IS MEDICARE FAIR?

ii.
THE DISTRIBUTION OF MEDICARE BENEFITS ACROSS CITIES AND COUNTRY

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Is Medicare Fair? ii. The distribution of Medicare Benefits across cities and country
The Mitchell Institute for Education and Health Policy at Victoria University is one of the country’s leading education and health policy think tanks and trusted thought leaders. Our focus is on improving our education and health systems so more Australians can engage with and benefit from these services, supporting a healthier, fairer and more productive society.

The Australian Health Policy Collaboration is led by the Mitchell Institute at Victoria University and brings together leading health organisations and chronic disease experts to translate rigorous research into good policy. The national collaboration has developed health targets and indicators for preventable chronic diseases designed to contribute to reducing the health impacts of chronic conditions on the Australian population.

**Note**

This paper was conceived and developed by Ben Harris during the first half of 2019. Subsequently, Ben has accepted a position with Private Healthcare Australia starting in late August 2019.

**Suggested citation**


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Medicare is Australia’s universal health insurance scheme.

Established in 1975 and redesigned in 1984, it is meant to ensure all Australians have access to affordable or no-cost health care, regardless of personal circumstance and location.

The Medicare Benefits Schedule is a key part of Australia’s complex health system.

Despite health care needs broadly increasing the further from major cities, Medicare benefits (insurance pay-outs) are not equally distributed across geographic classifications.
Health care expenditure in Australia in 2016-17 totalled $180 billion

Of the $180 billion, 68.7% ($124 billion) was funded by taxpayers

- Australian Government expenditure was 41.3% ($75 billion)
  - $22 billion on insurance pay-outs through the Medical Benefits Schedule (MBS)
  - $17 billion contribution to public hospital funding
  - $12.1 billion on subsidising Pharmaceuticals (PBS)
  - $5.8 billion on rebates for private health insurance

- State, territory and local governments expenditure was 27.4% ($50 billion)
  - Public hospital funding ($69 billion from all governments) is the largest proportion of state and territory government expenditure

31.3% by individuals and private insurers, including injury compensation bodies

- 16.5% (individuals)
- 8.8% (health insurance funds)
- 6.0% (other, including injury and accident insurance)
Medicare is a universal health insurance system, designed to ensure all Australians receive the healthcare they need when they need it and irrespective of their capacity to pay.

Medicare comprises:

- **Health insurance benefits** paid by the Australian Government in accordance with the Medicare Benefits Schedule (MBS) either direct to providers (e.g., bulk billing) or in the form of a refund to patients who receive health care services from private providers – general practitioners, specialists, allied health professionals and diagnostic testing and imaging services. In 2017-18, these payments were $23 billion of the total healthcare expenditure of approximately $180 billion.

- **The Pharmaceutical Benefits Scheme**, which subsidises selected pharmaceuticals;

- **Free health care** provided by public hospitals, funded jointly by the Australian and State and Territory governments, rationed by availability of beds/services and severity of care need

Over 80% of Australians receive a Medicare insurance benefit each year.
In this series, “Is Medicare Fair?” we test whether Medicare is meeting its objective.

Because the Medicare Benefits Schedule is fundamental to Australians’ access to health care and is used by so many Australians every year, this it is the right place to start to begin to assess the fairness of Australia’s health system.

In each paper we review a different dimension of fairness and test whether data supports the view that Medicare is meeting its objective.

It is our objective to stimulate debate about whether Medicare in its current form is adequate as a national health insurance scheme in the 21st century.
In this paper we focus on the distribution of Medicare insurance payments across Australia – major cities, inner and outer rural areas, and remote and very remote areas.

We compare the distribution of these payments against health care needs in those areas as measured by the burden of disease (AIHW), noting that the averages mask very large differences in local communities’ and individuals’ health and their circumstances.

We find that:

The geographic distribution of payments does not match the pattern and distribution of healthcare needs.

Health care needs are greater in rural and remote areas but payments made through the MBS are clustered in cities and inner regional areas.

