



National Health Performance **Authority**

National Health Performance **Authority**

Healthy Communities:

GP care for patients with chronic conditions in 2009–2013





National Health Performance **Authority**

National Health Performance Authority

Healthy Communities:

GP care for patients with chronic conditions in 2009–2013

National Health Performance Authority

GPO Box 9848

Sydney, NSW 2001 Australia

Telephone: +61 2 9186 9210

www.nhpa.gov.au

© National Health Performance Authority 2014



The National Health Performance Authority licenses use of this report under Creative Commons Attribution-Non Commercial-No Derivatives Licence 3.0, Australia and the terms of this notice.

You are permitted to make fair use of the report consistent with the terms of the licence. You must not make use of the report in a misleading or deceptive manner or in a manner that is inconsistent with the context of the report.

Permissions beyond the scope of the licence may be available at **nhpaadmin@nhpa.gov.au**

Disclaimer

This report is produced for health research, health care and health advocacy purposes. This report is not intended to provide guidance on particular health care choices. You should contact your medical advisors on particular health care choices.

ISSN: 2201-8212

Print ISBN: 978-1-74186-199-0

Online ISBN: 978-1-74186-200-3

Suggested citation: National Health Performance Authority 2014, *Healthy Communities: GP care for patients with chronic conditions in 2009–2013*.

Further copies of this document can be downloaded from **www.myhealthycommunities.gov.au**

Published December 2014.

Please note that there is the potential for minor revisions of this report.

Please check **www.myhealthycommunities.gov.au** for any amendments.

Table of contents

Summary	iii
Key findings	iii
GP care for patients with selected cardiovascular risk conditions	v
GP care for patients with depression and anxiety	v
GP care for patients with arthritis and chronic back pain	vi
Introduction	1
About this report	1
What we know about GP care for people with chronic conditions	2
What we don't know	3
About the data	3
About the patients	4
About the measures	5
Key findings: GP care for patients with chronic conditions and multimorbidity	9
Key findings: GP care for patients with selected cardiovascular risk conditions	17
Key findings: GP care for patients with depression and anxiety	27
Key findings: GP care for patients with arthritis and chronic back pain	37
Appendix	46
Glossary	47
References	51
Acknowledgements	53
About the Authority	54
Additional document	
<i>Healthy Communities: GP care for patients with chronic conditions in 2009–2013,</i>	
<i>Technical Supplement</i>	

Summary

Chronic conditions are responsible for about 85% of the total burden of disease in Australasia.¹ Conditions such as heart disease, diabetes and mental illness are among the top 10 causes of premature death.² People with chronic conditions account for a large share of the 635,000 potentially avoidable hospitalisations in 2011–12.³

Worldwide, the number of people living with chronic health conditions is increasing and placing greater demands on health care systems.^{4,5}

In local communities, health professionals play a critical role in assisting people in the management of their chronic conditions. Strong primary health systems are associated with better health outcomes, fewer hospital admissions and reduced health system costs.⁶

The Australian Government has announced that in 2015, Primary Health Networks (PHNs) will be established to better coordinate health services. PHNs are intended to ensure that patients, particularly those with complex chronic conditions, receive the right care, at the right place and right time.⁷ While doctors will be working towards the consistent delivery of appropriate care in line with recommended guidelines, opportunities may exist to optimise the management of chronic conditions.^{8–10}

Accordingly, the aim of this report is to deepen understanding of how management of chronic conditions differs across local areas, and to support health professionals and PHNs, particularly GP-led Clinical Councils, target improvements in services to maintain people's health and keep people out of hospital.

The report presents information on patients with one or multiple diagnosed chronic conditions, and focuses on patients with some of the most common conditions managed in general practice, including selected cardiovascular risk conditions, depression, anxiety, arthritis and chronic back pain.

This is the first report to give a local-level breakdown of the care of patients with chronic conditions by determining how many of these patients there are, how often and in what ways their GP manages these conditions.

Findings are described for 61 local areas and for seven clusters of similar areas called peer groups. Results are presented from data collected by the Bettering the Evaluation and Care of Health (BEACH) program, conducted by the University of Sydney, during the period from 2005 to 2013.

Key findings

Marked differences were found in both the frequency with which GPs manage patients' chronic conditions and in the clinical actions GPs take to care for those conditions.

Among **all people who visit the GP** at least once in a year, the percentage of people with **one or more** selected chronic conditions ranged from 44% to 56% across local areas. The percentage was slightly higher in regional areas, particularly in lower-income regional areas, than in metropolitan areas.

In comparison, the percentage of **all GP consultations** that involved patients who had **one or more** selected chronic conditions was only slightly higher (51% to 60%) across metropolitan and rural areas, and higher still (60% to 66%) across regional areas.

Across local areas, the percentage of all GP consultations in which **one or more** chronic conditions was **actively managed** ranged from 34% of GP consultations in Sydney North Shore & Beaches to 50% of consultations in Hume (Vic/NSW) (**Figures 3a and 3b, pages 12 and 13**).

The findings also indicate that irrespective of variation in how often GPs saw patients with **three or more** chronic conditions (19% to 30% of consultations across peer groups), they **actively managed** three or more chronic conditions at about the same frequency (2% to 3% of consultations). This indicates that in local areas with a higher proportion of patients with three or more chronic conditions, opportunities may exist to optimise care for these patients.

The percentage of all GP consultations in which chronic conditions were **actively managed** differed, depending on where the GP practises:

- GP management of selected cardiovascular risk conditions ranged from 5% to 11% across local areas nationally
- GP management of depression or anxiety ranged from 4% to 9% across local areas nationally
- GP management of arthritis or chronic back pain ranged from 3% to 7% across local areas nationally.

Depending on where a GP practises, the approach they take to actively manage their patients' chronic conditions also differs:

- In managing selected cardiovascular risk conditions:
 - **Statins were prescribed** on 26% to 40% of GP management occasions across local areas nationally. Current guidelines recommend that most patients with these conditions should be treated with statins¹⁰
 - **A referral to another health professional** was provided on 4% to 11% of occasions across local areas.
- In managing depression or anxiety, diverse approaches taken may reflect the availability of allied health professionals and specialists:
 - **A psychotropic medication** (such as an antidepressant, antipsychotic or sedative) was prescribed on 38% to 74% of GP management occasions across local areas
 - **GP counselling** was provided on 25% to 51% of occasions across local areas
 - **A referral to another health professional** was provided on 11% to 21% of occasions across local areas.
- In managing arthritis or chronic back pain:
 - **A medication was prescribed** on 52% to 75% of GP management occasions across local areas
 - **A referral to another health professional** was provided on 11% to 22% of occasions across local areas
 - **Imaging was ordered** on 8% to 20% of occasions across local areas, despite current guidelines discouraging imaging for the management of chronic low back pain.¹¹

The following pages summarise the findings for each of the selected chronic conditions found in this report.

GP care for patients with selected cardiovascular risk conditions



Among **all people who visit the GP** at least once in a year, the percentage of people who had a selected cardiovascular risk condition ranged from 17% to 19% in metropolitan areas, and from 16% to 21% in regional and rural communities.



The percentage of **all GP consultations** that were with patients who had a cardiovascular risk condition, irrespective of whether the condition was managed, was 22% in high-income and middle-income metropolitan areas. It ranged from 19% to 30% in lower-income metropolitan and all regional and rural areas.



GPs managed cardiovascular risk conditions in about one-third of all the consultations with these patients. The proportion of all GP consultations in which a cardiovascular risk condition was **actively managed** ranged from one in 20 (5%) consultations in South Eastern Melbourne and West Moreton-Oxley (Qld) to one in nine (11%) consultations in Hume (Vic/NSW).



GP actions in the management of cardiovascular risk conditions also varied across local areas. Depending on where a GP practises, the percentage of GP management occasions in which statins were prescribed ranged from 26% to 40% and a referral to another health professional from 4% to 11% across local areas.

(Figures 4 to 7, pages 20 to 23)

GP care for patients with depression and anxiety



Among **all people who visit the GP** at least once in a year, the percentage of people who had depression, anxiety or both of these conditions ranged from 16% to 18% in metropolitan areas and from 13% to 20% in regional and rural communities.



The percentage of **all GP consultations** that were with patients who had depression, anxiety or both of these conditions, irrespective of whether these conditions were managed, ranged from 18% to 21% in metropolitan, 20% to 23% in regional, and 15% to 18% in rural communities.



GPs managed depression or anxiety in about one-third of all the consultations with these patients. Across local areas, the proportion of all GP consultations in which depression or anxiety were **actively managed** ranged from one in 25 (4%) consultations in Sydney North Shore & Beaches to one in 11 (9%) consultations in Frankston-Mornington Peninsula (Vic) and Hume (Vic/NSW).



GP actions in the management of depression or anxiety also varied across local areas. Depending on where a GP practises, a psychotropic was prescribed on 38% to 74% of GP management occasions, GP counselling on 25% to 51% and a referral to another health professional was provided on 11% to 21% of occasions across local areas.

(Figures 8 to 11, pages 30 to 33)

GP care for patients with arthritis and chronic back pain



Among **all people who visit the GP** at least once in a year, the percentage of people who had arthritis, chronic back pain or both of these conditions ranged slightly from 16% to 18% in metropolitan, 20% to 21% in regional and 16% to 20% in rural areas.



The percentage of **all GP consultations** that were with patients who had arthritis, chronic back pain or both of these conditions, irrespective of whether these conditions were managed, ranged from 21% to 27% in metropolitan, 27% to 28% in regional and 19% to 29% in rural areas.



GPs managed arthritis or chronic back pain in about one-fifth of all the consultations with these patients. Across local areas, the proportion of all GP consultations in which arthritis or chronic back pain were **actively managed** ranged from one in 33 (3%) consultations in Sydney North Shore & Beaches to one in 14 (7%) consultations in Murrumbidgee (NSW) and Tasmania.



GP actions in the management of arthritis or chronic back pain also varied across local areas. Depending on where a GP practises, the percentage of GP management occasions where a medication was prescribed ranged from 52% to 75%, a referral to another health professional was provided from 11% to 22% and imaging was ordered from 8% to 20% across local areas.

(Figures 12 to 15, pages 40 to 43)

Introduction

About this report

The National Health Performance Authority (the Authority) bases its performance reports on indicators agreed by the Council of Australian Governments (COAG). This report provides information on the following equity and effectiveness indicators:

- Access to services by type of service compared to need
- GP-type service use.

The report also provides contextual information relevant to the following indicators:

- Specialist service utilisation
- Allied health-type service use
- Percentage of the population receiving primary mental health care.

This is the Authority's first report on primary health care that presents information at the local level on how often and in what way GPs manage their patients' health conditions, particularly chronic conditions.

Findings are broken down by 61 areas called Medicare Local catchments. The national network of Medicare Local organisations was established between 2011 and 2012 to work with GPs and other health professionals to improve the responsiveness, coordination and integration of local health services. These organisations are due to be replaced in 2015.

The report's findings can be considered in the context of four broad themes:

1. How frequently selected chronic conditions are found among **people who visit a GP** in a year
2. How often **GPs see patients** with one chronic condition or two or more chronic conditions (multimorbidity)
3. How often GPs **actively manage** patients for that chronic condition. In other words, how often a GP took steps to mitigate or monitor that condition, as opposed to another unrelated health problem
4. What **actions GPs took** to manage that condition (such as prescribing a medication or providing a referral or counselling)

(See **Measuring GP activity in this report, pages 6 and 7**).

Findings are presented around these themes for people who have a selected cardiovascular risk condition; depression and anxiety; and the musculoskeletal conditions, arthritis and chronic back pain. These conditions were selected because they are some of the most common among people in the community and are frequently seen in general practice (see page 4).

In addition, the likelihood that people with these conditions experience complications or need to be hospitalised is reduced if these conditions are detected and managed early. Health outcomes are also improved with appropriate and ongoing GP care.⁶

The report offers insights into the extent to which GPs care for patients who have one or multiple chronic conditions, as many of these conditions require similar multidisciplinary approaches to prevention, treatment and management.¹

While there is evidence that many aspects of care are well managed in Australia, there are gaps in the consistent delivery of appropriate care according to recommended guidelines. For example, studies have shown:

- Only 41% of patients in Australia with selected cardiovascular risk conditions were taking statins despite current guidelines recommending almost all people at risk of cardiovascular disease, and who require treatment, take a statin^{8,11}
- Only 45% of patients with depression or anxiety were offered a treatment that could be beneficial⁹
- Only 18% of patients with low back pain received an analgesic, and 45% received a referral for imaging despite guidelines recommending the use of analgesics and discouraging imaging to manage low back pain^{10,12}.

Since people with chronic conditions consume a large amount of health and hospital services, improvements in their health and care are likely to increase the productivity and performance of Australia's health system.

In this context, optimal management of people with chronic conditions are of mutual interest to primary health care networks and Local Hospital Networks.

The aim of this report is to deepen understanding of local populations and how GP care differs across local areas, and to help clinicians and health service managers target improvements in services relative to the health needs of people in their communities.

What we know about GP care for people with chronic conditions

The number of people in Australia with a chronic condition is increasing, as is the number and percentage who have multiple chronic conditions.⁴

Common chronic conditions among people in Australia include selected cardiovascular risk conditions such as hyperlipidaemia (12%), type 2 diabetes (6%) and ischaemic heart disease (5%).^{13,14}

One in six Australians have a diagnosed mental health condition including depression (10%) and anxiety (6%).^{13,14} Almost one in seven have a musculoskeletal condition including arthritis (12%) and chronic back pain (4%).¹⁴ Overall, one in two Australians are estimated to have at least one chronic condition and one in four have two or more chronic conditions (multimorbidity).¹⁵

Across local communities, there may be opportunities to improve prevention, treatment and management of chronic conditions. The Authority has reported marked differences in local rates of potentially avoidable hospitalisations and premature deaths from chronic conditions.^{2,3}

For example:

- In 2011–12, the rate of potentially avoidable hospitalisations for chronic conditions varied across local areas from 643 per 100,000 population in Northern Sydney to 2,237 per 100,000 population in Central and North West Queensland
- The rate of potentially avoidable admissions for chronic conditions varied across similar metropolitan and regional communities
- Potentially avoidable hospitalisations for cardiovascular conditions were particularly high.³

In Australia, the economic burden of chronic conditions is also significant. In 2008–09, the direct health care costs of three of the four most expensive groups of conditions (cardiovascular diseases, mental disorders and musculoskeletal conditions) was estimated to be \$20 billion, or more than one-quarter (27%) of all health expenditure.⁴

What we don't know

In Australia, there is limited information available at the local level on the reasons why people visit the GP and the health care they receive, which is intended to prevent, treat and manage chronic conditions.

There is also limited information on how GPs differ in the care they provide and the impact this has on rates of hospitalisations, morbidity and mortality.

This report is intended to start filling this gap in local-level information.

About the data

Data for this report were sourced from a continuous, national cross-sectional study of general practice activity called the Bettering the Evaluation and Care of Health (BEACH) program, which is conducted by the Family Medicine Research Centre (FMRC), the University of Sydney. Analysis of data was provided by FMRC.

The BEACH program comprises ever-changing, random samples of approximately 1,000 participating GPs per year, each of whom records information about encounters with 100 consecutive consenting patients. In this report, these encounters are called GP consultations.

The information in this report is about GP activity and the care GPs provide to their patients. The data does not include information on people who do not visit a GP or people with undiagnosed conditions. All of the data in this report are mapped to the geographic catchments where services were provided, rather than where people live.

Information on the management of chronic conditions by GPs and the actions GPs take (such as referral, prescription, counselling) are reported for the period from April 2009 to March 2013, and include 393,300 GP consultations.

The prevalence of conditions among patients are reported from a substudy within the BEACH program, the Supplementary and Nominal Data (SAND) for the period from July 2005 to June 2013, and include 25,855 patient consultations.

To report BEACH data at the local level, the Authority decided and FMRC applied methods and suppression rules to ensure the reliability, representativeness and confidentiality of the data.

To enable fairer comparisons, the Authority has allocated each local area to one of seven peer groups, based on socioeconomic status, remoteness, and distance to hospitals: three in metropolitan areas, two in regional areas, and two in rural areas. More information on these peer groups is available in the [Appendix, page 46](#).

About the patients

Patients identified as having **one or more selected chronic conditions** include those patients, of any age, diagnosed with one or more of the following 18 commonly managed conditions, in order based on prevalence at GP consultation:

- Hypertension
- Osteoarthritis
- Hyperlipidaemia
- Depression
- Gastro-oesophageal reflux disease
- Anxiety
- Asthma
- Chronic back pain
- Ischaemic heart disease
- Type 2 diabetes
- Cancer (malignant neoplasm)
- Sleep disorder
- Chronic obstructive pulmonary disease
- Cerebrovascular disease/cerebrovascular accident
- Congestive heart failure
- Peripheral vascular disease
- Rheumatoid arthritis
- Type 1 diabetes.

The BEACH data were used to identify patients, of any age, with **selected cardiovascular risk conditions** based on clinical guidelines¹¹ to support the management of:

- Ischaemic heart disease – including acute myocardial infarction (AMI)
- Cerebrovascular disease and stroke
- Heart failure
- Type 2 diabetes among people 60 years of age and older
- Hyperlipidaemia.

Patients identified as having **depression, anxiety or both of these conditions** include patients, of any age, who have diagnosed depression, anxiety or both conditions, which is considered by the GP to be chronic.

Patients identified as having **arthritis or chronic back pain** include those patients, of any age, who have diagnosed osteoarthritis, rheumatoid arthritis and/or chronic back pain. Osteoarthritis and rheumatoid arthritis account for 86% of all arthritis problems managed in BEACH data.

About the measures



Patients with a chronic condition, included in this report, are those patients who visit the GP at least once in a year who are recorded by the GP as having a selected cardiovascular risk condition; depression, anxiety or both of these conditions; arthritis or chronic back pain or one or more of 18 selected chronic conditions per 100 people who visit the GP at least once in a year. Information is presented as a percentage.

This measure was weighted to the age and sex distribution of people who visited the GP at least once in a year, using Medicare Benefits Schedule data.



GP consultations with patients who have a chronic condition, is measured as the number of GP consultations that involved patients who have a specific chronic condition or one or more common chronic conditions per 100 GP consultations.

Information is presented as the percentage of GP consultations that occur with patients who have a condition, irrespective of whether the patient had that condition managed.

That is, people with a selected cardiovascular risk condition who, for example, had other problems managed but not the cardiovascular risk condition, are included in this measure. Therefore, this measure shows the percentage of consultations in which GPs have the opportunity to 'check up' on patients who have this condition, irrespective of the reason they visited.



GP management of chronic conditions is measured as the number of GP consultations in which the chronic condition or multiple chronic conditions are actively managed by the GP per 100 GP consultations. Information is presented as the percentage of GP consultations in which a specific chronic condition is actively managed, or for multimorbidity, when two or more chronic conditions of any kind are managed.

For example, people with a cardiovascular risk condition who had other problems managed, but not their cardiovascular risk condition are excluded in this measure.



GP actions in the management of chronic conditions is measured as the number of times a referral, prescription or GP counselling is provided to manage a specific chronic condition per 100 GP management occasions for the specific chronic condition. Information is presented as a percentage.

For more information on the methods used in the report see *Healthy Communities: GP care for patients with chronic conditions in 2009–2013, Technical Supplement* at www.myhealthycommunities.gov.au

Measuring GP activity in this report

There are many people living in Australia with one or more chronic conditions, such as selected cardiovascular risk conditions, depression, anxiety, arthritis and chronic back pain.



