variation in Australia

In Australia, the lowest rate for standard echocardiography was in **Mundaring** (2,279 MBS services per 100,000 people) and the highest rate was in **Blacktown - North** (7,957 MBS services per 100,000 people). The rate was **3.5 times as high** in the area with the highest rate compared to the area with the lowest rate.

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Dotted areas and asterisks (\*) indicate rates that are considered more volatile than other published rates and should be interpreted with caution. These rates are excluded from the calculation of the difference between the highest and lowest SA3 rates in Australia.

Sources: AIHW analysis of Medicare Benefits Schedule data and ABS Estimated Resident Population 30 June 2016.



### Lowest rate areas

The following areas had the 10 lowest rates in Australia.

SA3 area	Rate	Services
East Pilbara (WA)	1,785*	203
West Pilbara (WA)	1,906*	248
Mundaring (WA)	2,279	865
West Coast (Tas)	2,329	378
Bayswater - Bassendean (WA)	2,335	1,670
Belmont - Victoria Park (WA)	2,375	1,293
Meander Valley - West Tamar (Tas)	2,388	567
Swan (WA)	2,390	2,054
Esperance (WA)	2,396	352
Huon - Bruny Island (Tas)	2,446	497

### Highest rate areas

The following areas had the 10 highest rates in Australia.

SA3 area	Rate	Services
Blacktown - North (NSW)	7,957	4,079
Dubbo (NSW)	7,626	5,083
St Marys (NSW)	7,625	2,855
Blacktown (NSW)	7,426	7,566
Fairfield (NSW)	7,277	11,282
Penrith (NSW)	7,269	7,265
Merrylands - Guildford (NSW)	7,268	8,241
Bundaberg (Qld)	7,051	6,842
Mount Druitt (NSW)	6,999	5,136
Rouse Hill - McGraths Hill (NSW)	6,976	1,450

Asterisks (\*) indicate rates that are considered more volatile than other published rates and should be interpreted with caution. These rates are excluded from the calculation of the difference between the highest and lowest SA3 rates in Australia.

Sources: AIHW analysis of Medicare Benefits Schedule data and ABS Estimated Resident Population 30 June 2016.