Outer regional and remote areas, where 10% of Australians live, are $259 million behind of where they would be if Medicare funds were evenly distributed by population in 2017-18.
WHERE DO OUR TAXPAYER DOLLARS GO TO PAY FOR MEDICARE?

$23.2 BILLION (2017-18)

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>GENERAL PRACTICE</td>
<td>34%</td>
</tr>
<tr>
<td>DIAGNOSTIC IMAGING</td>
<td>16%</td>
</tr>
<tr>
<td>PATHOLOGY</td>
<td>13%</td>
</tr>
<tr>
<td>SPECIALIST ATTENDANCES</td>
<td>11%</td>
</tr>
<tr>
<td>OPERATIONS</td>
<td>9%</td>
</tr>
</tbody>
</table>

of Medicare benefits spending in 2017-18
The Australian Bureau of Statistics uses the Australian Statistical Geography Standard (ASGS) to determine whether someone lives in a major city, an inner regional, outer regional, remote or very remote part of Australia.

The Medicare statistics used in this report are broken down by ASGS classification. However, because so many Australians live in major cities (72%), the data are dominated by the cities result.

### POPULATION

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Cities</td>
<td>71.8%</td>
</tr>
<tr>
<td>Inner Regional</td>
<td>17.8%</td>
</tr>
<tr>
<td>Outer Regional</td>
<td>8.3%</td>
</tr>
<tr>
<td>Remote</td>
<td>1.2%</td>
</tr>
<tr>
<td>Very Remote</td>
<td>0.8%</td>
</tr>
</tbody>
</table>
MEDICARE BENEFITS ARE NOT EVENLY DISTRIBUTED BETWEEN CITIES AND COUNTRY AREAS

People in major cities receive an average amount of Medicare benefits. People in inner regional areas receive a little more than average ($1.04).

The further out from the cities and inner regional areas, the less is received from Medicare, down to 56¢ in very remote areas.

According to the Australian Institute of Health and Welfare’s Burden of Disease 2015 study (AIHW 2019), remote and very remote areas (grouped together) have 1.41 times the burden of disease as major cities.

The distribution of Medicare funds does not match areas’ needs.
THE DISTRIBUTION OF MEDICARE FUNDS DOES NOT MATCH HEALTH CARE NEEDS

According to the Australian Institute of Health and Welfare’s Burden of Disease 2015 study (AIHW 2019), health burden increased with remoteness, with remote and very remote areas having 1.41 times the burden of disease of major cities. Inner regional (1.13 times) and outer regional areas (1.16 times) also have higher burden of disease.

There are significant differences in burden of disease within each geographic classification. For example, people living in lower socioeconomic communities have a much higher burden of disease than those living in more affluent communities. (Medicare benefits data by socioeconomic status are not available.)

Burden of disease data also show that particular groups, such as Aboriginal and Torres Strait Islander peoples, some migrant groups, and people living with mental health conditions and/or disability have higher burdens of disease.
The differences in per person expenditure through Medicare translate into substantial differences in Medicare benefits received by people living in cities, in inner and outer regional areas, and in remote parts of Australia.

Major cities and inner regional areas, where 90% of Australians live, are $259 million ahead of where they would be if Medicare funds were evenly distributed by population in 2017-18.

For the 2 ½ million Australians living in outer regional areas and remote parts of Australia, there is a matching shortfall of $259 million.
MEDICARE BENEFITS FOR GENERAL PRACTICE ARE NOT EVENLY DISTRIBUTED BETWEEN CITIES AND COUNTRY AREAS

- General practice, which includes family doctors and practice nurses, can be accessed in Australia without a referral. This is the largest part of Australia’s private health system, contributing to more than a third of Medicare rebates ($7.8 billion in 2017-18).
- People living in major cities receive the highest shares of Medicare rebates for general practice services, while remote areas have lower shares.
- The distribution of general practitioners may influence the number of services.
  - The number of general practitioners per head of population declines with remoteness, measured by primary place of practice.
  - (Note that not all services provided in this category are performed by specialist general practitioners.)
MEDICARE BENEFITS FOR SPECIALIST ATTENDANCES ARE NOT EVENLY DISTRIBUTED BETWEEN CITIES AND COUNTRY AREAS

- Medical specialists often work in both the public and the private sector. Specialists are available for consultation in the community only on referral from a general practitioner. Medical specialist attendance rebates account for 11% of Medicare expenditure.