Patients

Percentage of all people who visit a GP at least once in a year who have a chronic condition



Consultations

Percentage of all GP consultations with patients who have chronic conditions



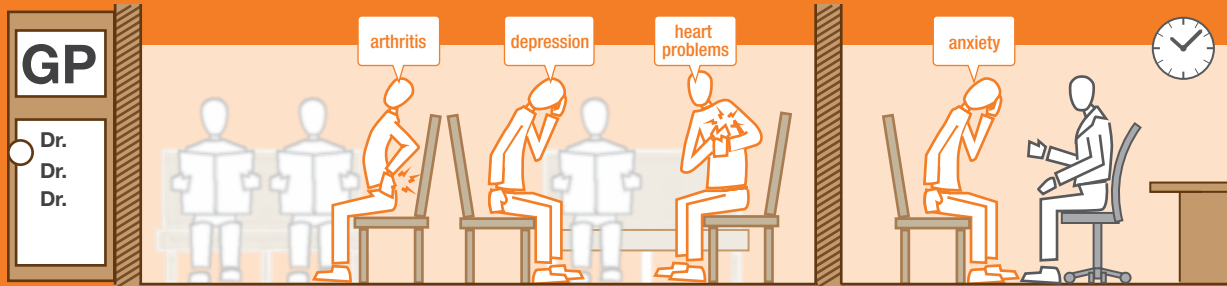
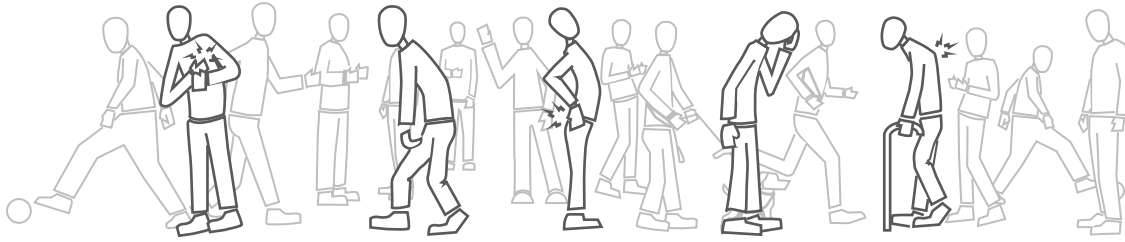
Management

Percentage of all GP consultations in which chronic conditions are actively managed

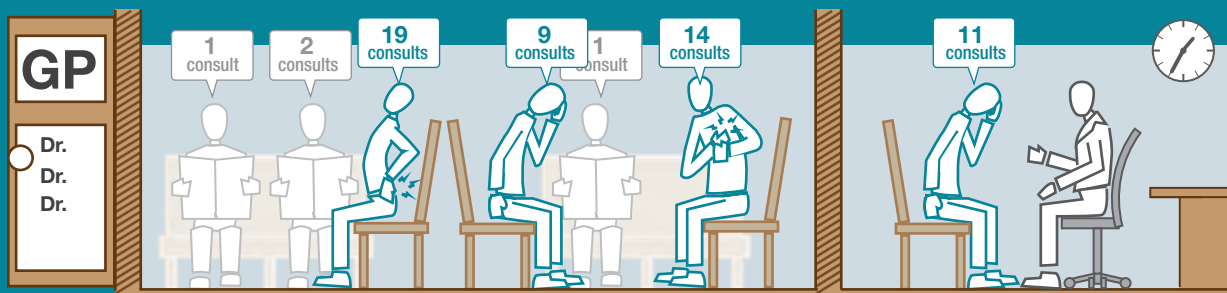


Actions

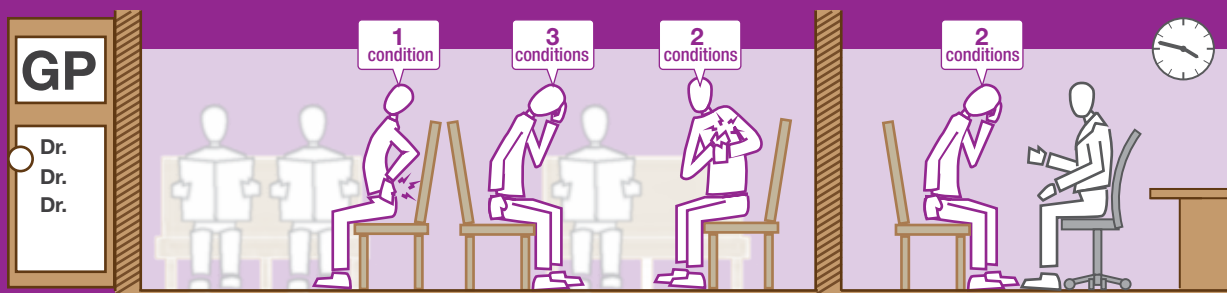
Percentage of GP management occasions in which patients with chronic conditions receive a prescription, referral or counselling



Most people with a chronic condition visit a GP each year



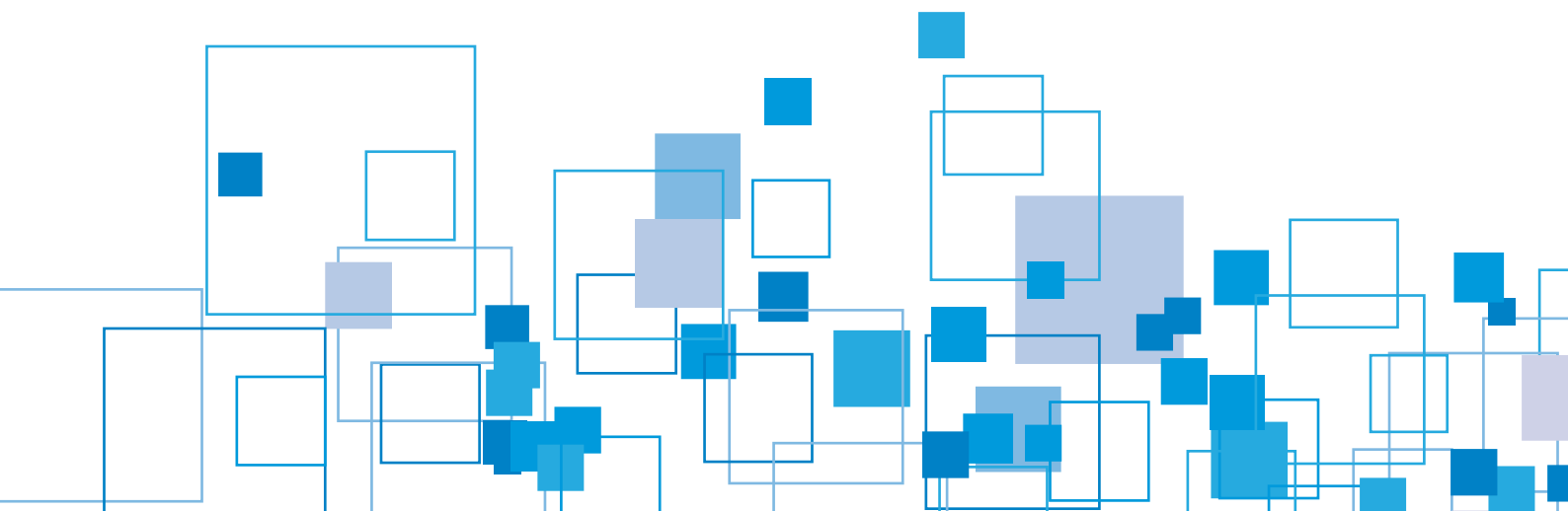
Patients *with* chronic conditions tend to have more GP consultations than patients *without*



GPs may *actively manage* one or more chronic conditions during a single consultation

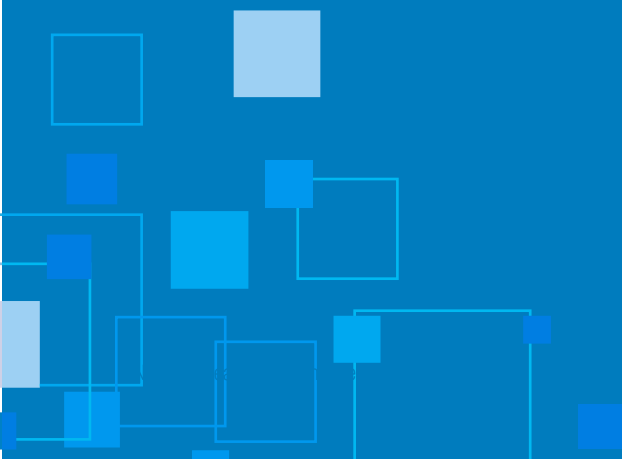


GPs may take clinical actions such as prescribing medications to manage these conditions



GP care for patients with chronic conditions and multimorbidity

GP care for patients with chronic conditions in 2009–2013



Key findings: GP care for patients with chronic conditions and multimorbidity

The number of people in Australia with chronic conditions is increasing, as is the number and percentage who have multiple chronic conditions (multimorbidity).⁴

GPs provide care for acute and episodic health conditions and help patients manage chronic conditions. Patients with two, or three or more chronic conditions, often have complex health needs that require ongoing management and coordination of more specialised care with other parts of the health care system.

Among **all people who visit the GP** at least once in a year, the percentage of people who had one or more chronic conditions ranged from 44% to 56% across local areas. The percentage was slightly higher in regional areas, particularly in lower-income regional areas than in metropolitan areas (**Figure 1, page 12**).

In comparison, the percentage of **all GP consultations** that involved patients who had one or more chronic conditions was only slightly higher (51% to 60%) across metropolitan and rural areas, and higher still (60% to 66%) across regional areas (**Figure 2, page 12**).

Across local areas, the percentage of GP consultations in which one or more chronic conditions were **actively managed** ranged from 34% of all GP consultations in Sydney North Shore & Beaches, to 50% of consultations in Hume (Vic/NSW).

- Among metropolitan communities (**Metro 1, 2 and 3** peer groups), the highest percentage of GP consultations in which one or more chronic conditions were **actively managed** was Southern Adelaide-Fleurieu-Kangaroo Island
- Among regional communities (**Regional 1 and 2**) the highest percentage of GP consultations in which one or more chronic conditions were **actively managed** was Hume (Vic/NSW)
- Among rural communities (**Rural 1 and 2**) the highest percentage of GP consultations in which one or more chronic conditions were **actively managed** was Townsville-Mackay (Qld) (**Figure 3b, page 13**).

The findings also indicate that irrespective of variation in how often GPs saw patients with **three or more** chronic conditions (19% to 30% of consultations across peer groups), they **actively managed** three or more chronic conditions at about the same frequency (2% to 3% of consultations). This may indicate that in local areas with a higher proportion of patients with three or more chronic conditions, opportunities may exist to optimise care for these patients (**Figures 2, 3a and 3b, pages 12 and 13**).



Figure 1: Percentage of people who visit the GP at least once in a year who had one, two or three or more common chronic conditions*, by Medicare Local catchment peer group, 2005–2013†

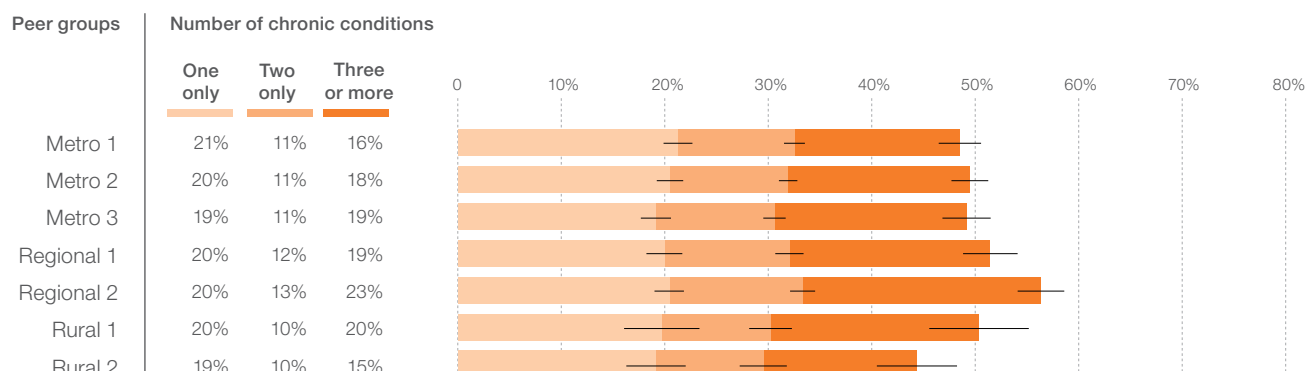


Figure 2: Percentage of GP consultations with patients who had one, two or three or more common chronic conditions*, by Medicare Local catchment peer group, 2005–2013

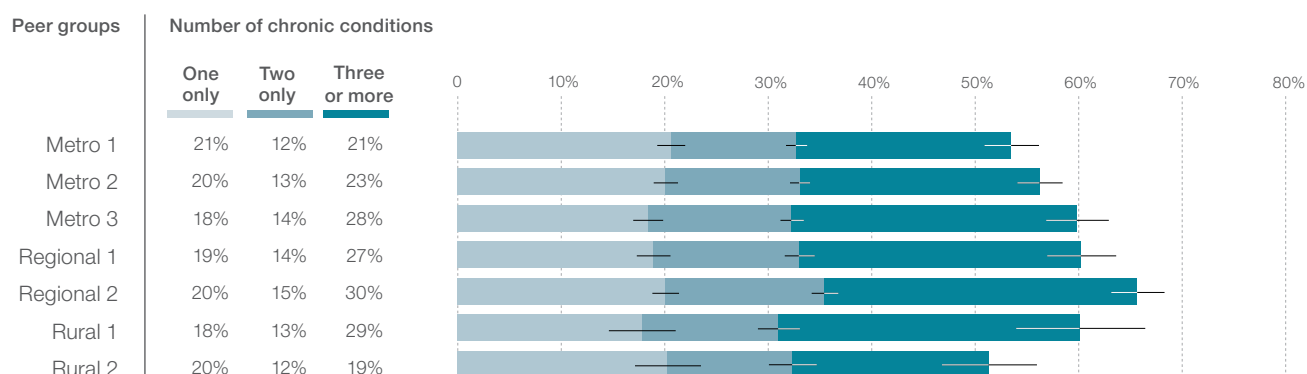
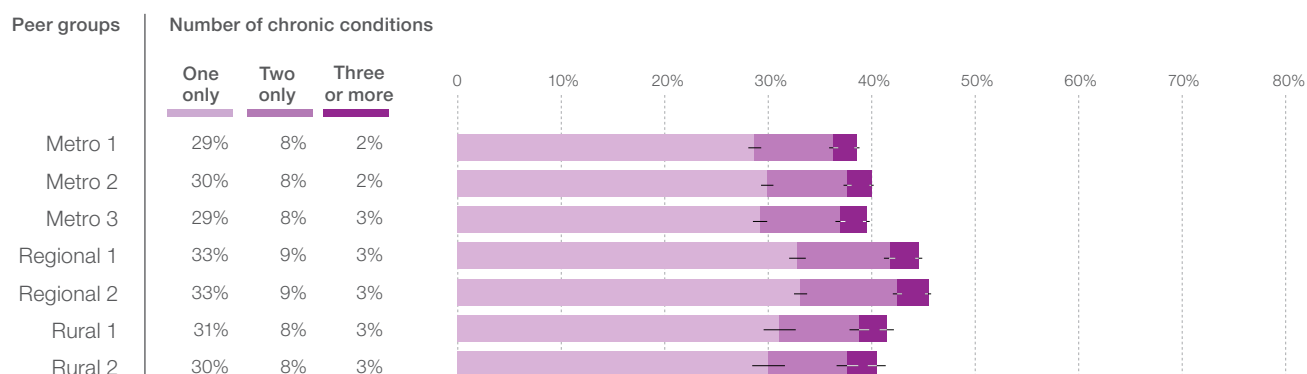


Figure 3a: Percentage of GP consultations in which one, two or three or more chronic conditions‡ were managed, by Medicare Local catchment peer group, 2009–2013



— 95% Confidence interval.

* Results comprise patients who are recorded by the GP as having been diagnosed with one or more of 18 common chronic conditions.

† Data were weighted to the attending patient population using Department of Human Services, Medicare Benefits statistics, 12 months ending June 2013.

‡ Results comprise all chronic conditions managed. See O'Halloran J, et al. Defining chronic conditions for primary care with ICPC-2. Fam Pract 2004;21(4).

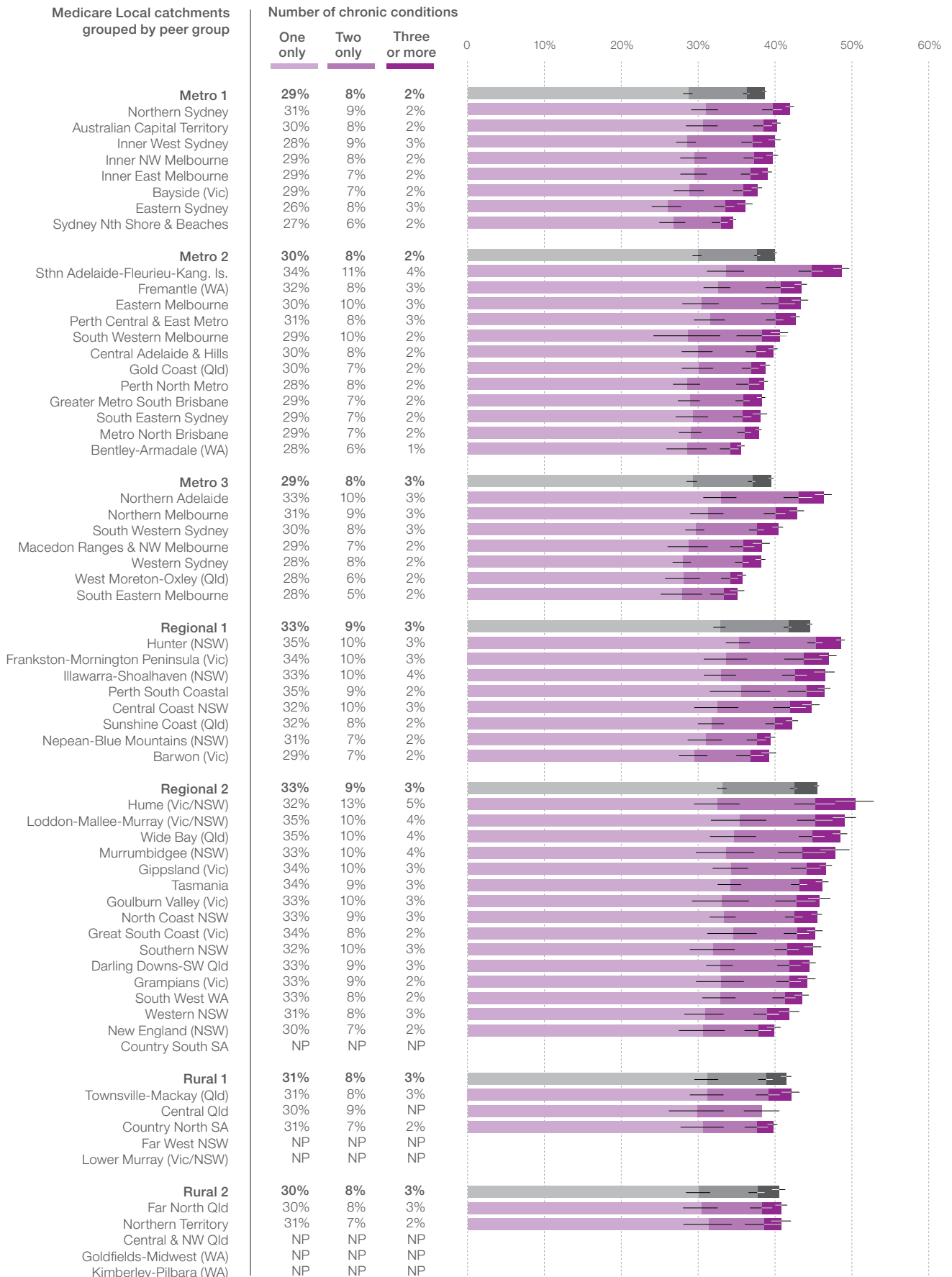
NP Not available for publication.

Notes: Data are reported as whole numbers. However, for graphical display and ordering they are plotted unrounded. Data are collected from a national survey of GPs. Characteristics of participating GPs may differ from non-participating GPs in a Medicare Local catchment which may affect the generalisability of results. For data limitations and exclusions see this report's Technical Supplement.

Source: Customised analysis of BEACH dataset (April 2009–March 2013) and BEACH SAND subdataset (July 2005–June 2013) prepared for the National Health Performance Authority by the Family Medicine Research Centre, the University of Sydney.



Figure 3b: Percentage of GP consultations in which one, two or three or more chronic conditions[†] were managed, by Medicare Local catchment, 2009–2013



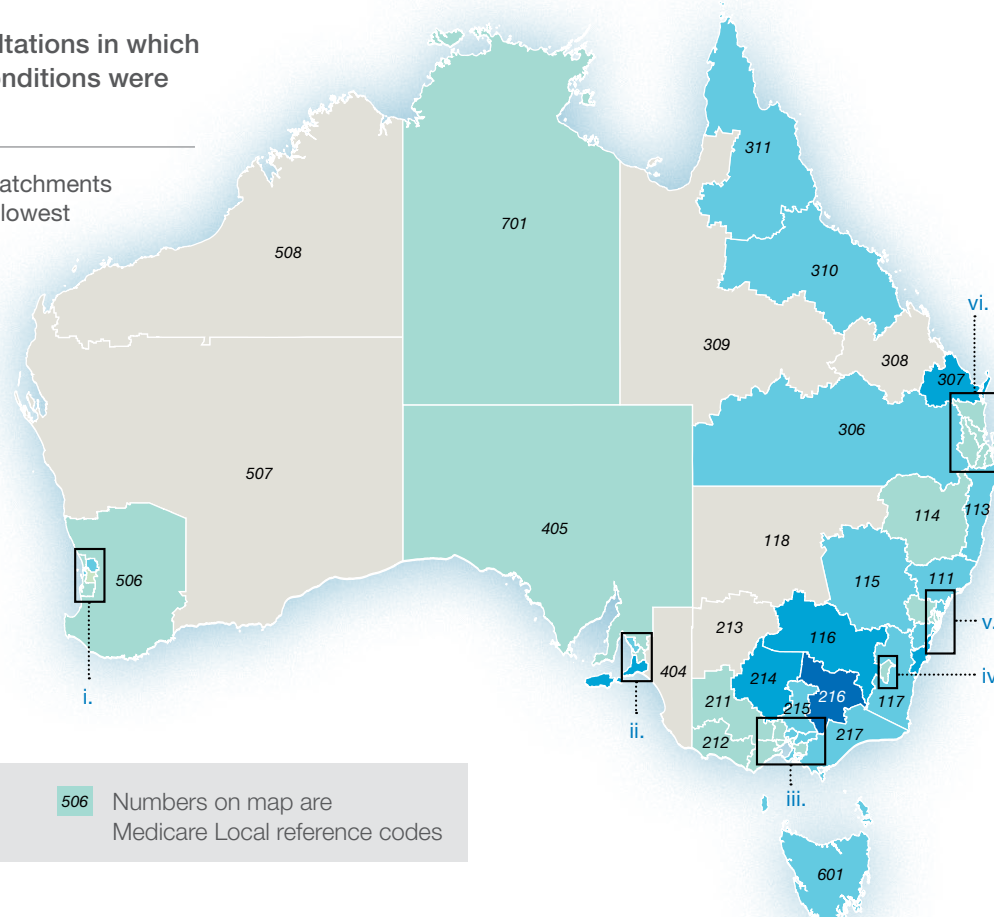
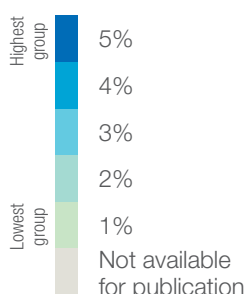
GP management of three or more chronic conditions

Years of data: 2009–2013

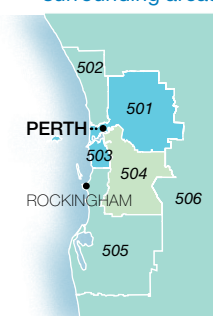
During 2009–2013, the percentage of GP consultations in which three or more chronic conditions¹ were managed varied across Medicare Local catchments and across peer groups, ranging from 5% in Hume (Vic/NSW) to 1% in Bentley-Armadale (WA).

Percentage of GP consultations in which three or more chronic conditions were managed, 2009–2013

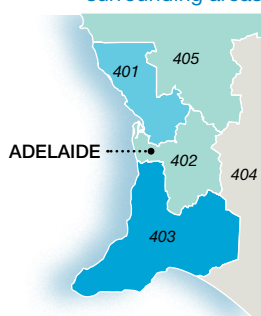
Results for Medicare Local catchments were ranked from highest to lowest then split into five groups.²



i. Perth and surrounding areas



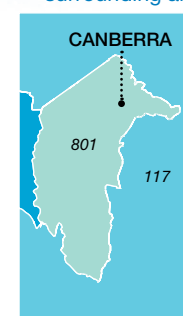
ii. Adelaide and surrounding areas



iii. Melbourne and surrounding areas

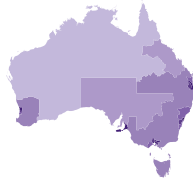


iv. Canberra and surrounding areas



- Results comprise all chronic conditions managed in general practice defined in O'Halloran J, et al. Defining chronic conditions for primary care with ICD-10. Fam Pract 2004;21(4):381–6.
 - Each Medicare Local catchment has been assigned to a group that represents one percentage point.
 - For more information on peer groups and the calculation of peer group results refer to this report's Technical Supplement.
- Notes:** Data are reported as whole numbers. However, for graphical display and ordering they are plotted unrounded. Data are collected from a national survey of GPs. Characteristics of participating GPs may differ from non-participating GPs in a Medicare Local catchment which may affect the generalisability of results. For data limitations and exclusions see this report's Technical Supplement.
- Source:** Customised analysis of BEACH data prepared for the National Health Performance Authority by the Family Medicine Research Centre, the University of Sydney, 2009–2013. Data can be downloaded from www.myhealthycommunities.gov.au

Fair comparisons



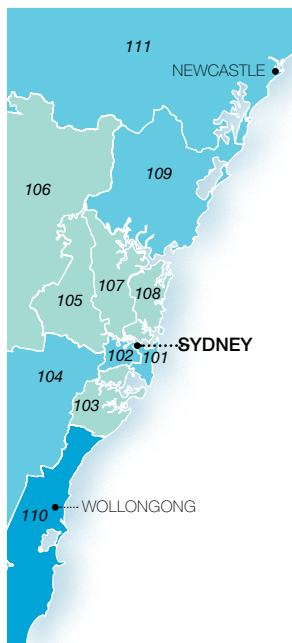
To compare Medicare Locals more fairly, each Medicare Local catchment has been grouped into one of seven peer groups³, based on remoteness and socioeconomic status.

This allows:

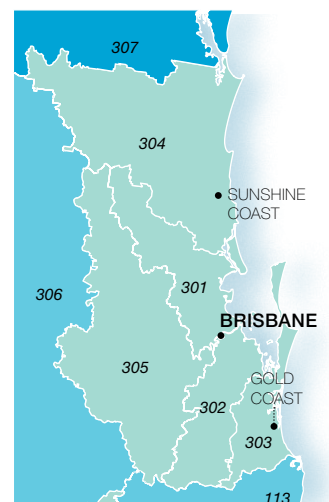
- Medicare Local catchments to be compared within the same metropolitan, regional or rural peer group
- Medicare Local catchments to be compared with the average for their peer group.

It also allows variation to be seen across peer groups that may be associated with remoteness and socioeconomic status.

v. Sydney and surrounding areas

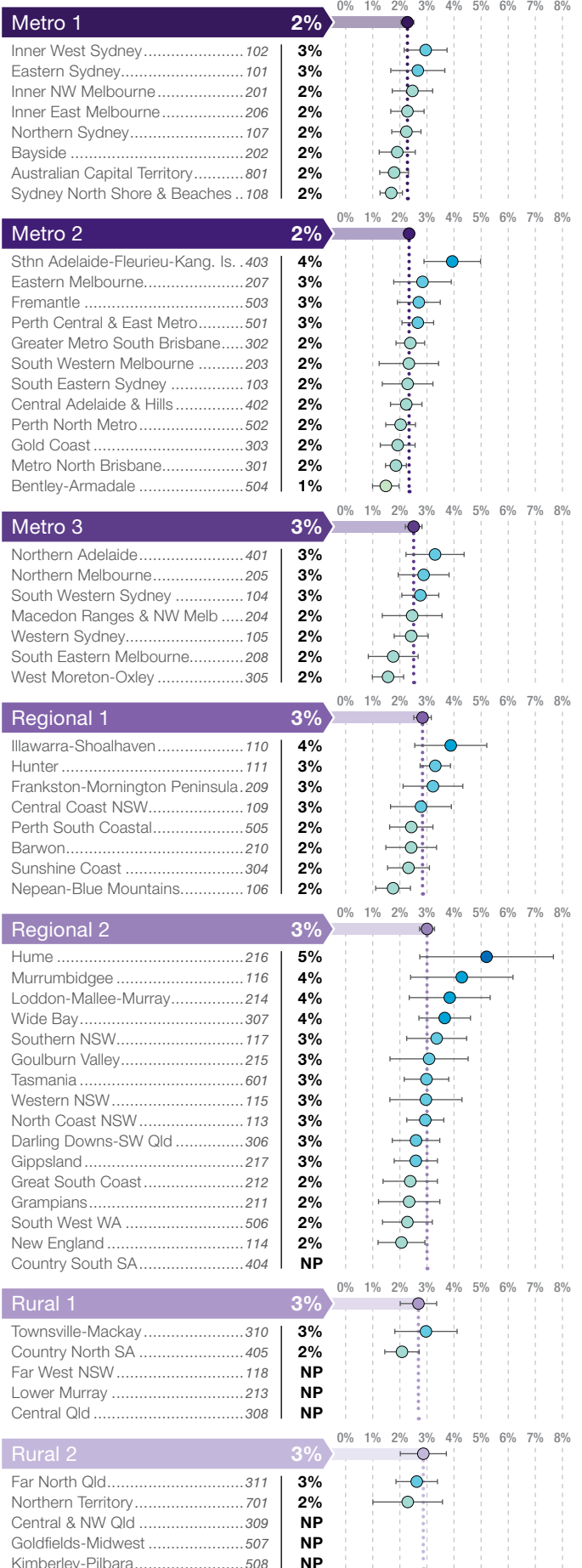


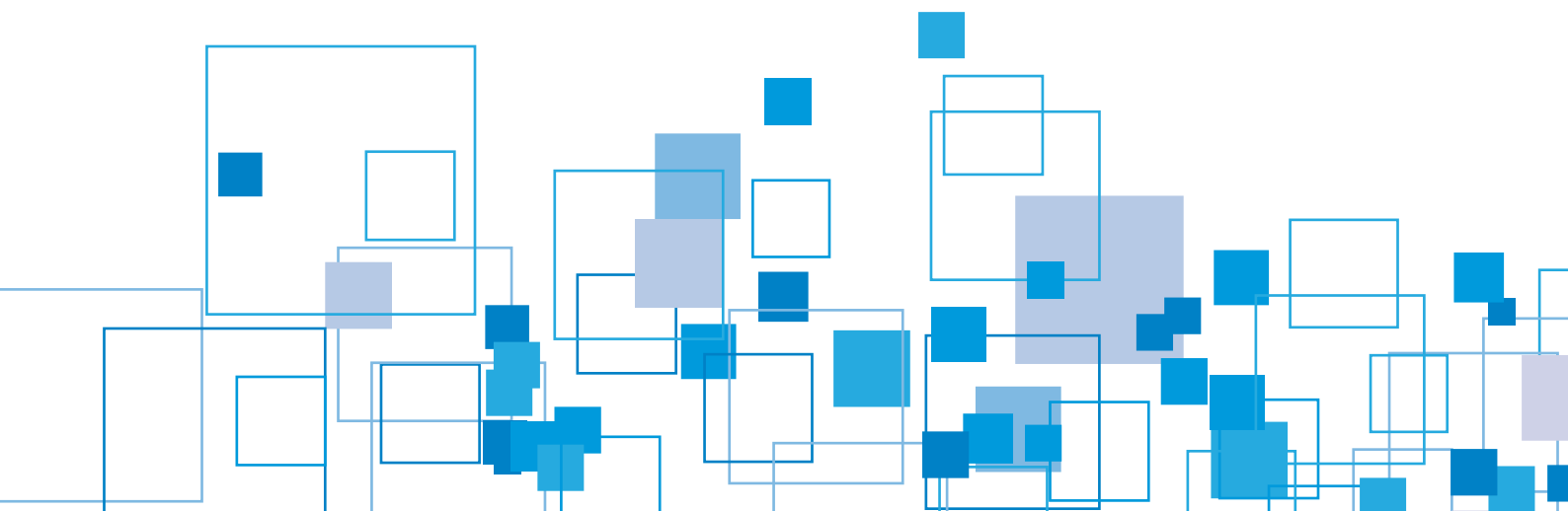
vi. Brisbane and surrounding areas



NP Not available for publication.
More information can be found at www.myhealthycommunities.gov.au and in this report's Technical Supplement.

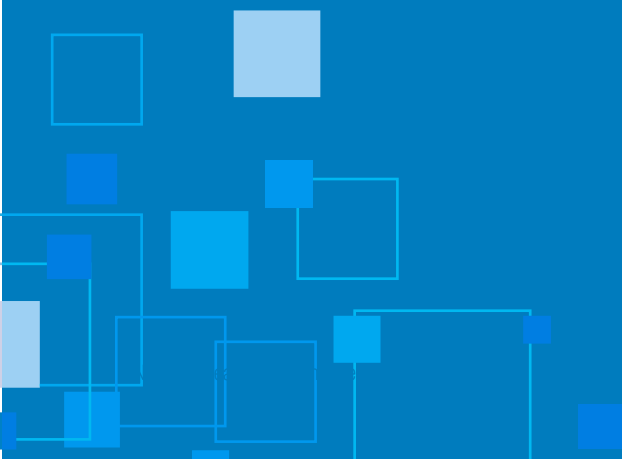
Peer groups





GP care for patients with selected cardiovascular risk conditions

GP care for patients with chronic conditions in 2009–2013



Key findings: GP care for patients with selected cardiovascular risk conditions

In Australia, many of the most common chronic conditions are cardiovascular risk conditions, including hyperlipidaemia (12%), type 2 diabetes (6%) and ischaemic heart disease (5%).^{13,14}

Among **all people who visit the GP** at least once in a year, the percentage of people who had one or more selected cardiovascular risk conditions ranged from 17% to 19% in metropolitan communities to 16% to 21% in regional and rural communities (**Figure 4, page 20**).

The percentage of **all GP consultations** that involved patients who had a selected cardiovascular risk condition, irrespective of whether the condition was managed, was 22% in high and middle-income metropolitan areas compared to 19% to 30% in lower-income metropolitan, as well as all regional and rural areas (**Figure 5, page 20**).

GPs managed cardiovascular risk conditions in about one-third of all consultations with these patients. Across local areas, the proportion of all GP consultations in which cardiovascular risk conditions were **actively managed** ranged from one in nine (11%) consultations in Hume (Vic/NSW) to one in 20 (5%) consultations in South Eastern Melbourne and West Moreton-Oxley (Qld) (**Figure 6b, page 21**).

GP actions to manage selected cardiovascular risk conditions also varied across local areas, which illustrates the diverse approaches to managing these conditions and may reflect the availability of allied health professionals and specialists.

Depending on where a GP practises, the percentage of GP management occasions in which **statins were prescribed** ranged from 26% in South Eastern Melbourne and Sunshine Coast (Qld) to 40% in Central Queensland and Eastern Sydney.

Across local areas, a **referral to another health professional** was provided for one in 25 (4%) GP management occasions for a cardiovascular risk condition in Bayside (Vic), Northern Melbourne, and Central Queensland compared to one in nine (11%) occasions in Nepean-Blue Mountains (NSW) (**Figure 7, page 22 and 23**).

There were also some differences between similar local areas that are within the same peer group, after accounting for geographic and socioeconomic characteristics.

Selected cardiovascular risk conditions comprise ischaemic heart disease, including acute myocardial infarction (AMI), cerebrovascular disease, heart failure, stroke and hyperlipidaemia, and type 2 diabetes for people 60 years and over. These conditions were selected based on recommended guidelines for the management of these conditions.¹¹



Figure 4: Percentage of people who visit the GP at least once in a year who had a selected cardiovascular risk condition*, by Medicare Local catchment peer group, 2005–2013†

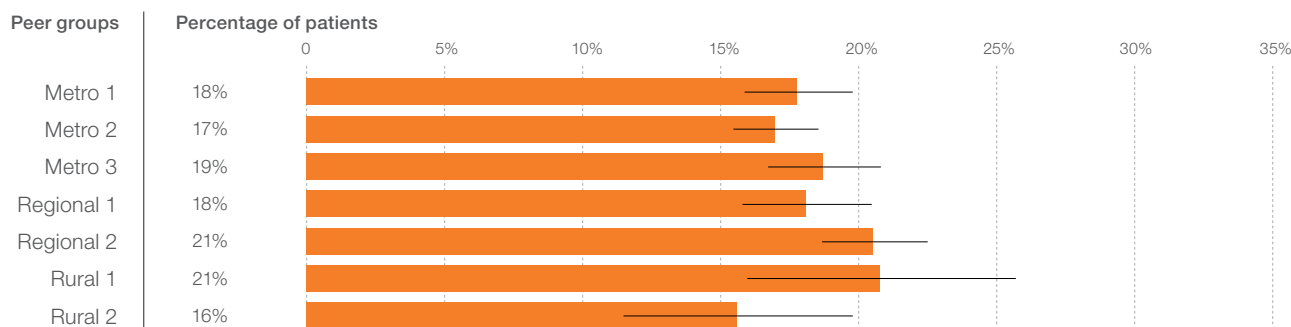


Figure 5: Percentage of GP consultations with patients who had a selected cardiovascular risk condition*, by Medicare Local catchment peer group, 2005–2013

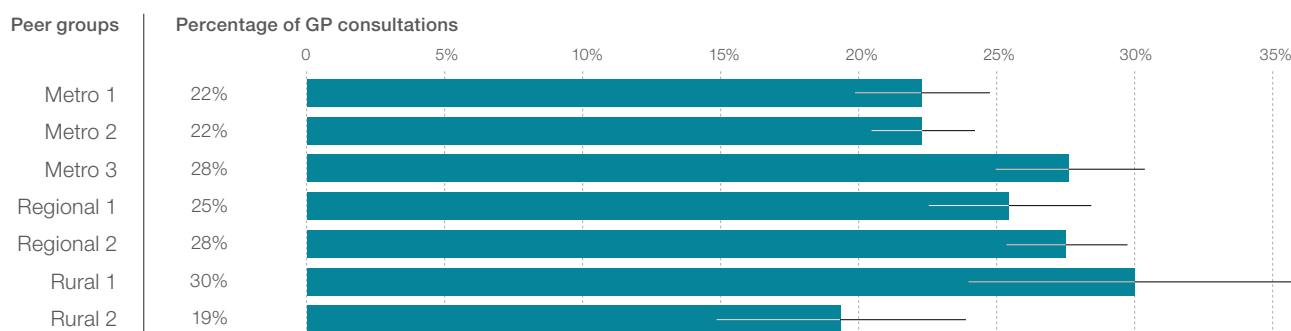
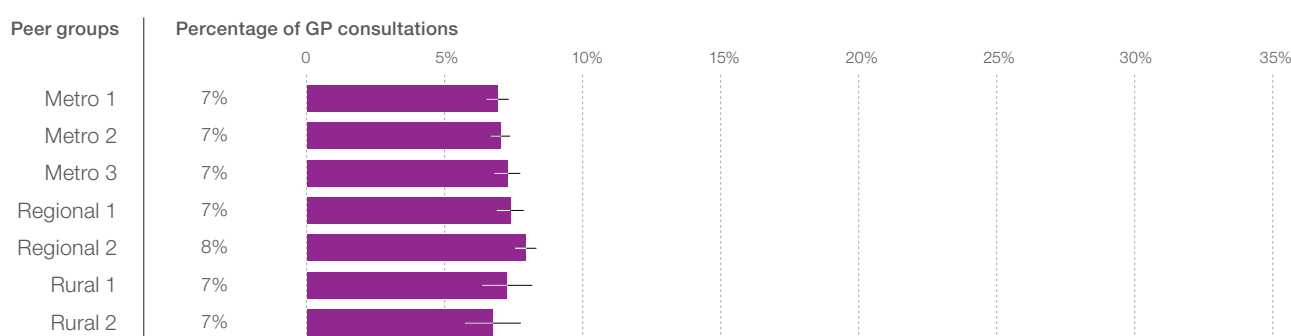


Figure 6a: Percentage of GP consultations in which a selected cardiovascular risk condition* was managed, by Medicare Local catchment peer group, 2009–2013



— 95% Confidence interval.

* Selected cardiovascular risk conditions comprise ischaemic heart disease including acute myocardial infarction (AMI), cerebrovascular disease, heart failure, stroke and hyperlipidaemia, and type 2 diabetes for people 60 years and over. These conditions were selected based on recommended guidelines for the management of these conditions.

† Customised analysis of BEACH SAND substudy data (2005–2013) weighted to the attending population using Department of Human Services, Medicare Benefits statistics, 12 months ending June 2013.

Interpret with caution.

NP Not available for publication.

Notes: Data are reported as whole numbers. However, for graphical display and ordering they are plotted unrounded. Data are collected from a national survey of GPs. Characteristics of participating GPs may differ from non-participating GPs in a Medicare Local catchment which may affect the generalisability of results. For data limitations and exclusions see this report's Technical Supplement.

Source: Customised analysis of BEACH dataset (April 2009–March 2013) and BEACH SAND substudy dataset (July 2005–June 2013) prepared for the National Health Performance Authority by the Family Medicine Research Centre, the University of Sydney.