- The differences in Medicare rebates paid for specialist attendances for people in rural and remote areas may be influenced by a lack of access to specialists in some parts of Australia. In 2015, major cities had 162 specialists per 100,000 population; dropping to 83 in inner regional areas, 61 in outer regional areas and only 34 in remote and very remote areas (note the MBS rebate figures refer to where the patient lives, not where the doctor practises).

- Specialists may work in the public or private sector, and many work in both.

<table>
<thead>
<tr>
<th>Region</th>
<th>Rebate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Cities</td>
<td>$1.05</td>
</tr>
<tr>
<td>Inner Regional</td>
<td>96¢</td>
</tr>
<tr>
<td>Outer Regional</td>
<td>76¢</td>
</tr>
<tr>
<td>Remote</td>
<td>50¢</td>
</tr>
<tr>
<td>Very Remote</td>
<td>30¢</td>
</tr>
</tbody>
</table>
MEDICARE BENEFITS FOR OBSTETRICS ARE NOT EVENLY DISTRIBUTED BETWEEN CITIES AND COUNTRY AREAS

- Obstetrics rebates comprise less than 1% of Medicare expenditure.
- Major cities have the highest rates of obstetric rebates through Medicare, with a large drop for rural and remote areas.
- The proportion of Medicare rebates for obstetrics is not related to the rate of births in each classification. Fertility rates in capital cities is 1.9 births, climbing to 2.2 in regional areas and 2.5 in remote areas (ABS 2018).

<table>
<thead>
<tr>
<th>City Type</th>
<th>Benefit</th>
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<tbody>
<tr>
<td>Major Cities</td>
<td>$1.08</td>
</tr>
<tr>
<td>Inner Regional</td>
<td>78¢</td>
</tr>
<tr>
<td>Outer Regional</td>
<td>81¢</td>
</tr>
<tr>
<td>Remote</td>
<td>80¢</td>
</tr>
<tr>
<td>Very Remote</td>
<td>54¢</td>
</tr>
</tbody>
</table>
MEDICARE BENEFITS FOR PATHOLOGY ARE NOT EVENLY DISTRIBUTED BETWEEN CITIES AND COUNTRY AREAS

- Pathology rebates, including rebates for pathology episode initiation and pathology tests, accounted for 13% of Medicare Benefits expenditure in 2017-18.
- Cities and inner regional areas had the highest rates of pathology benefits, while remote areas were lower.
MEDICARE BENEFITS FOR DIAGNOSTIC IMAGING ARE NOT EVENLY DISTRIBUTED BETWEEN CITIES AND COUNTRY AREAS

- Diagnostic imaging rebates accounted for 16% of Medicare Benefits expenditure in 2017-18.
- Inner regional areas had the highest rates of diagnostic imaging benefits, while the remote areas were much lower.
MEDICARE BENEFITS FOR OPERATIONS ARE NOT EVENLY DISTRIBUTED BETWEEN CITIES AND COUNTRY AREAS

- Medicare benefits for operations and assistance at operations comprise 9% of total benefits paid.
- Inner regional areas have the largest proportion of Medicare expenditure, with remote areas having the lowest.
- Surgeons may work in the public or private sector, and many work in both.

<table>
<thead>
<tr>
<th>Location</th>
<th>Benefit ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Cities</td>
<td>97¢</td>
</tr>
<tr>
<td>Inner Regional</td>
<td>$1.14</td>
</tr>
<tr>
<td>Outer Regional</td>
<td>$1.01</td>
</tr>
<tr>
<td>Remote</td>
<td>77¢</td>
</tr>
<tr>
<td>Very Remote</td>
<td>42¢</td>
</tr>
</tbody>
</table>
MEDICARE BENEFITS FOR OPTOMETRY ARE NOT EVENLY DISTRIBUTED BETWEEN CITIES AND COUNTRY AREAS

• Optometry consultations are covered by Medicare, and do not need a referral. Optometry benefits comprise less than 2% of Medicare expenditure.