Data can be downloaded from www.myhealthycommunities.gov.au



Figure 6b: Percentage of GP consultations in which a selected cardiovascular risk condition* was managed, by Medicare Local catchment, 2009–2013

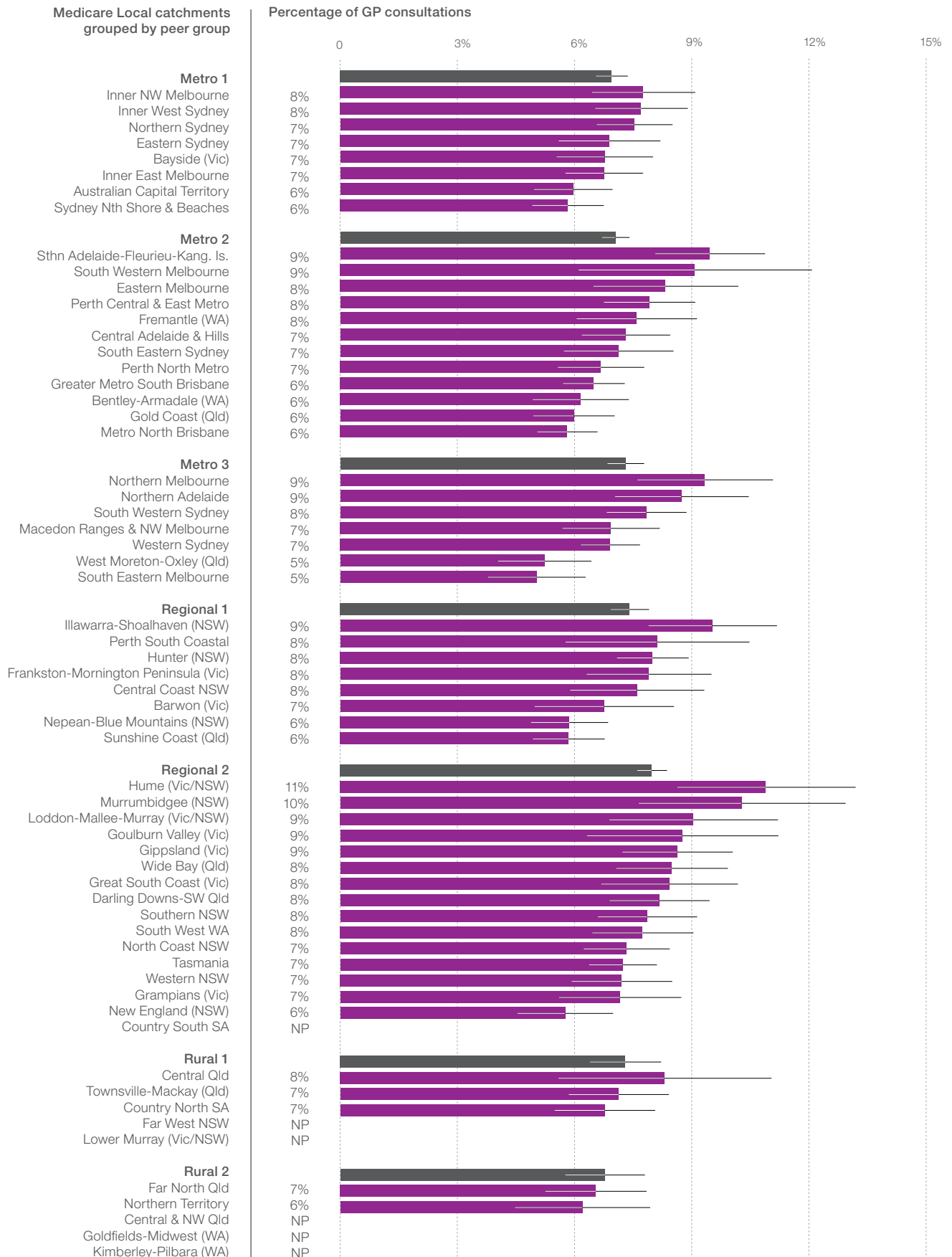
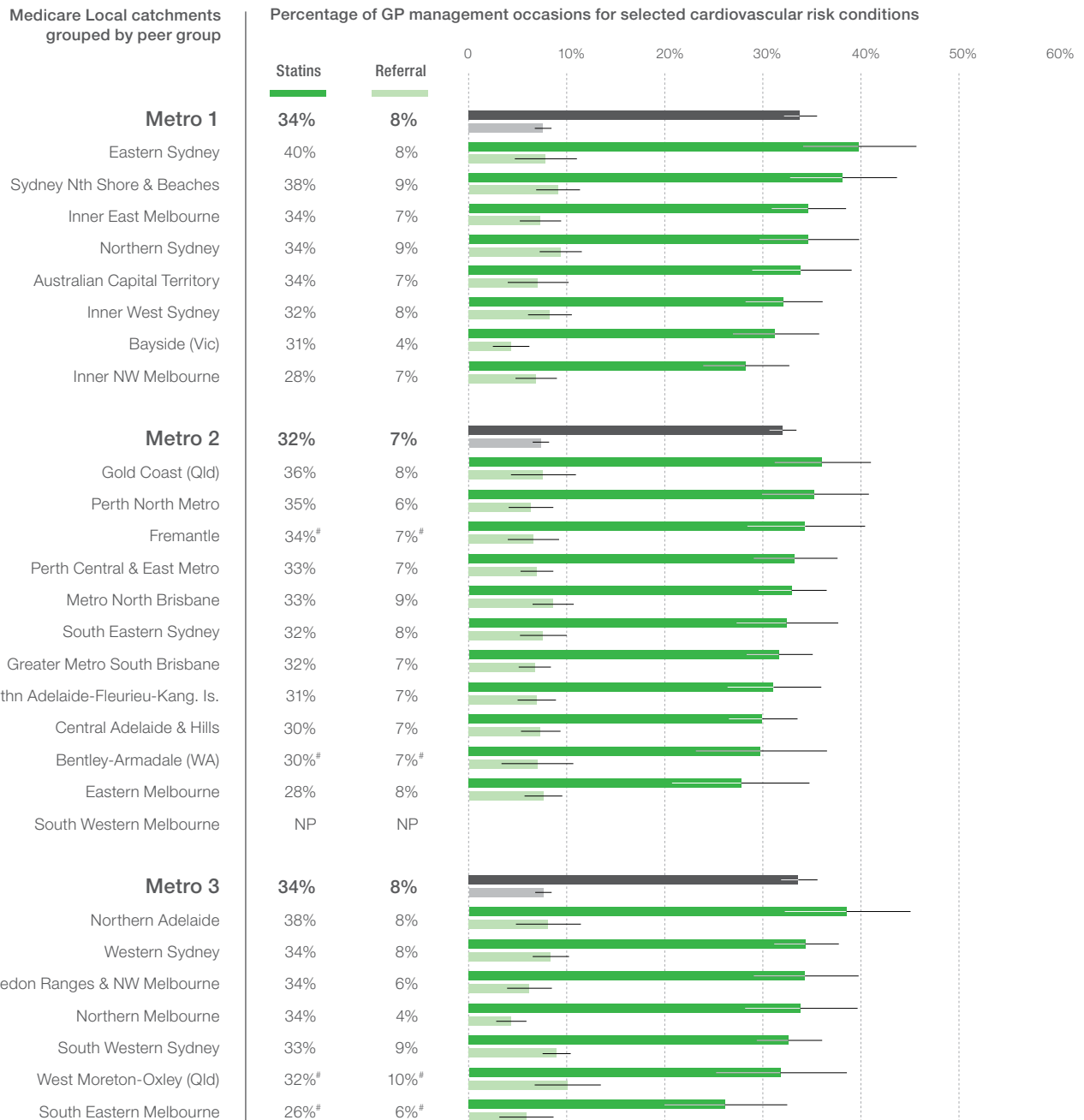




Figure 7: Percentage of GP management occasions in which statins were prescribed or a referral to a health professional was provided in the management of a selected cardiovascular risk condition*, by Medicare Local catchment, 2009–2013



— 95% Confidence interval.

* Selected cardiovascular risk conditions comprise ischaemic heart disease including acute myocardial infarction (AMI), cerebrovascular disease, heart failure, stroke and hyperlipidaemia, and type 2 diabetes for people 60 years and over. These conditions were selected based on recommended guidelines for the management of these conditions.

Interpret with caution.

NP Not available for publication.

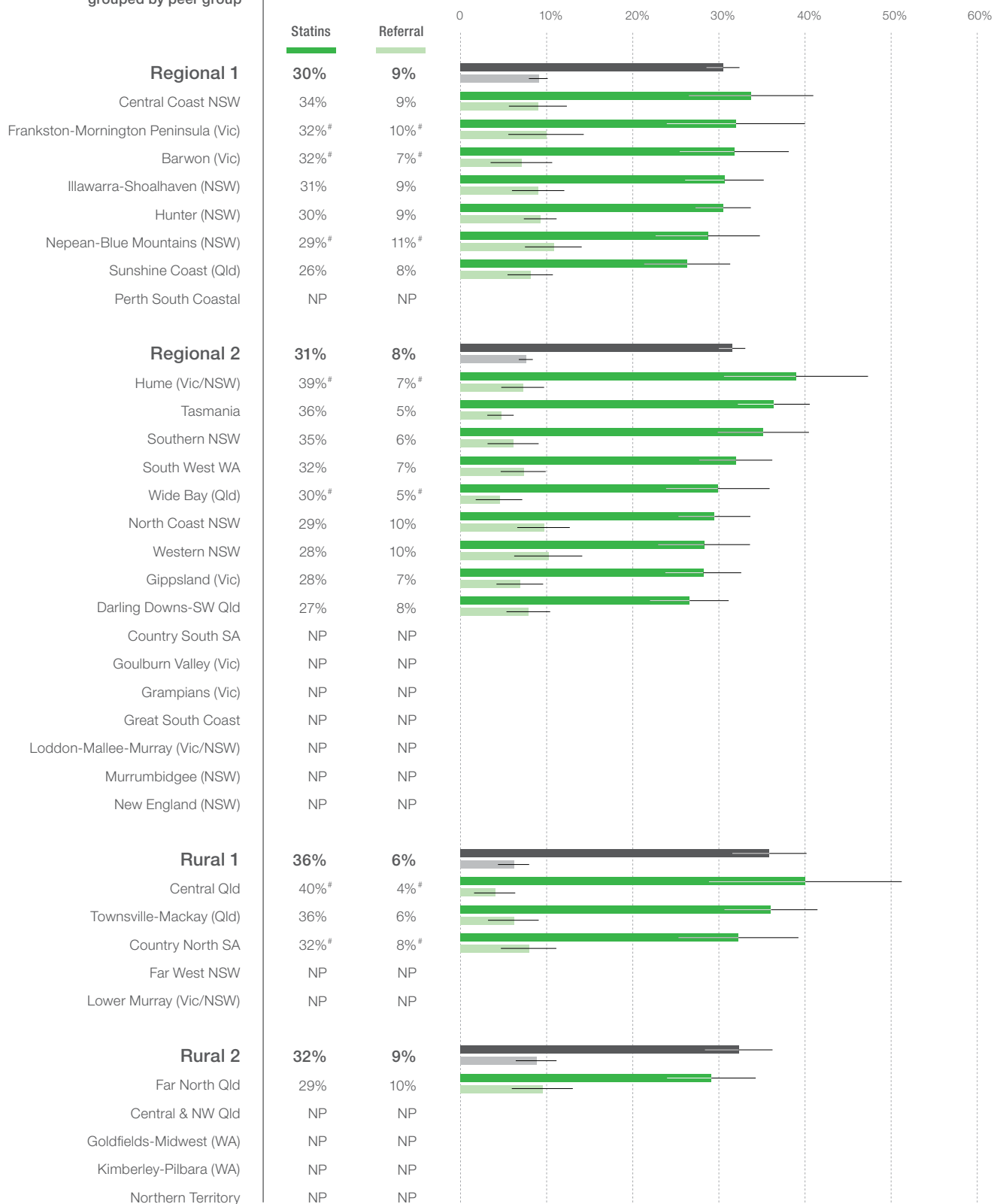
Notes: Data are reported as whole numbers. However, for graphical display and ordering they are plotted unrounded. Data are collected from a national survey of GPs. Characteristics of participating GPs may differ from non-participating GPs in a Medicare Local catchment which may affect the generalisability of results. For data limitations and exclusions see this report's Technical Supplement.

Source: Customised analysis of BEACH data prepared for the National Health Performance Authority by the Family Medicine Research Centre, the University of Sydney, 2009–2013.

Data can be downloaded from www.myhealthycommunities.gov.au

Medicare Local catchments
grouped by peer group

Percentage of GP management occasions of a selected cardiovascular risk conditions



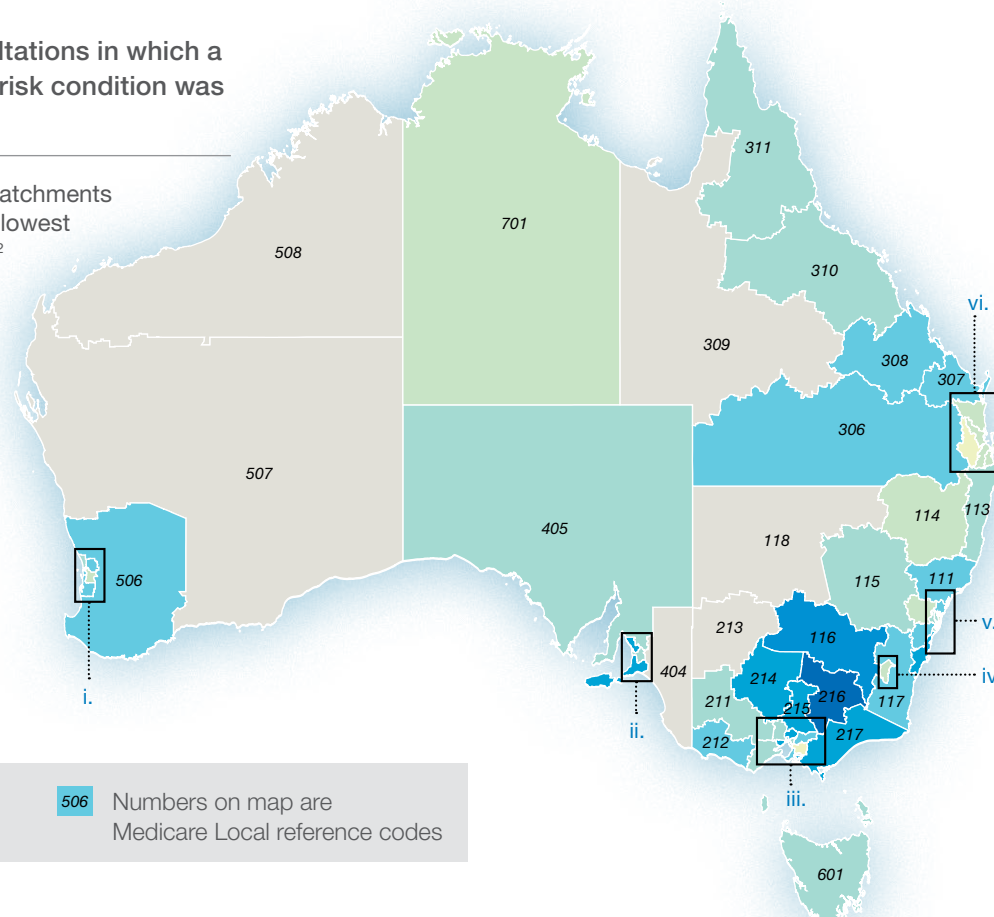
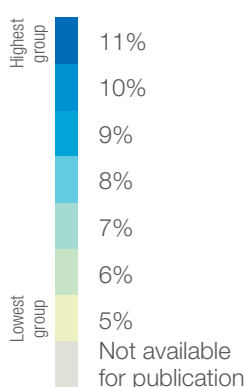
GP management of selected cardiovascular risk conditions

Years of data: 2009–2013

During 2009–2013, the percentage of GP consultations in which a selected cardiovascular risk condition¹ was managed varied across Medicare Local catchments and across peer groups, ranging from 11% in Hume (Vic/NSW) to 5% in South Eastern Melbourne and West Moreton-Oxley (Qld).

Percentage of GP consultations in which a selected cardiovascular risk condition was managed, 2009–2013

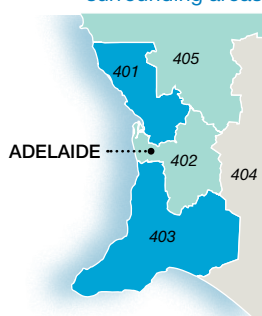
Results for Medicare Local catchments were ranked from highest to lowest then split into seven groups.²



i. Perth and surrounding areas



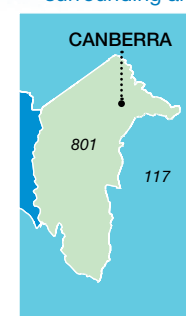
ii. Adelaide and surrounding areas



iii. Melbourne and surrounding areas

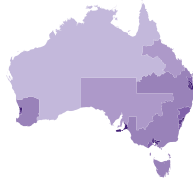


iv. Canberra and surrounding areas



1. Selected cardiovascular risk conditions comprise ischaemic heart disease including acute myocardial infarction (AMI), cerebrovascular disease, heart failure, stroke and hyperlipidaemia, and type 2 diabetes for people 60 years and over. These conditions were selected based on recommended guidelines for the management of these conditions.
 2. Each Medicare Local catchment has been assigned to a group that represents one percentage point.
 3. For more information on peer groups and the calculation of peer group results refer to this report's Technical Supplement.
- Notes:** Data are reported as whole numbers. However, for graphical display and ordering they are plotted unrounded. Data are collected from a national survey of GPs. Characteristics of participating GPs may differ from non-participating GPs in a Medicare Local catchment which may affect the generalisability of results. For data limitations and exclusions see this report's Technical Supplement.
- Source:** Customised analysis of BEACH data prepared for the National Health Performance Authority by the Family Medicine Research Centre, the University of Sydney, 2009–2013. Data can be downloaded from www.myhealthycommunities.gov.au

Fair comparisons



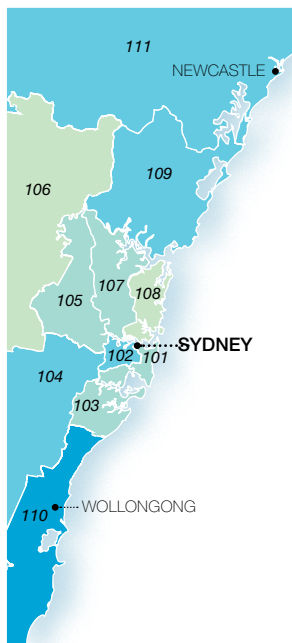
To compare Medicare Locals more fairly, each Medicare Local catchment has been grouped into one of seven peer groups³, based on remoteness and socioeconomic status.

This allows:

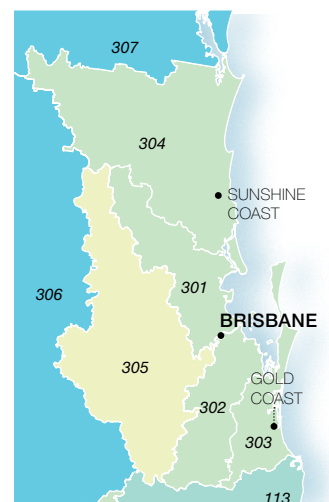
- Medicare Local catchments to be compared within the same metropolitan, regional or rural peer group
- Medicare Local catchments to be compared with the average for their peer group.

It also allows variation to be seen across peer groups that may be associated with remoteness and socioeconomic status.

v. Sydney and surrounding areas

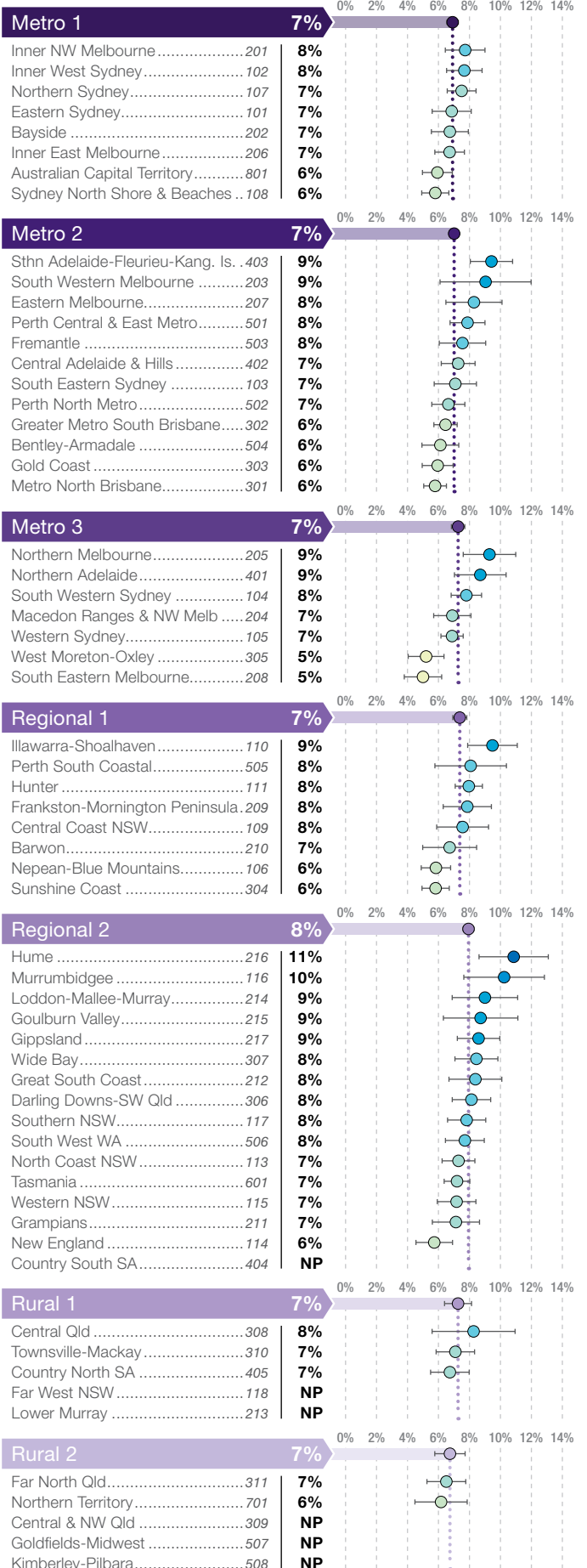


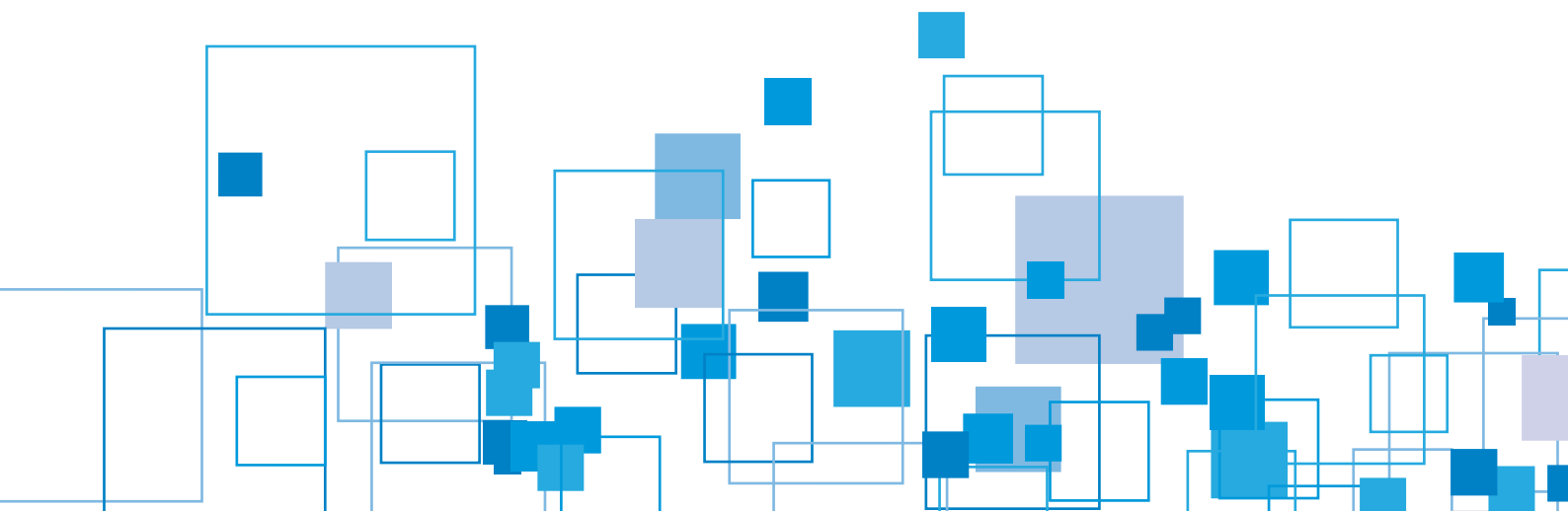
vi. Brisbane and surrounding areas



NP Not available for publication.
More information can be found at www.myhealthycommunities.gov.au and in this report's Technical Supplement.

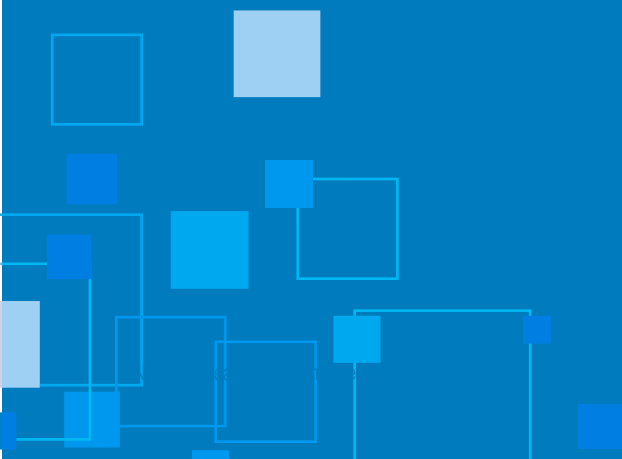
Peer groups





GP care for patients with depression and anxiety

GP care for patients with chronic conditions in 2009–2013



Key findings: GP care for patients with depression and anxiety

One in six Australians had a diagnosed mental health condition including depression (10%) and anxiety (6%) in 2008–09.¹⁴

Among **all people who visit the GP** at least once in a year, the percentage of people who had depression, anxiety or both of these conditions ranged from 16% to 18% in metropolitan communities to 13% to 20% in regional and rural communities (**Figure 8, page 30**).

The percentage of **all GP consultations** that involved patients who had depression, anxiety or both these conditions, irrespective of whether the condition was managed, ranged slightly from 18% to 21% in metropolitan, 20% to 23% in regional and 15% to 18% in rural communities (**Figure 9, page 30**).

GPs manage depression or anxiety in about one-third of all consultations with these patients. Across local areas, the proportion of all GP consultations in which depression or anxiety was **actively managed** ranged from one in 25 (4%) consultations in Sydney North Shore & Beaches compared to one in 11 (9%) consultations in Frankston-Mornington Peninsula (Vic) and Hume (Vic/NSW) (**Figure 10b, page 31**).

GP actions in the management of depression or anxiety also varied across local areas, which illustrates the diverse approaches to managing these conditions and may reflect the availability of allied health professionals and specialists (**Figure 11, pages 32 and 33**).

Depending on where a GP practises, a **psychotropic medication** (such as an antidepressant, antipsychotic or sedative) was prescribed on 38% of GP management occasions for depression or anxiety in Northern Sydney compared to 74% in Hume (Vic/NSW).

Across local areas, **GP counselling** was provided on 25% of GP management occasions for depression or anxiety in Southern NSW compared to 51% in Southern Adelaide-Fleurieu-Kangaroo Island.

Across local areas, a **referral to another health professional** was provided on 11% of GP management occasions for depression or anxiety in Southern Adelaide-Fleurieu-Kangaroo Island and Central Adelaide & Hills compared to 21% in Eastern Sydney (**Figure 11, pages 32 and 33**).

There were also notable differences between similar local areas that are within the same peer group, after accounting for geographic and socioeconomic characteristics.



Figure 8: Percentage of people who visit the GP at least once in a year who had depression, anxiety or both of these conditions*, by Medicare Local catchment peer group, 2005–2013†

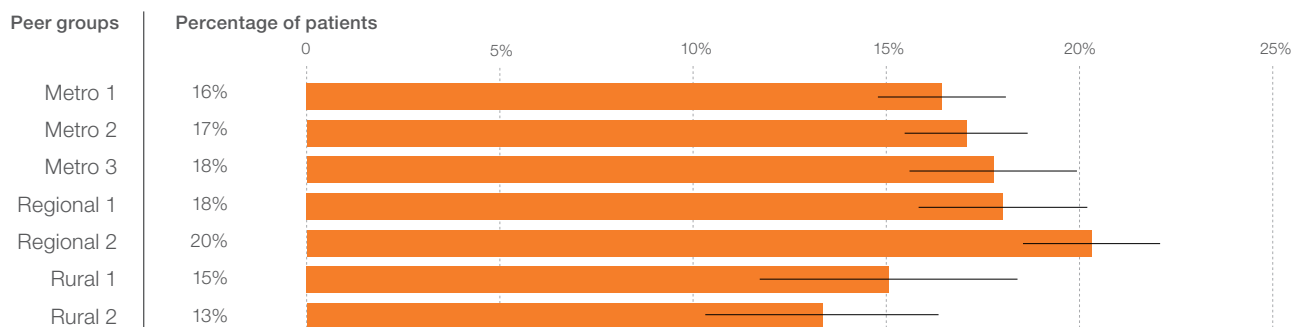


Figure 9: Percentage of GP consultations with patients who had depression, anxiety or both of these conditions*, by Medicare Local catchment peer group, 2005–2013

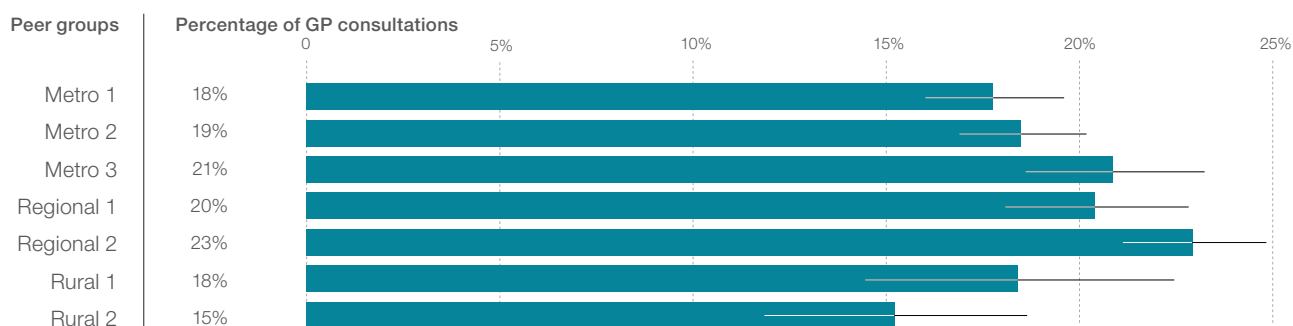
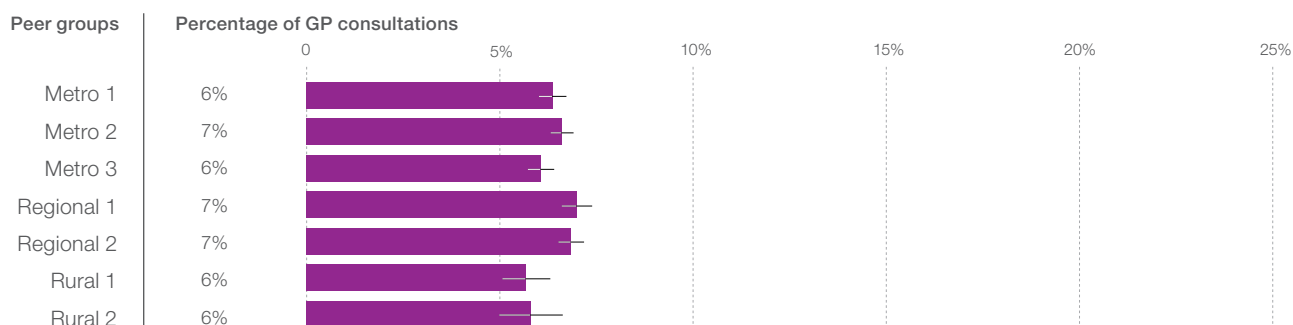


Figure 10a: Percentage of GP consultations in which depression or anxiety* was managed, by Medicare Local catchment peer group, 2009–2013



— 95% Confidence interval.

* Results comprise patients who are recorded by the GP as having been diagnosed with depression, anxiety or both of these conditions.

† Customised analysis of BEACH SAND substudy data (July 2005–June 2013) prepared for the National Health Performance Authority weighted to the attending patient population using Department of Human Services, Medicare Benefits statistics, 12 months ending June 2013.

Interpret with caution.

NP Not available for publication.

Notes: Data are reported as whole numbers. However, for graphical display and ordering they are plotted unrounded. Data are collected from a national survey of GPs. Characteristics of participating GPs may differ from non-participating GPs in a Medicare Local catchment which may affect the generalisability of results. For data limitations and exclusions see this report's Technical Supplement.

Source: Customised analysis of BEACH dataset (April 2009–March 2013) and BEACH SAND substudy dataset (July 2005–June 2013) prepared for the National Health Performance Authority by the Family Medicine Research Centre, the University of Sydney.

Data can be downloaded from www.myhealthycommunities.gov.au



Figure 10b: Percentage of GP consultations in which depression or anxiety* was managed, by Medicare Local catchment, 2009–2013

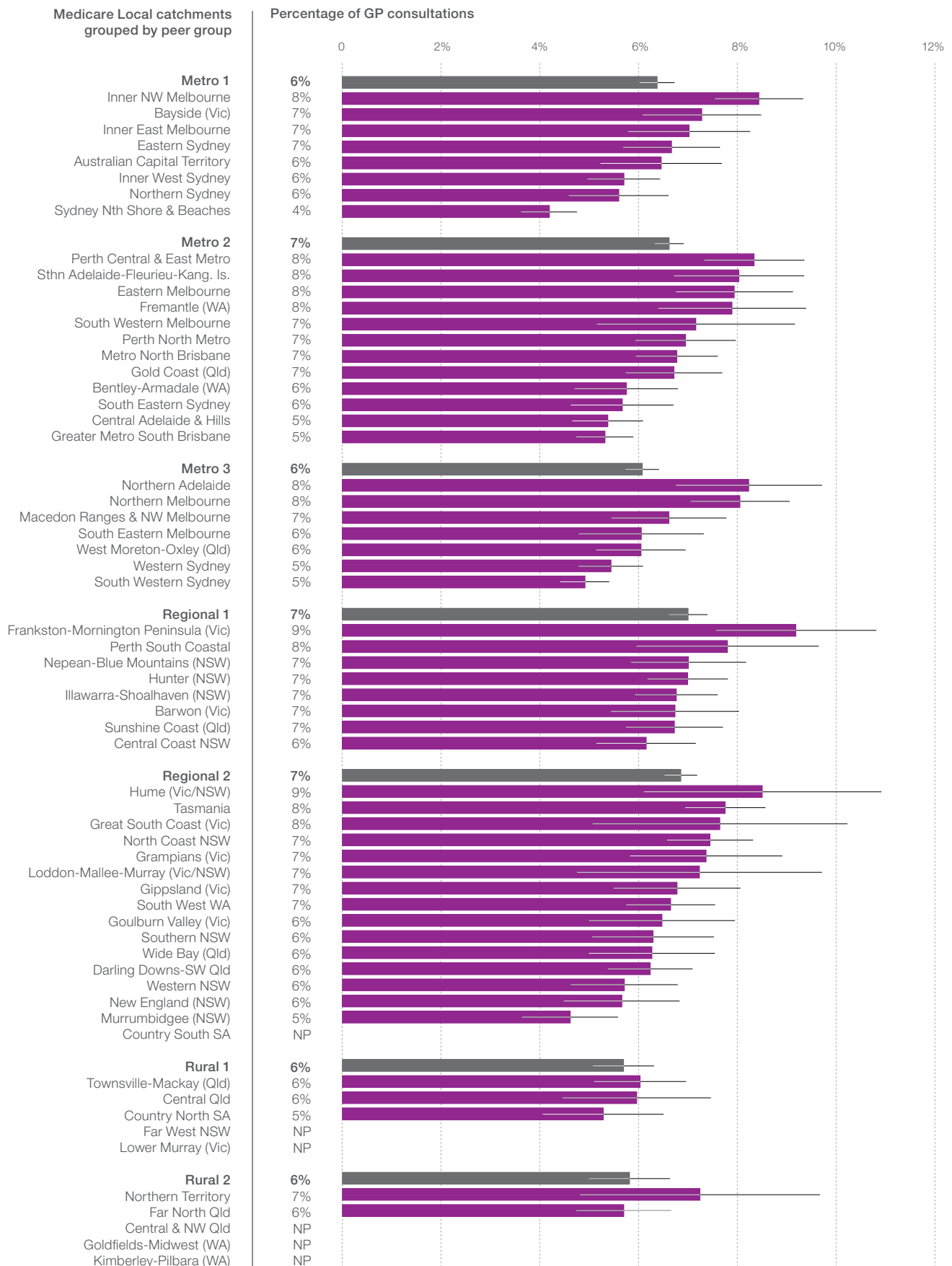
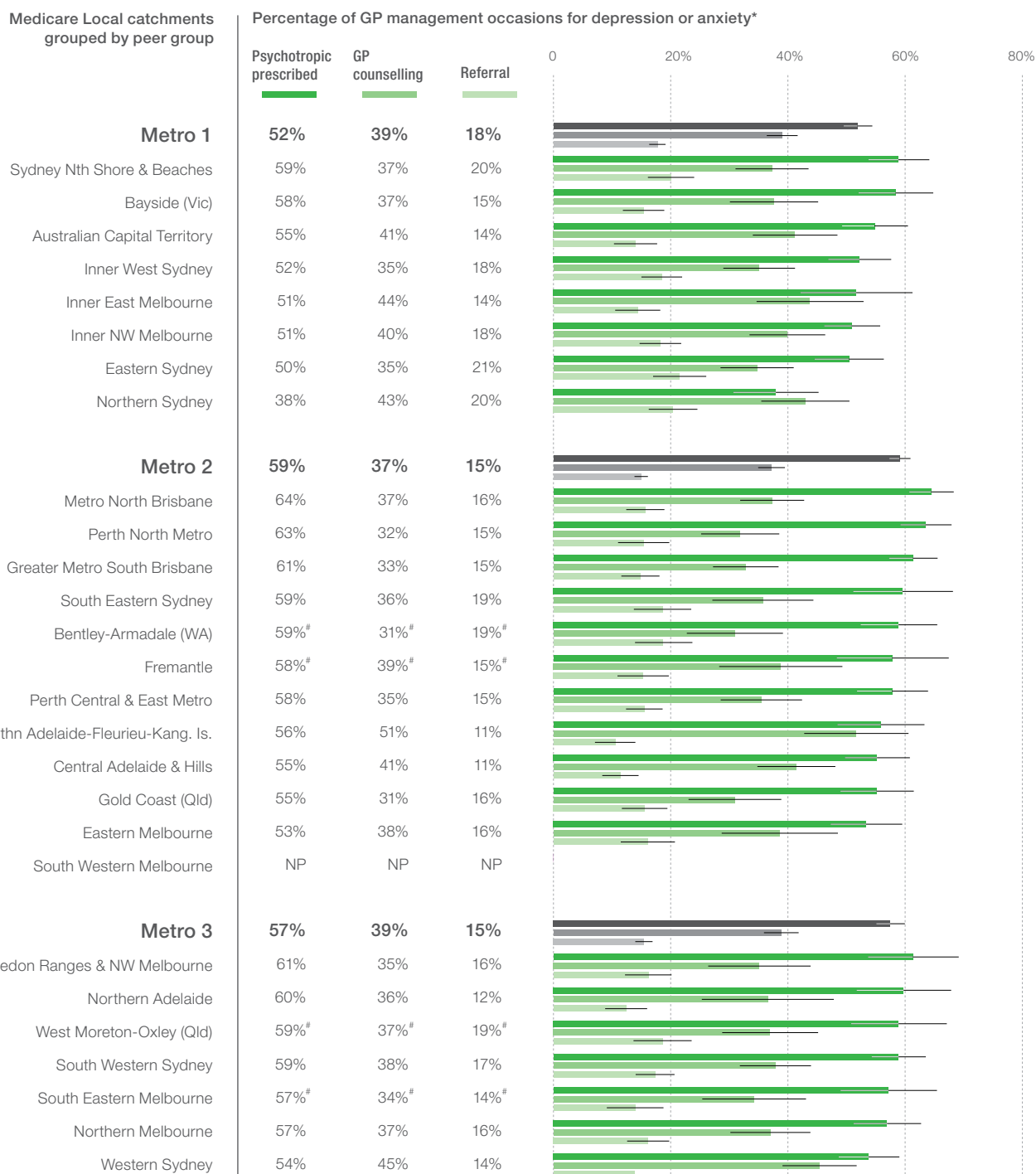




Figure 11: Percentage of GP management occasions in which psychotropics were prescribed, GP counselling, or a referral to a health professional was provided in the management of depression or anxiety, by Medicare Local catchment, 2009–2013



— 95% Confidence interval.

* Due to the opportunity to have zero, one, two or three management options percentages do not add to 100.

Interpret with caution.

NP Not available for publication.

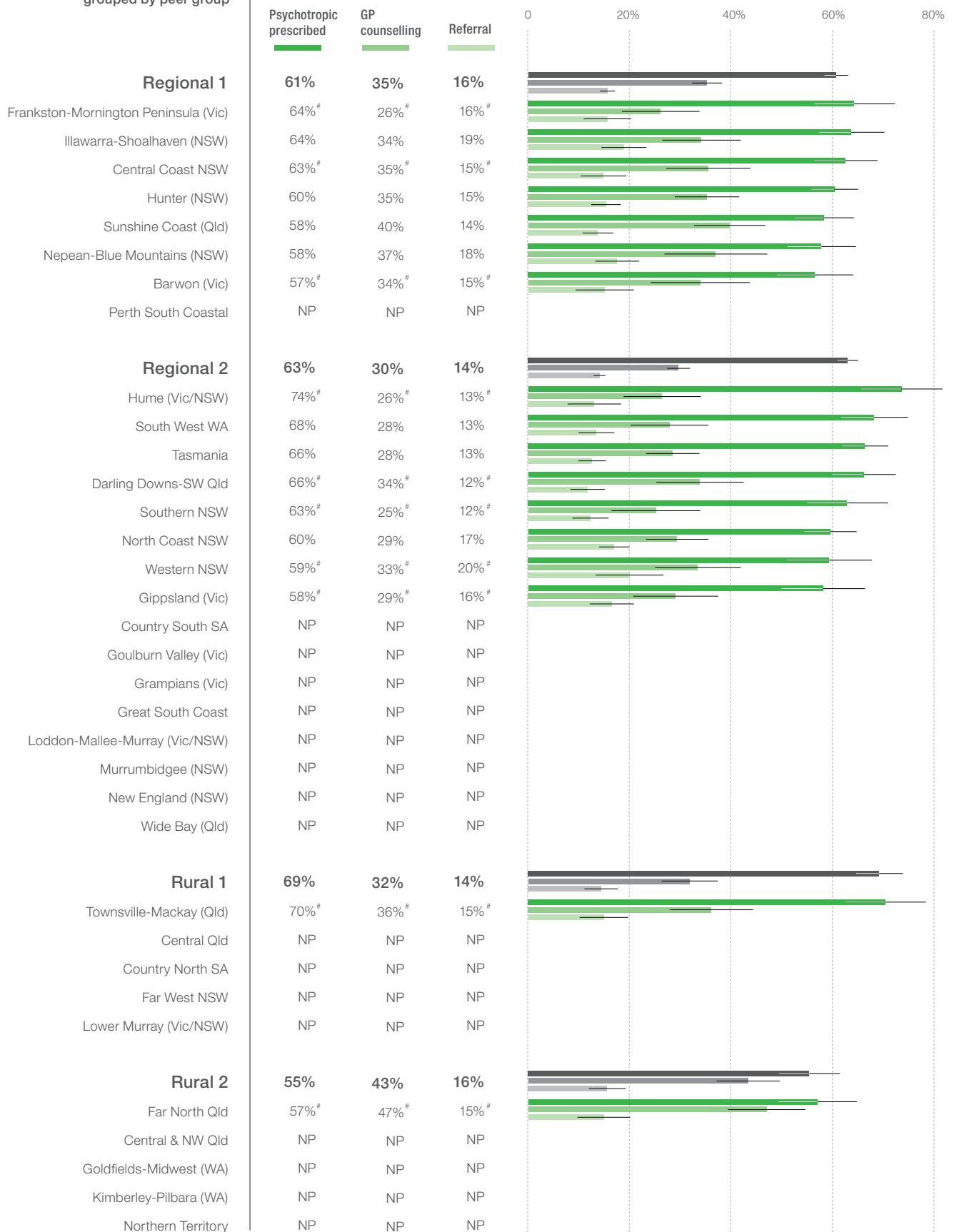
Notes: Data are reported as whole numbers. However, for graphical display and ordering they are plotted unrounded. Data are collected from a national survey of GPs. Characteristics of participating GPs may differ from non-participating GPs in a Medicare Local catchment which may affect the generalisability of results. For data limitations and exclusions see this report's Technical Supplement.