• Inner regional areas have the highest rate of Medicare expenditure on optometry, and very remote areas the lowest.

MAJOR CITIES $0.98
INNER REGIONAL $1.09
OUTER REGIONAL $1.02
REMOTE 80¢
VERY REMOTE 50¢
Medicare benefits for allied health are not evenly distributed between cities and country areas.

- Medicare covers selected allied health services, generally as part of a care plan initiated by a general practitioner. Allied health services comprise less than 4% of Medicare expenditure.
- Major cities have the highest rate of Medicare expenditure on allied health services, with a very sharp drop off for outer regional, remote and very remote areas.
This paper looks at the distribution of rebates paid to patients through the Medicare Benefits Schedule by remoteness classification. This is one lens we can use to help make an assessment of fairness. The data demonstrate that Medicare rebates are not equally distributed among cities, rural and remote Australia. These data in isolation do not necessarily lead to the conclusion that the current distribution is unfair.

In the view of the authors, a fair health system would ensure that people who need the most comprehensive care receive access to that care.

The data examined in this publication do not measure need for services, only if a service was provided. The data do not measure quality of care. Medicare does not record what happens in a consultation, so there is no way to know how doctors and other health professionals are treating their patients. All we know is that a person claimed an MBS benefit. The data does not record who did not receive a service – many people who need services may not be getting them.

We are measuring what is subsidised by taxpayers through the MBS, with no comment on the benefits or otherwise of that spending. Good quality health care does not need to necessarily be the most expensive health care. For example, people can receive excellent care through planned and comprehensive general practice visits that manage and prevent disease at a fraction of the cost of a single operation.

As the MBS is only a part of Australia’s health system, we do not know if other parts of the system are compensating, doubling up, or missing in response to differences in MBS coverage.

Our expectation is that these data will shine a light on one aspect of fairness, and prompt debate to help explain the differences we have found in this analysis.

We are limited in our analysis by the data published by the Australian Government. Those data differentiate by geographical classification and by state and territory (the subject of the first paper in this series).

The Australian Institute of Health and Welfare’s burden of disease data and the Australian Health Policy Collaboration’s Australia’s Health Tracker by Socioeconomic Status both demonstrate that socioeconomic status is strongly correlated to health status, and understanding MBS expenditure by socioeconomic status would assist in assessing if Medicare is fair. The authors encourage the Australian Government to also publish MBS data by socioeconomic status to improve debate.
The data presented in this report raise a number of key questions for governments, providers and policy makers. Some questions include:

- Are all Australians getting fair access to Medicare?
- Is our universal health system a fair health system? What does “fair” mean?
- Should our health system be equitable across regions or states and territories, or should we be considering other factors?
- Are we getting value for money as taxpayers for our health dollars?
- To what extent are state and territory health systems a barrier to or enabling access to care subsidised by the Medicare Benefits Schedule? Or are factors outside the health system, such as jobs, education, transport and access to parks and good food, more important influencers of health?
- What local conditions are affecting Medicare spending?
- Is our health infrastructure in the right place?
- Are other parts of the health system supporting those missing out on Medicare rebates?
- What is it about the service mix in different regions contributing to these results?
- How much does the number, mix and distribution of providers affect Medicare rebates?
- As many Australians are not accessing pathology and diagnostic imaging through the MBS, are diagnoses being missed?
- How much do patients have to travel for care, and what are the costs incurred for individuals and families to travel to services?
- Should more effort be taken to expand allied health services in rural and remote areas?
- What is it about the service mix in different regions contributing to these results?
- As country Australians are not accessing specialist medical care through the MBS at the same rate as other people, are they missing out?
- Are people in cities receiving too many services?
- What should be done to address inequitable health outcomes if Medicare is not meeting the needs of a large number of Australians?

The data presented in this report are designed to inform discussion and debate about the suitability of Medicare for 21st Century Australia. The distribution of Medicare benefits across Australia’s states and territories is an important element of addressing the question, Is Medicare Fair?
Most of these data are sourced from:


These data include Medicare Benefits Scheme statistics in 29 tables, including by broad type of service, by state and territory, by remoteness and other factors.