Source: Customised analysis of BEACH dataset (April 2009–March 2013) and BEACH SAND substudy dataset (July 2005–June 2013) prepared for the National Health Performance Authority by the Family Medicine Research Centre, the University of Sydney.

Data can be downloaded from www.myhealthycommunities.gov.au

Medicare Local catchments
grouped by peer group

Percentage of GP management occasions for depression or anxiety*



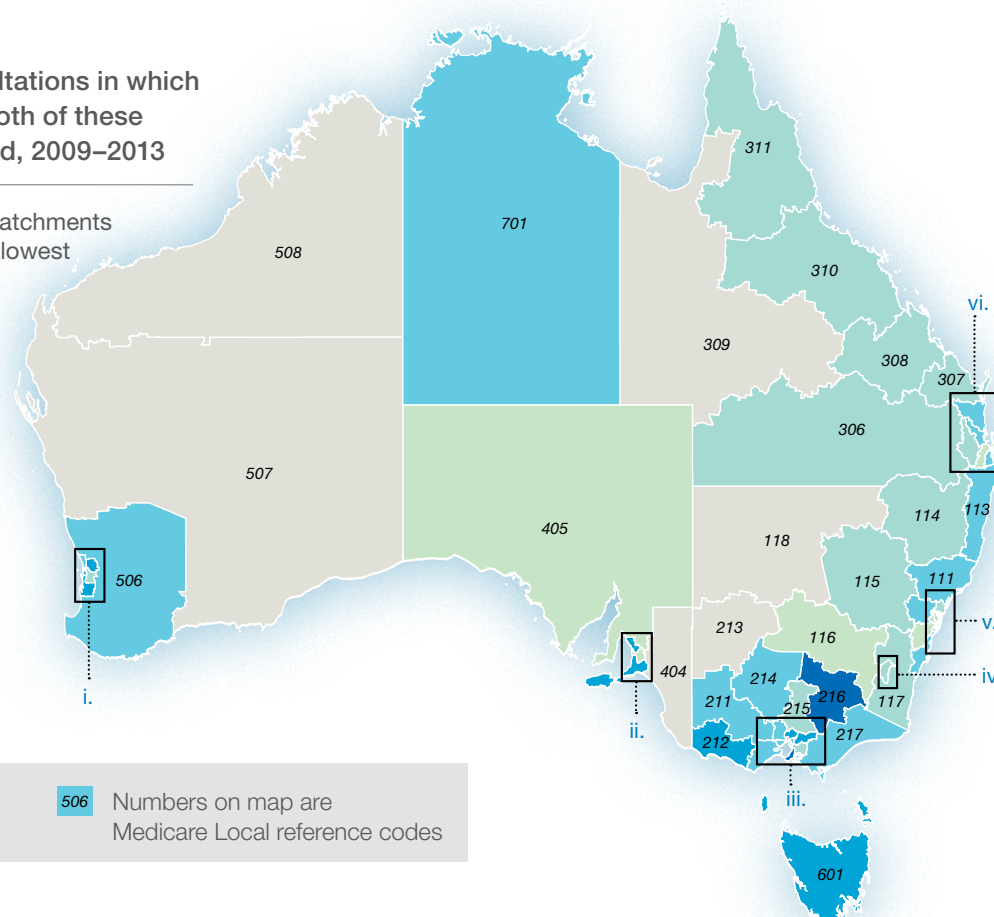
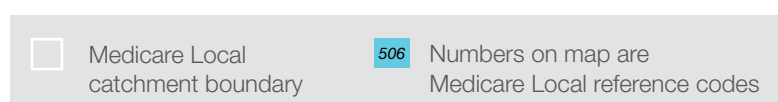
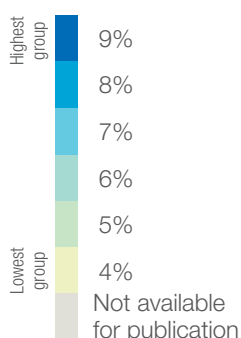
GP management of depression or anxiety

Years of data: 2009–2013

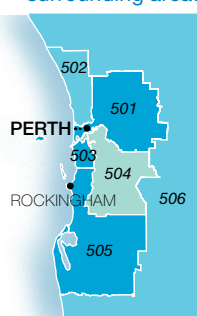
During 2009–2013, the percentage of GP consultations in which depression or anxiety was managed varied across Medicare Local catchments and across peer groups, ranging from 9% in Frankston-Mornington Peninsula (Vic) and Hume (Vic/NSW) to 4% in Sydney North Shore & Beaches.

Percentage of GP consultations in which depression, anxiety or both of these conditions were managed, 2009–2013

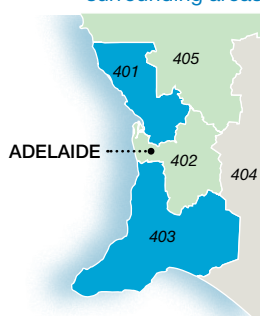
Results for Medicare Local catchments were ranked from highest to lowest then split into six groups.²



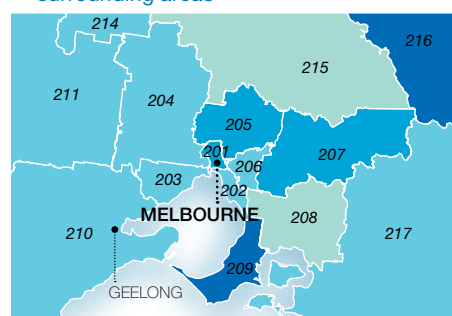
i. Perth and surrounding areas



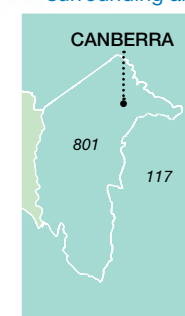
ii. Adelaide and surrounding areas



iii. Melbourne and surrounding areas

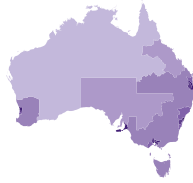


iv. Canberra and surrounding areas



1. Results comprise patients of any age with diagnosed depression and/or anxiety.
 2. Each Medicare Local catchment has been assigned to a group that represents one percentage point.
 3. For more information on peer groups and the calculation of peer group results refer to this report's Technical Supplement.
Notes: Data are reported as whole numbers. However, for graphical display and ordering they are plotted unrounded.
 Data are collected from a national survey of GPs. Characteristics of participating GPs may differ from non-participating GPs in a Medicare Local catchment which may affect the generalisability of results. For data limitations and exclusions see this report's Technical Supplement.
Source: Customised analysis of BEACH data prepared for the National Health Performance Authority by the Family Medicine Research Centre, the University of Sydney, 2009–2013.
 Data can be downloaded from www.myhealthyclimatecommunities.gov.au

Fair comparisons



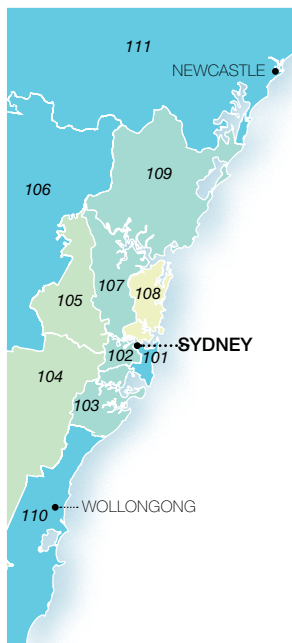
To compare Medicare Locals more fairly, each Medicare Local catchment has been grouped into one of seven peer groups³, based on remoteness and socioeconomic status.

This allows:

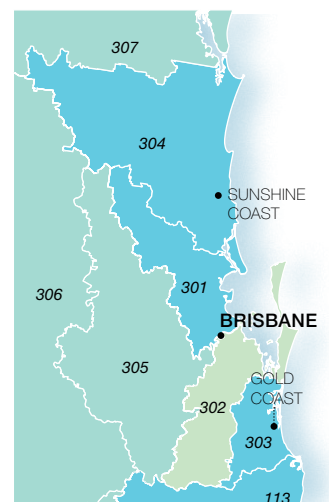
- Medicare Local catchments to be compared within the same metropolitan, regional or rural peer group
- Medicare Local catchments to be compared with the average for their peer group.

It also allows variation to be seen across peer groups that may be associated with remoteness and socioeconomic status.

v. Sydney and surrounding areas

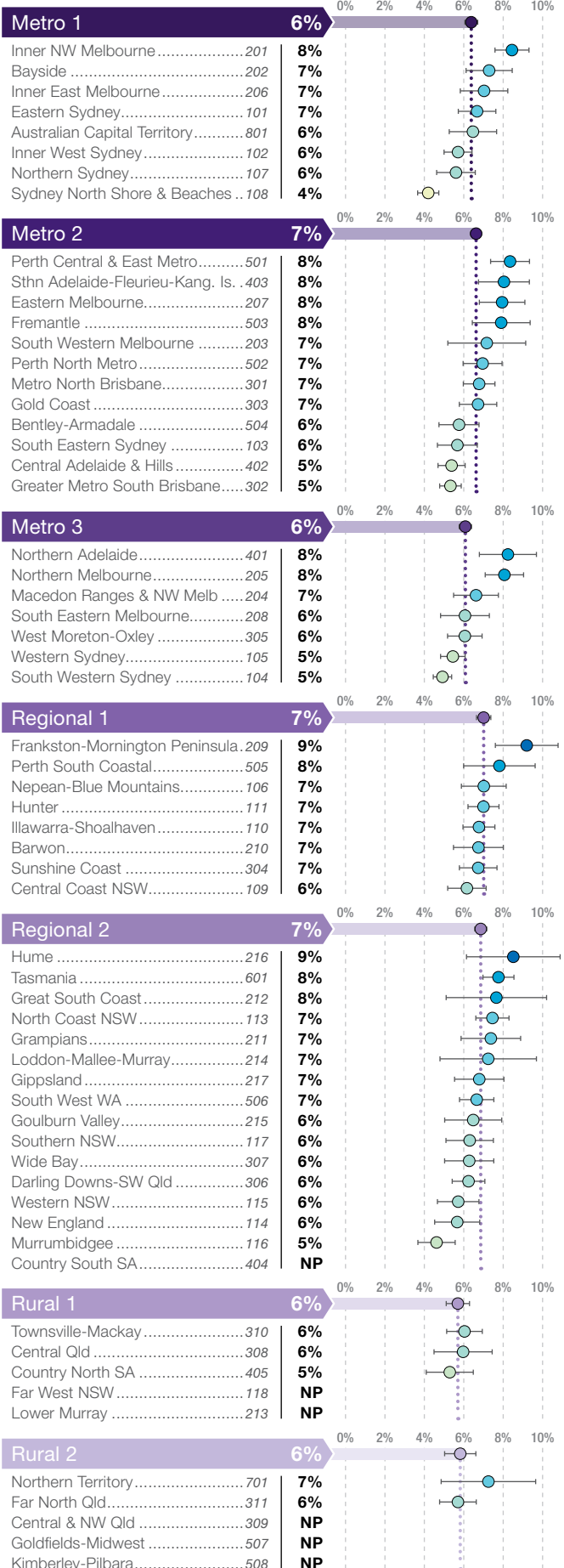


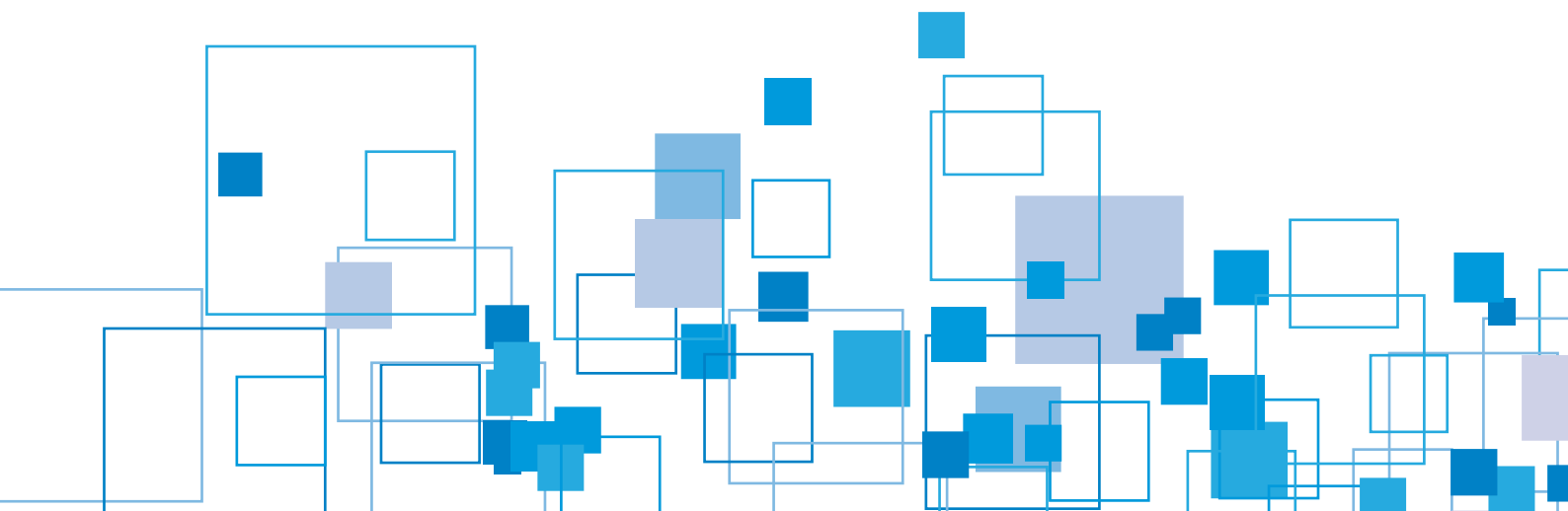
vi. Brisbane and surrounding areas



NP Not available for publication.
More information can be found at www.myhealthycommunities.gov.au and in this report's Technical Supplement.

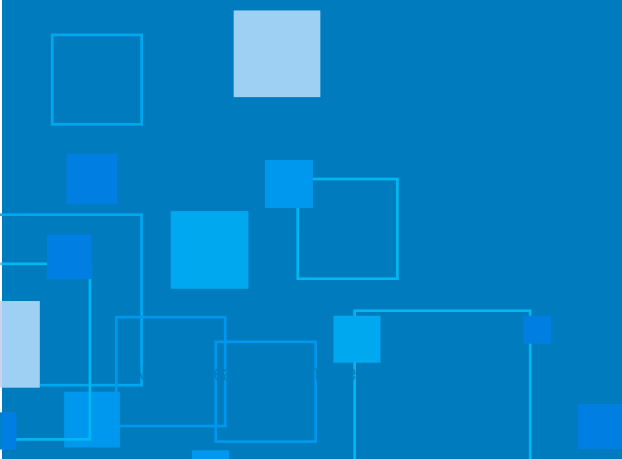
Peer groups





GP care for patients with arthritis and chronic back pain

GP care for patients with chronic conditions in 2009–2013



Key findings: GP care for patients with arthritis and chronic back pain

In Australia, almost one in seven people have a musculoskeletal condition including arthritis (12%) and chronic back pain (4%).¹⁴

Among **all people who visit the GP** at least once in a year, the percentage of people who had arthritis or chronic back pain ranged from 16% to 18% in metropolitan, 20% to 21% in regional and 16% to 20% in rural areas (**Figure 12, page 40**).

The percentage of **all GP consultations** that involved patients who had arthritis, chronic back pain or both of these conditions, irrespective of whether the condition was managed, ranged from 21% to 27% in metropolitan, 27% to 28% in regional and from 19% to 29% in rural areas (**Figure 13, page 40**).

GPs manage arthritis or chronic back pain in about one-fifth of all consultations with these patients. Across local areas, the proportion of all GP consultations in which arthritis or chronic back pain were **actively managed** ranged from one in 33 (3%) GP consultations in Sydney North Shore & Beaches compared to one in 14 (7%) consultations in Murrumbidgee (NSW) and Tasmania (**Figure 14b, page 41**).

GP actions in the management of arthritis or chronic back pain also varied across local areas, which illustrates the diverse approaches to managing these conditions and may reflect the availability of allied health professionals and specialists.

Depending on where a GP practises, a **medication was prescribed** on 52% of GP management occasions for arthritis or chronic back pain in Northern Sydney compared to 75% in Nepean-Blue Mountains.

Across local areas, a **referral to another health professional** was provided on 11% of GP management occasions for arthritis or chronic back pain in Northern Melbourne, West Moreton-Oxley (Qld), Far North Queensland and Tasmania compared to 22% in Darling-Downs South West Queensland and Northern Sydney.

Across local areas, **imaging was ordered** on 8% of GP management occasions for arthritis or chronic back pain in North Coast NSW, Macedon Ranges & North Western Melbourne and Northern Adelaide compared to 20% in Central Coast NSW (**Figure 15, pages 42 and 43**).



Figure 12: Percentage of people who visit the GP at least once in a year who had arthritis or chronic back pain*, by Medicare Local catchment peer group, 2005–2013†

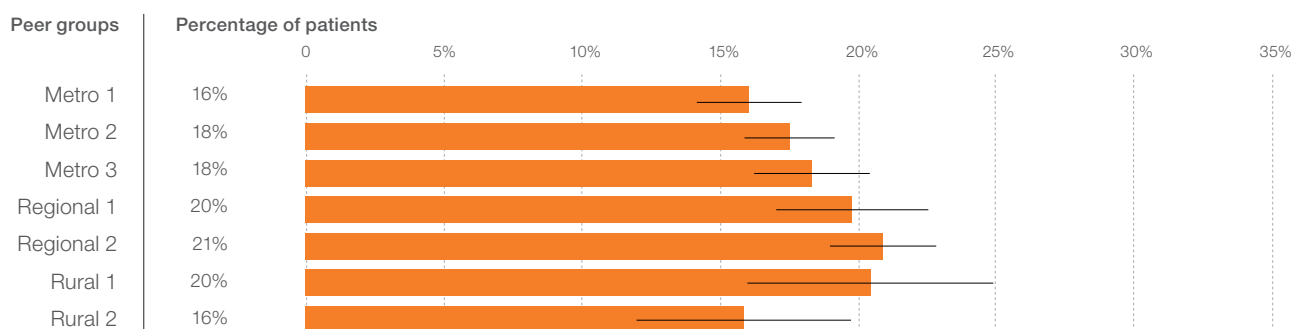


Figure 13: Percentage of GP consultations with patients who had arthritis or chronic back pain*, by Medicare Local catchment peer group, 2005–2013

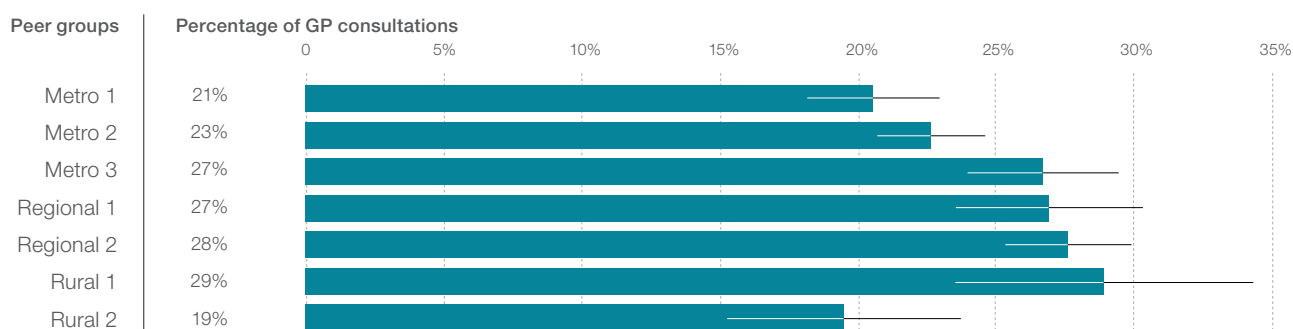


Figure 14a: Percentage of GP consultations in which arthritis or chronic back pain* was managed, by Medicare Local catchment peer group, 2009–2013



— 95% Confidence interval.

* Results comprise patients who are recorded by the GP as having been with arthritis (defined as osteoarthritis or rheumatoid arthritis) or chronic back pain

† Customised analysis of BEACH SAND substudy data (July 2005–June 2013) prepared for the National Health Performance Authority weighted to the attending patient population using Department of Human Services, Medicare Benefits statistics, 12 months ending June 2013.

Interpret with caution.

NP Not available for publication.

Notes: Data are reported as whole numbers. However, for graphical display and ordering they are plotted unrounded. Data are collected from a national survey of GPs. Characteristics of participating GPs may differ from non-participating GPs in a Medicare Local catchment which may affect the generalisability of results. For data limitations and exclusions see this report's Technical Supplement.

Source: Customised analysis of BEACH dataset (April 2009–March 2013) and BEACH SAND substudy dataset (July 2005–June 2013) prepared for the National Health Performance Authority by the Family Medicine Research Centre, the University of Sydney.

Data can be downloaded from www.myhealthycommunities.gov.au



Figure 14b: Percentage of GP consultations in which arthritis or chronic back pain* was managed, by Medicare Local catchment, 2009–2013

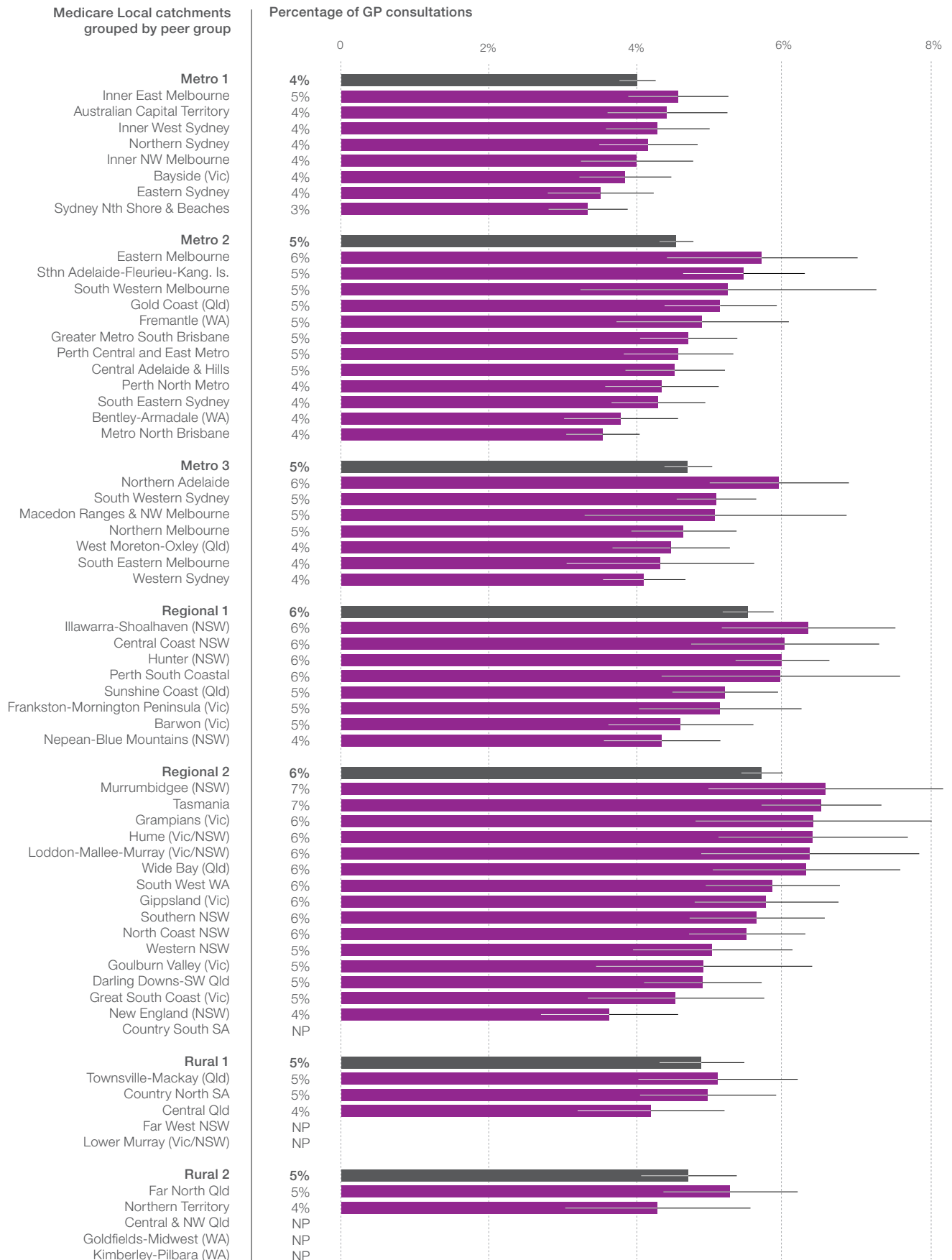
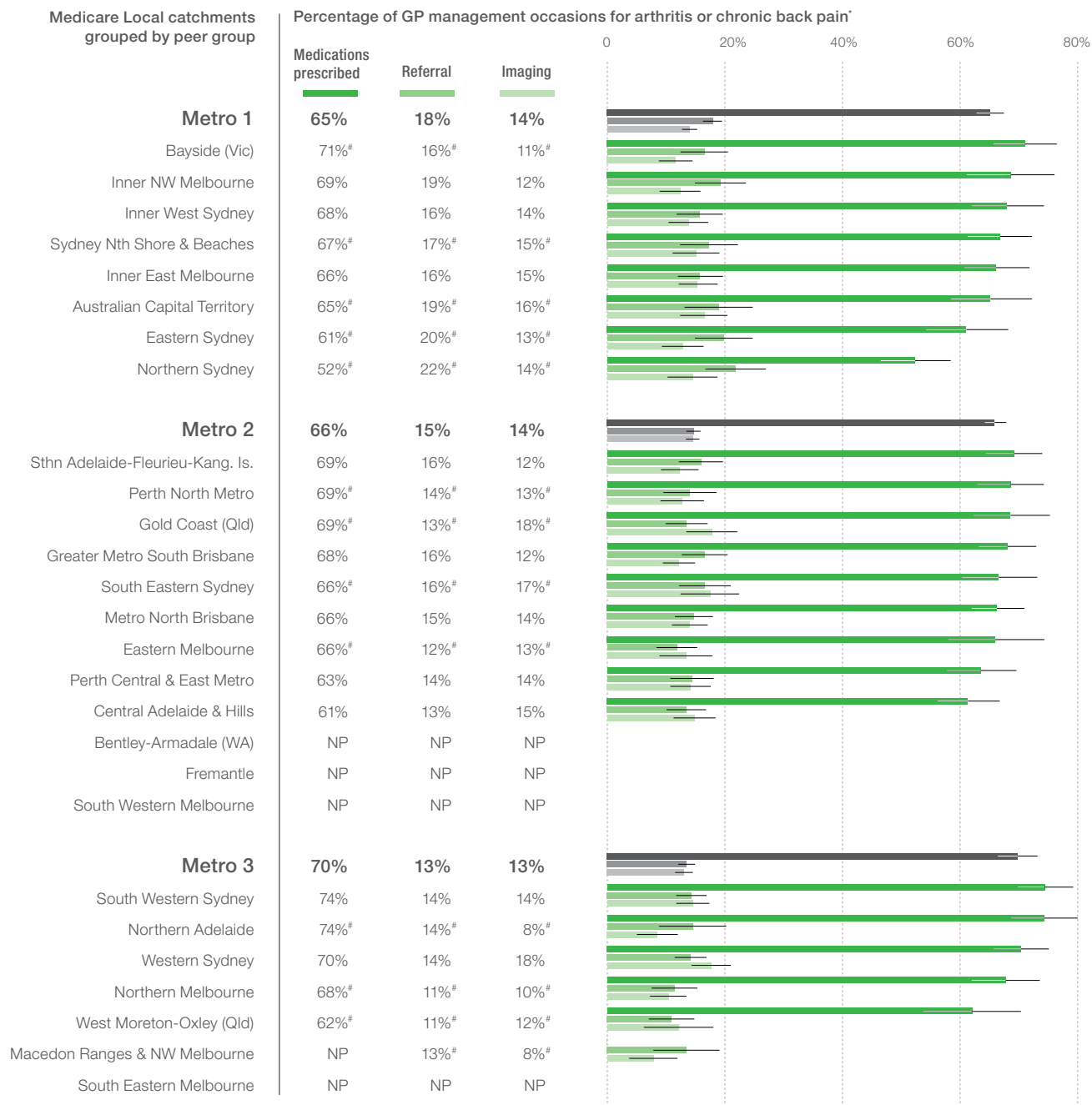




Figure 15: Percentage of GP management occasions in which medications were prescribed, a referral to a health professional or imaging was provided in the management of arthritis or chronic back pain, by Medicare Local catchment, 2009–2013



— 95% Confidence interval.

* Due to the opportunity to have zero, one, two or three management options percentages do not add to 100.

Interpret with caution.

NP Not available for publication.

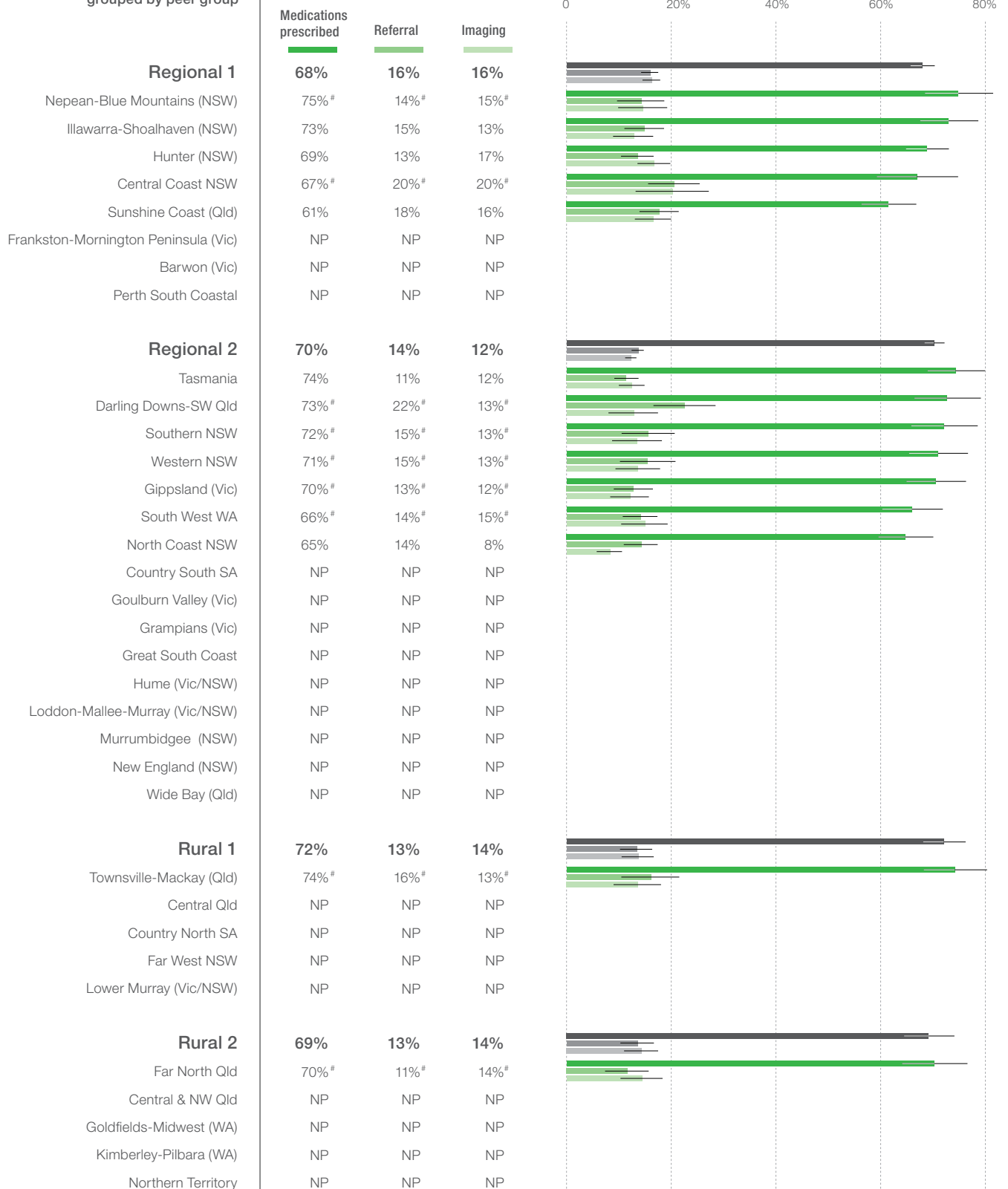
Notes: Data are reported as whole numbers. However, for graphical display and ordering they are plotted unrounded. Data are collected from a national survey of GPs. Characteristics of participating GPs may differ from non-participating GPs in a Medicare Local catchment which may affect the generalisability of results. For data limitations and exclusions see this report's Technical Supplement.

Source: Customised analysis of BEACH data prepared for the National Health Performance Authority by the Family Medicine Research Centre, the University of Sydney, 2009–2013.

Data can be downloaded from www.myhealthycommunities.gov.au

Medicare Local catchments
grouped by peer group

Percentage of GP management occasions for arthritis or chronic back pain*



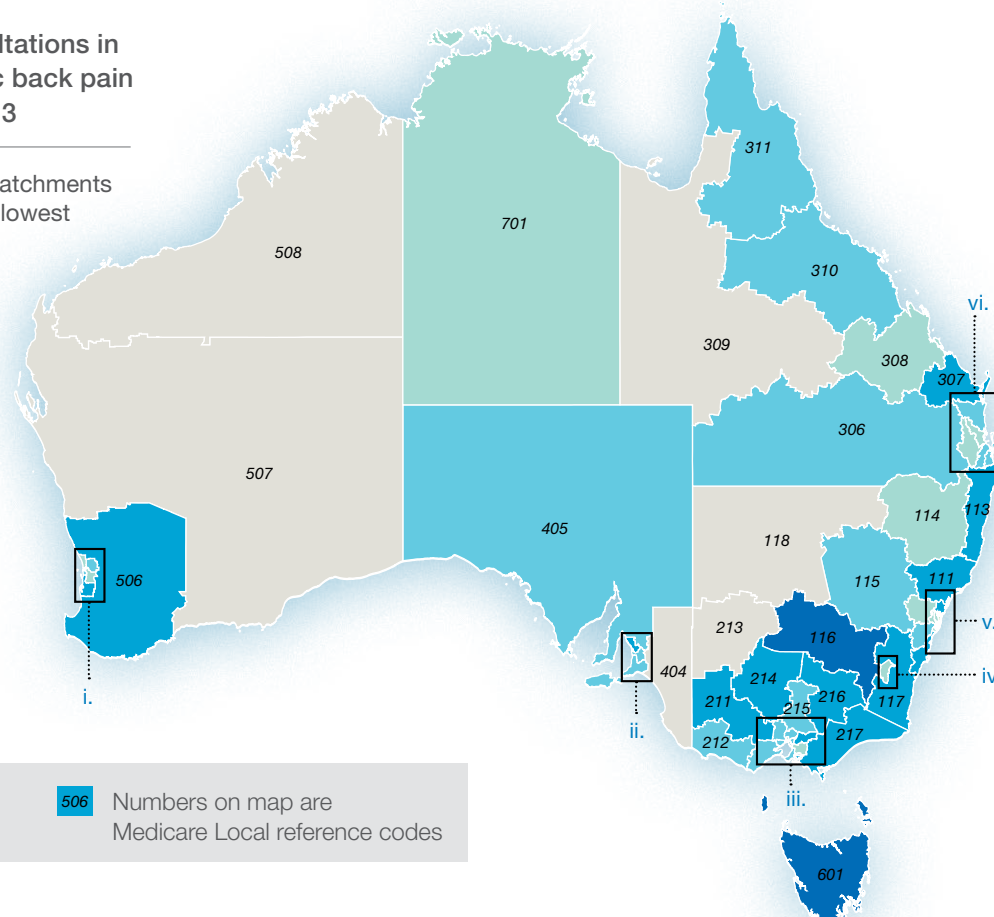
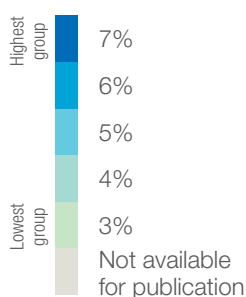
GP management of arthritis or chronic back pain

Years of data: 2009–2013

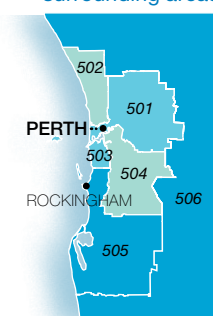
During 2009–2013, the percentage of GP consultations in which arthritis or chronic back pain¹ was managed varied across Medicare Local catchments and across peer groups, ranging from 7% in Murrumbidgee (NSW) and Tasmania to 3% in Sydney North Shore & Beaches.

Percentage of GP consultations in which arthritis or chronic back pain was managed, 2009–2013

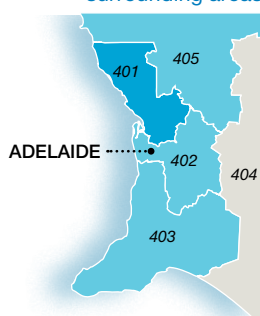
Results for Medicare Local catchments were ranked from highest to lowest then split into five groups.²



i. Perth and surrounding areas



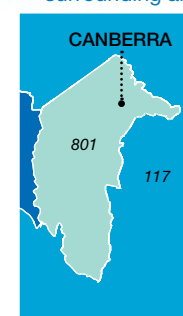
ii. Adelaide and surrounding areas



iii. Melbourne and surrounding areas

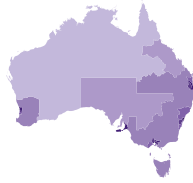


iv. Canberra and surrounding areas



- Results comprise management of osteoarthritis and rheumatoid arthritis which account for 85.6% of all arthritis managed by GPs during consultations for chronic back pain.
 - Each Medicare Local catchment has been assigned to a group that represents one percentage point.
 - For more information on peer groups and the calculation of peer group results refer to this report's Technical Supplement.
- Notes:** Data are reported as whole numbers. However, for graphical display and ordering they are plotted unrounded. Data are collected from a national survey of GPs. Characteristics of participating GPs may differ from non-participating GPs in a Medicare Local catchment which may affect the generalisability of results. For data limitations and exclusions see this report's Technical Supplement.
- Source:** Customised analysis of BEACH data prepared for the National Health Performance Authority by the Family Medicine Research Centre, the University of Sydney, 2009–2013. Data can be downloaded from www.myhealthycommunities.gov.au

Fair comparisons



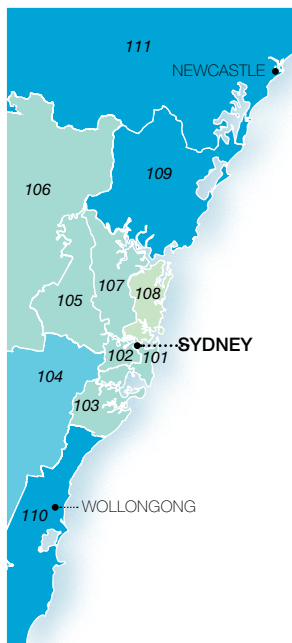
To compare Medicare Locals more fairly, each Medicare Local catchment has been grouped into one of seven peer groups³, based on remoteness and socioeconomic status.

This allows:

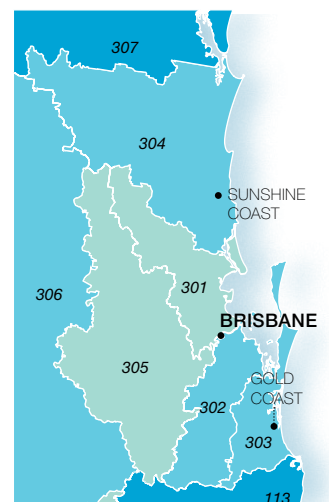
- Medicare Local catchments to be compared within the same metropolitan, regional or rural peer group
- Medicare Local catchments to be compared with the average for their peer group.