The Australian Government’s *Explanatory Notes* provide detail on the data used. Some key points from the *Explanatory Notes* relevant to this analysis include:

- The data includes services that qualify for a Medicare Benefit under the *Health Insurance Act 1973*
- The data for 2017-18 refer to the year of processing, not the date the service was rendered
- State/territory and remoteness classification is determined by the patient’s Medicare enrolment as at the date their claim was processed.

In this analysis, the Mitchell Institute has used data for financial year 2017-18 on:

- **Estimated resident population**, sourced from the Australian spreadsheet (table 2), state and territory spreadsheets (tables 3-10) and the remoteness index spreadsheets (tables 11-16).
  - The sum of the estimated resident populations of states and territories in tables 3-10 (24,592,907) does not equal the estimated resident population of Australia in table 2 (24,597,528).
  - The sum of estimated resident populations of major cities, inner regional, outer regional, remote and very remote in tables 11-15 (24,598,933) does not equal the estimated resident population of Australia in table 2 (24,597,528).
  - All calculations comparing with national figures are based on the estimated resident population of Australia in table 2 (24,597,528).

- **Benefits paid**, sourced from table 1.2 for the summary statistics by state/territory, table 1.3 for the summary statistics by ASGS remoteness category, and from the state and territory spreadsheets (tables 3-10) and the remoteness index spreadsheets (tables 11-16) for the broad types of service in each area. In tables 3-16, the cell used was benefits paid, all services, in and out of hospital.
  - A small number of services, with benefits paid of $9.3 million, were not assigned to an ASGS remoteness category and appear in table 16, unknown remoteness area figures. These have been excluded from the analysis.
• **Broad type of service**, sourced from the type of service (BTOS) spreadsheet (table 1.1), state and territory spreadsheets (tables 3-10) and the remoteness index spreadsheets (tables 11-16). The broad types of service data sourced include:
  - Total Non-Ref erred Attendances (Incl Practice Nurse Items)
  - Specialist Attendances
  - Obstetrics
  - Total Pathology Incl Pathology Episode Initiation and Pathology Tests
  - Diagnostic Imaging
  - Total Operations and Assistance at Operations
  - Optometry
  - Allied health

Tables were constructed using these data:
• Resident population by remoteness category and benefits paid
• Resident population by state and territory and benefits paid by broad type of service

The working spreadsheet is available on request to info@mitchellinstitute.org.au.

**Service mix**

Sourced from the type of service (BTOS) spreadsheet (table 1.1). Calculated by dividing the benefits paid for each broad type of service (line 11) by the total Medicare benefits paid 2017-18 (cell C11: $23,196,308,312), calculated to two decimal places.

**Remoteness category breakdown**

Sourced from the working spreadsheet, resident population by remoteness category and benefits paid. An Australian average and remoteness category benefits per person were calculated by dividing benefits paid by estimated resident population. The comparison was generated by dividing each remoteness category benefits per person by the Australian benefits paid per person, calculated to two decimal places.

The surplus and deficit figures were calculated by using the resident population multiplied by the difference between the remoteness category benefits paid per person and Australian benefits paid per person.
NOTES ON THE DATA

Other references


The geographic numbers of general practitioners was derived from:


<table>
<thead>
<tr>
<th>Remoteness Area</th>
<th>Full time service equivalent GPs per 100,000 population by remoteness 2016-17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major cities</td>
<td>101.3</td>
</tr>
<tr>
<td>Inner regional</td>
<td>99.5</td>
</tr>
<tr>
<td>Outer regional</td>
<td>88.6</td>
</tr>
<tr>
<td>Remote</td>
<td>71.3</td>
</tr>
<tr>
<td>Very remote</td>
<td>61.5</td>
</tr>
</tbody>
</table>


Specialists by remoteness area data from 2015 sourced from:


These data are from 2015, while the Medicare data quoted are from 2017-18.

Birth rates by jurisdiction are from:


These data are from 2017, while the Medicare data quoted are from the 2017-18 financial year.