It also allows variation to be seen across peer groups that may be associated with remoteness and socioeconomic status.

v. Sydney and surrounding areas



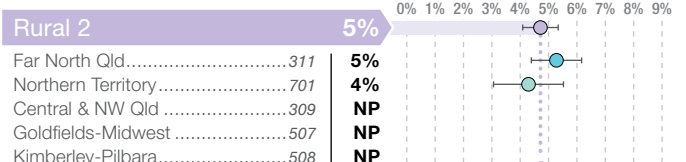
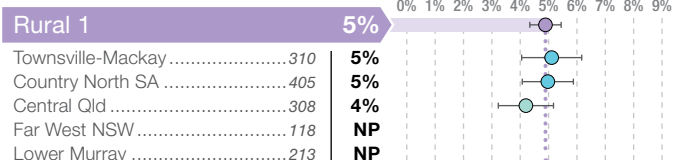
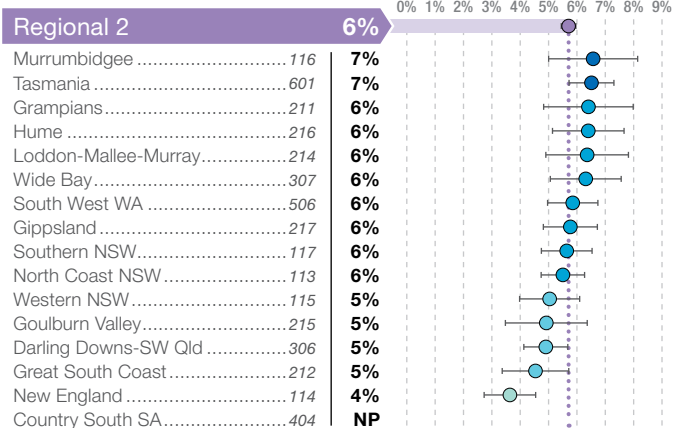
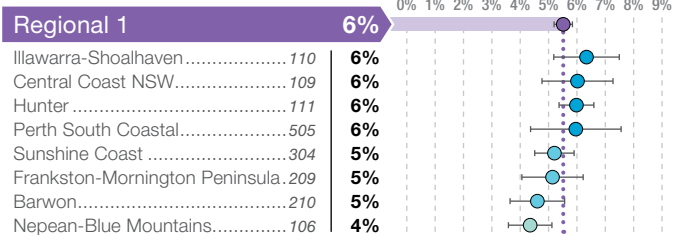
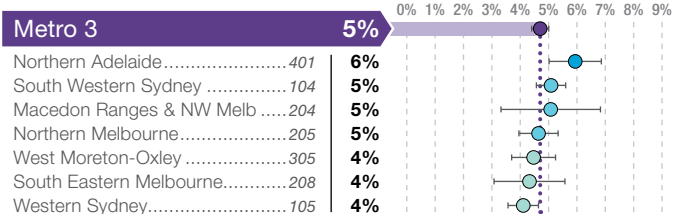
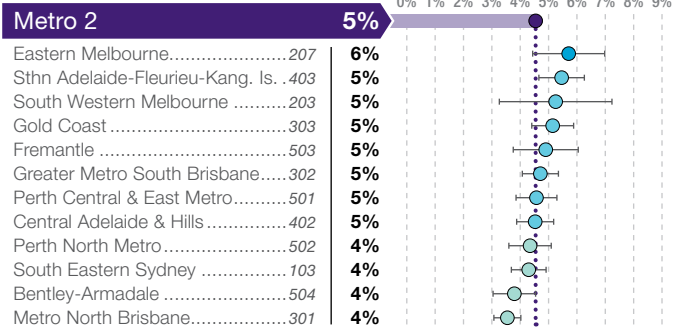
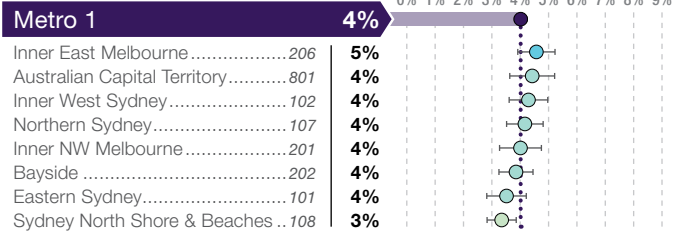
vi. Brisbane and surrounding areas



NP Not available for publication.
More information can be found at www.myhealthycommunities.gov.au and in this report's Technical Supplement.

Peer groups

Map
Ref.



Appendix

About the peer groups

To enable fairer comparisons, the Authority allocated each Medicare Local catchment to one of seven peer groups, based on socioeconomic status, remoteness and distance to hospitals.

- **Metro 1:** High urban density, higher socioeconomic status
- **Metro 2:** Medium urban density, medium socioeconomic status
- **Metro 3:** Low urban density, lower socioeconomic status
- **Regional 1:** Outer urban areas, middle socioeconomic status
- **Regional 2:** Mostly non-metro urban and regional areas, middle socioeconomic status
- **Rural 1:** Distance from metro cities, with diverse socioeconomic status
- **Rural 2:** Mostly large remote areas, middle or lower socioeconomic status.

To find more information about peer groups, see *Healthy Communities: GP care for patients with chronic conditions in 2009–2013, Technical Supplement* at www.myhealthycommunities.gov.au

Glossary

Actively managed	Involves the care and monitoring of a patient's health condition by a GP.
Acute health condition	A medical condition that comes on suddenly and lasts for a limited time.
Acute myocardial infarction (AMI)	Occurs when there is restricted or totally obstructed blood flow, causing death of muscle in an area of the heart. Commonly referred to as a heart attack.
Allied health professional	A health professional who is not a doctor, nurse or dentist; the term includes physiotherapists, psychologists and dieticians.
Anxiety disorder	Clinically significant anxiety that is not restricted to any particular situation, including anxiety neurosis and panic disorder, with or without physical symptoms.
Arthritis	A chronic disease of the joints. Common forms include osteoarthritis and rheumatoid arthritis.
Asthma	A chronic lung disease that inflames and narrows the airways. Asthma causes recurring periods of wheezing, a feeling of constriction in the chest, shortness of breath and coughing.
Cancer	General term covering a variety of malignancies, whereby gene damage causes cells to multiply, invade and spread without control.
Cardiovascular	Relating to the heart, blood vessels and circulation.
Cerebrovascular accident (CVA)	Commonly known as a stroke, whereby a cerebral haemorrhage causes brain damage or, blockage of cerebral vessels which restricts or stops blood flow to the brain resulting in death of brain cells.
Chronic back pain	Refers to pain in the spine of three months or more and outlasting the usual healing process.
Chronic condition	A medical condition characterised by a combination of the following characteristics: duration that has lasted or is expected to last six months or more, a pattern of recurrence or deterioration, a poor prognosis, and consequences that impact on an individual's quality of life.
Chronic obstructive pulmonary disease (COPD)	A group of diseases that affect the lungs and airways. It is defined by limited airflow as a result of breakdown of lung tissue and obstruction of the small airways.

Clinical treatments	Clinical treatments performed may include general and specific advice, counselling (e.g. for weight loss, smoking, medication) or education, family planning and administrative processes (e.g. providing a medical certificate).
Common chronic condition	For the purposes of this report, a chronic medical condition that occurs frequently among people in the community and in general practice patients.
Congestive heart failure	A clinical syndrome due to heart disease, characterized by breathlessness and abnormal sodium and water retention, often resulting in oedema (swelling).
Consultation	A face-to-face professional interchange between a patient and a health professional to discuss a health concern.
Depression	A mood disorder with prolonged feelings of sadness and hopelessness, which is often accompanied by low self-esteem, a loss of interest in activities, and suicidal thoughts or self-blame.
Diabetes type 1	One of the two major types of diabetes mellitus: an autoimmune disease that results in the destruction of cells in the pancreas, leading to loss of the ability to secrete insulin. It has an abrupt onset, and insulin injections are required to sustain life; peak age of onset is 12 years. Also called insulin-dependent, juvenile, juvenile-onset, and Type I d. mellitus.
Diabetes type 2	One of the two major types of diabetes mellitus, with a peak age of onset between 50 and 60 years and a gradual development with few early symptoms. Dietary control with or without oral hypoglycaemic drugs is usually effective. Insulin injections are not usually needed. Diagnosis is based on pathology tests indicating glucose resistance. Called also adult-onset, maturity-onset, non-insulin-dependent, and Type II d. mellitus.
Gastro-oesophageal reflux disease (GORD)	A common condition in which the liquid contents of the stomach reflux back up into the oesophagus (food pipe).
General practitioner (GP)	A medical practitioner who provides primary comprehensive and continuing care to patients and their families within the community (RACGP).
GP management occasion	A consultation in which a GP takes clinical action, such as prescribing medication, to manage the patient's chronic condition
Hyperlipidaemia	The presence of abnormally high levels of lipids (fats) such as cholesterol and triglycerides in the blood.

Hypertension	Occurs when the blood is persistently pumping at a higher pressure than normal through the arteries. This can contribute to a number of conditions or diseases including heart attack, kidney disease or stroke.
Imaging	Production of diagnostic images; for example CT (computed tomography), MRI (magnetic resonance imaging), X-rays, ultrasound and nuclear medicine scans.
Insomnia	Insomnia means difficulty with either falling or staying asleep. It is one of a number of sleep disorders.
Ischaemic heart disease (IHD)	A disease characterised by reduced blood supply to the heart. Also called coronary heart disease. It is the most common form of cardiovascular disease. May take the form of a heart attack (see also acute myocardial infarction) and/or angina (a chronic condition when a temporary loss of blood supply to the heart causes periodic chest pain).
Morbidity	Any departure, subjective or objective, from a state of physiological wellbeing. In this sense, sickness, illness and morbid conditions are synonymous.
Multimorbidity	Refers to when two or more chronic medical conditions occur in one person.
Not available for publication (NP)	This applies when data are not able to be published for reasons related to reliability, validity and/or confidentiality. Methods used to determine whether a statistic is published are included in the report's Technical Supplement.
Obesity	A person whose body mass index (BMI) was greater than or equal to 30.
Osteoarthritis	A chronic and common form of arthritis, affecting mostly the spine, hips, knees and hands. It can first appear from the age of about 30 and is more common and severe with increasing age.
Peripheral vascular disease (PVD)	Peripheral vascular disease is the reduced circulation of blood to a body part other than the brain or heart. It is caused by narrowed or blocked arteries.
Prescription drugs	Pharmaceutical medicines only available on the prescription of a registered medical practitioner and only available from pharmacies.

Primary Health Networks	The Australian Government announced in the 2014–15 Budget that new Primary Health Networks (PHNs) will begin operations from 1 July 2015. Primary Health Networks will play a critical role in connecting health services across local communities so that patients, particularly those needing coordinated care, have the best access to a range of health care providers, including practitioners, community health services and hospitals. PHNs will work directly with GPs, other primary care providers, secondary care providers and hospitals.
Psychotropics	Psychotropic medicines act on the central nervous system to affect perception, mood, consciousness, cognition and/or behaviour. Examples include antidepressants, antipsychotics and sedatives.
Referral	The process by which the responsibility for part, or all, of the care of a patients is temporarily transferred to another health care provider.
Rheumatoid arthritis	A chronic, multisystem disease whose most prominent feature is joint inflammation and resulting damage, most often affecting the hand joints in symmetrical fashion. Can occur in all age groups but most commonly appears between ages 20 and 40.
Selected cardiovascular risk condition	For the purposes of this report, data were used to identify patients, of any age, with cardiovascular risk conditions based on clinical guidelines to support the prevention or management of: ischaemic heart disease - including acute myocardial infarction (AMI), cerebrovascular disease and stroke, and heart failure.
Statins	Drugs used to lower plasma lipoproteins and cholesterol.
Stroke	See CVA.

References

1. Institute for Health Metrics and Evaluation (IHME). The Global Burden of Disease: Generating Evidence, Guiding Policy [Internet]. Seattle, WA: IHME; 2013 [cited 2014 Oct 14]. Available from: http://www.healthdata.org/sites/default/files/files/policy_report/2013/GBD_GeneratingEvidence/IHME_GBD_GeneratingEvidence_FullReport.pdf
2. National Health Performance Authority. Healthy Communities: Avoidable deaths and life expectancies in 2009–2011 [Internet]. Sydney: National Health Performance Authority; 2013 [cited 2014 Oct 20]. Available from: <http://www.myhealthycommunities.gov.au>
3. National Health Performance Authority. Healthy Communities: Selected potentially avoidable hospitalisations in 2011–12 [Internet]. Sydney: National Health Performance Authority; 2013 [cited 2014 Sep 12]. Available from: <http://www.myhealthycommunities.gov.au>
4. Australian Institute of Health and Welfare (AIHW). Australia's Health 2014. Australia's health series no. 14. Cat. no. AUS 178. Canberra: AIHW; 2014.
5. Organisation for Economic Development (OECD). Health at a Glance 2013: OECD Indicators [Internet]. OECD Publishing; 2013 [cited 2014 Oct 23]. Available from: <http://www.oecd.org/els/health-systems/Health-at-a-Glance-2013.pdf>
6. National Primary Health Care Strategic Framework. 2013 April [Internet]. [cited 2014 Oct 23]. Available from: [http://www.health.gov.au/internet/main/publishing.nsf/Content/6084A04118674329CA257BF0001A349E/\\$File/NPHCframe.pdf](http://www.health.gov.au/internet/main/publishing.nsf/Content/6084A04118674329CA257BF0001A349E/$File/NPHCframe.pdf)
7. Australian Government Department of Health. Primary Health Networks [Internet]. Canberra: Commonwealth of Australia; 2014 [cited 2014 Oct 17]. Available from: http://www.health.gov.au/internet/main/publishing.nsf/Content/primary_Health_Networks
8. Webster RJ, Heeley EL, Peiris DP, Bayram C, Cass A, Patel AA. Gaps in cardiovascular disease risk management in Australian general practice. *Med J Aust.* 2009;191(6).
9. Andrews G, Sanderson K, Slade T, Issakidis C. Why does the burden of disease persist? Relating the burden of anxiety and depression to effectiveness of treatment. *Bull World Health Organ.* 2000;78:446–54.
10. Williams CM, Maher CG, et al. Low back pain and best practice care: a survey of general practice physicians. *Arch Intern Med.* 2010;170:271–7.
11. National Health and Medical Research Council (NHMRC). Guidelines for the management of absolute cardiovascular disease risk [Internet]. NHMRC; 2012 [cited 2014 Oct 24]. Available from: <https://www.nhmrc.gov.au/guidelines/publications/ext10>

12. Airaksinen O, Brox JJ, et al. Chapter 4. European guidelines for the management of chronic nonspecific low back pain. *Eur Spine J*. 2006;15 (Suppl. 2):S192–S300 DOI 10.1007/s00586-006-1072-1 page S194.
13. Australian Bureau of Statistics (ABS). Australian Health Survey [Internet]. Canberra: Commonwealth of Australia; 2012 Oct 10 [cited 2014 Oct 14]. Available from: <http://www.abs.gov.au/australianhealthsurvey>
14. Harrison CM, Britt HC, Miller GC, Henderson J. Prevalence of chronic conditions in Australia. *PLoS ONE*. 2013;8(7):e67494. DOI:10.1371/journal.pone.0067494.
15. Britt HC, Harrison CM, Miller GC, Knox SA. Prevalence and patterns of multimorbidity in Australia. *Medical J Aust*. 2008;189(2):72–7.

Acknowledgements

This report has benefited from advice from a number of individuals and organisations with interest and expertise in general practice and models of care.

The National Health Performance Authority received advice from its General Practice Report Advisory Committee. The Advisory Committee comprised:

- Dr Evan Ackermann
 - Chair, National Standing Committee for Quality Care, Royal Australian College of General Practitioners (RACGP)
- Mr David Butt
 - Chief Executive Officer, National Mental Health Commission
- Professor Mark Harris
 - Centre for Primary Health Care and Equity, University of New South Wales and Centre for Obesity Management and Prevention Research Excellence in Primary Health Care (COMPARE-PHC)
- Ms Rebecca Lee
 - Project Officer, Health Equity and Secondary Prevention, Heart Foundation
- A/Prof Graeme Miller
 - Medical Director, Family Medicine Research Centre, School of Public Health, the University of Sydney
- Ms Giuliana Murfet
 - Nurse Practitioner Diabetes, CDE, Diabetes Centre, North West Tasmanian Health Organisation
- Mr Luke Slawomirski
 - Program Manager, Implementation Support, Australian Commission on Safety and Quality in Health Care

- Ms Donna Stephenson
 - Policy Director, Consumers Health Forum of Australia
- Dr Lynn Weekes AM
 - Chief Executive Officer, NPS MedicineWise.

The National Health Performance Authority also received technical advice from the Family Medicine Research Centre, the University of Sydney. This technical Advisory Committee comprised:

- A/Prof Helena Britt
 - Director, Family Medicine Research Centre, School of Public Health, the University of Sydney
- A/Prof Graeme Miller
 - Medical Director, Family Medicine Research Centre, School of Public Health, the University of Sydney
- Dr Joan Henderson
 - Senior Research Fellow and Deputy Director, Family Medicine Research Centre, School of Public Health, the University of Sydney
- Mr Christopher Harrison
 - Senior Analyst, Family Medicine Research Centre, School of Public Health, the University of Sydney
- Dr Allan Pollack
 - Analyst, Family Medicine Research Centre, School of Public Health, the University of Sydney

About the Authority

The National Health Performance Authority has been set up as an independent agency under the *National Health Reform Act 2011*. It commenced full operations in 2012.

Under the terms of the Act, the Authority monitors and reports on the performance of Local Hospital Networks, public and private hospitals, primary health care organisations and other bodies that provide health care services.

The Authority's reports give all Australians access to timely and impartial information that allows them to compare fairly their local health care organisations against other similar organisations and against national standards.

The reports let people see, often for the first time, how their local health care organisations measure up against comparable organisations across Australia.

The Authority's activities are also guided by a document known as the Performance and Accountability Framework agreed by the Council of Australian Governments. The framework contains a set of indicators that form the basis for the Authority's performance reports.

The Authority's role will include reporting on the performance of health care organisations against these indicators in order to identify both high-performing Local Hospital Networks, Medicare Locals and hospitals (so effective practices can be shared), and Local Hospital Networks and Medicare Local catchments that perform poorly (so that steps can be taken to address problems).

The Authority releases reports on a quarterly basis, and also publishes performance data on the MyHospitals website (www.myhospitals.gov.au), the MyHealthyCommunities website (www.myhealthycommunities.gov.au) and on www.nhpa.gov.au

The Authority consists of a Chairman, a Deputy Chairman and five other members, appointed for up to five years. Members of the Authority are:

- Ms Patricia Faulkner AO (Chairman)
- Mr John Walsh AM (Deputy Chairman)
- Dr David Filby PSM
- Professor Michael Reid
- Professor Paul Torzillo AM
- Professor Claire Jackson
- Professor Bryant Stokes AM RFD (on leave).

The conclusions in this report are those of the Authority. No official endorsement from any Minister, department of health or health care organisation is intended or should be inferred.

MyHealthyCommunities

Explore more than 100 measures of health care and wellbeing in Australia at the MyHealthyCommunities website

MyHealthyCommunities is a ground-breaking website that lets Australians see, often for the first time, how their community scores across dozens of health care indicators, and how it compares against other similar areas.

The site contains the National Health Performance Authority's suite of Healthy Communities reports, and users can customise their own report using our free **MyReport** data tool to focus on the performance and other characteristics of their local community.



Coming soon: newly established Primary Health Network (PHN) boundaries will be published mid-December on MyHealthyCommunities

MyHealthyCommunities

See the results for more than 100 measures of health and care in your local area including:

- Immunisation rates
- Infant mortality
- Obesity rates
- Tobacco smoking rates
- Smoking rates during pregnancy

www.myhealthycommunities.gov.au

Free comparative health data



– it's just a click away!

Check out our interactive tools

Join the 33,000+ who have used our interactive childhood immunisation tool and see your postcode's result.



<http://www.myhealthycommunities.gov.au/interactive/ic01>

Explore performance information for over 1,000 public and private hospitals in Australia at the MyHospitals website

Join the 1.3 million people who have used the **MyHospitals** website in the last year to access valuable performance reporting information and explore emergency department, cancer surgery and safety & quality performance data.

You can use **MyHospitals** to see how a hospital performs against a number of health performance indicators, search for a hospital by state or territory or postcode, view a hospital's profile and the services it offers, and see the changes in performance results over time.

MyHospitals also has a variety of tools to compare hospital performance outcomes across Australia. All of the National Health Performance Authority's Hospital Performance reports and data are available to download free of charge from the website.



View the latest performance information for more than 1,000 public and private hospitals across Australia including:

- Cancer surgery waiting times
- Infection rates
- Hospital length of stay
- Waiting times for elective surgery
- Time spent in emergency departments

www.myhospitals.gov.au

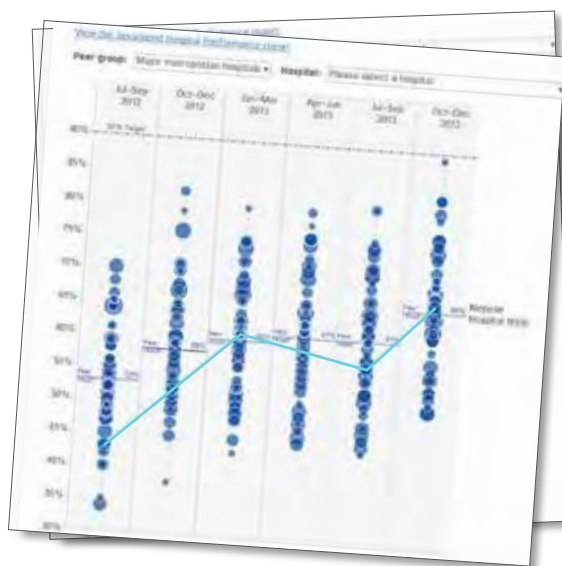
Free comparative health data

– it's just a click away!



Check out our interactive tools

Use our interactive tools to find out your hospital's results.



This is page is intentionally left blank

National Health Performance Authority

MDP 158, GPO Box 9848
Sydney, NSW 2001, Australia
Telephone: +61 2 9186 9210

www.nhpa.gov.au

