# IS MEDICARE FAIR?

### i. THE DISTRIBUTION OF MEDICARE BENEFITS ACROSS THE STATES AND TERRITORIES

Ben Harris, Melinda Craike, Ruth Dunkin, Rosemary Calder





#### **ABOUT US**

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

Harris B, Craike M, Dunkin R, Calder R 2019. Is Medicare Fair? i. the distribution of Medicare Benefits across the states and territories. Mitchell Institute Policy issues paper no.2-2019, Victoria University. Melbourne.

ISBN: 978-0-6486656-0-1

### **KEY POINTS**

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 being broadly consistent across Australia (apart from the Northern Territory), Medicare benefits (insurance pay-outs) are not equally distributed across the states and territories.

### PREAMBLE: WHERE DOES MEDICARE FIT?

# 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** AUSTRALIA'S UNIVERSAL HEALTH INSURANCE SCHEME

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.

#### IS MEDICARE MEETING ITS OBJECTIVE – DOES IT MATTER WHERE YOU LIVE?

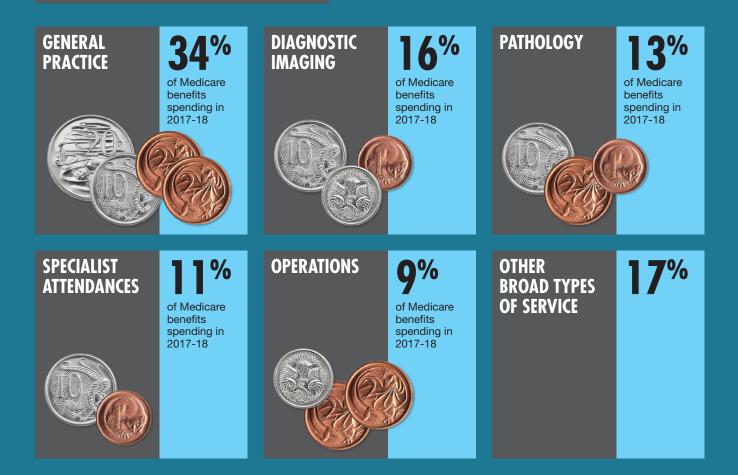
In this series, "Is Medicare Fair?" we test whether Medicare is meeting its objective

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 this paper we focus on the distribution of Medicare insurance payments across Australia's six states and two territories.

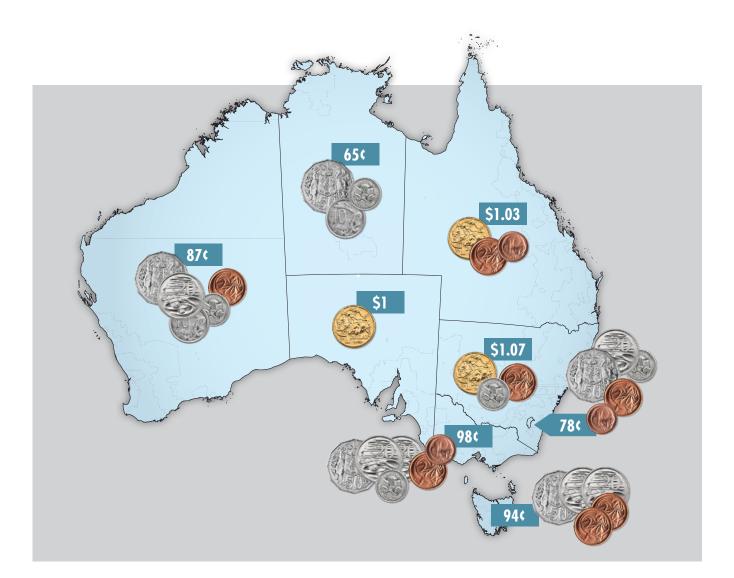
We place these data alongside states' and territories' health care needs, as measured by the burden of disease (AIHW), noting that state and territory averages mask very large differences in local communities' and individuals' health and their circumstances. WHERE DO OUR TAXPAYER DOLLARS GO TO PAY FOR MEDICARE?





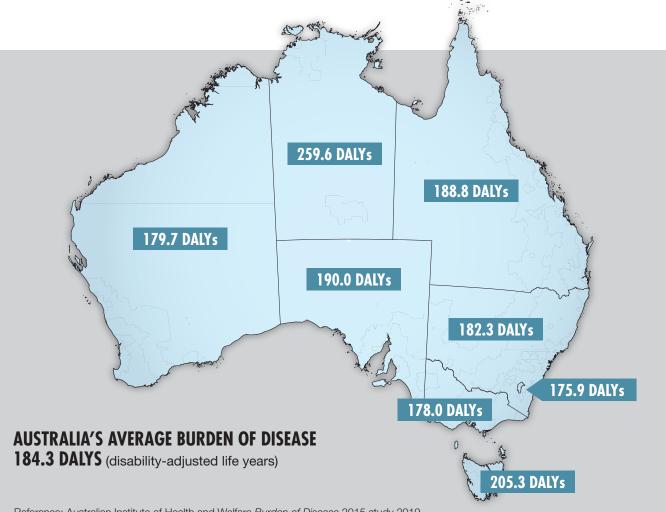
### MEDICARE INSURANCE PAYMENTS ARE NOT EVENLY DISTRIBUTED ACROSS THE STATES AND TERRITORIES

- People in New South Wales get the highest average per capita Medicare payments, averaging \$1.07 per person (where the average across Australia is represented as \$1 per person).
- People in the Territories get the smallest payments (65c per person in the Northern Territory, and 78c per person in the ACT), and those in Western Australia (87c per person).



### YET, HEALTHCARE NEEDS ARE MUCH MORE EVENLY DISTRIBUTED, WITH THE EXCEPTION OF THE NT

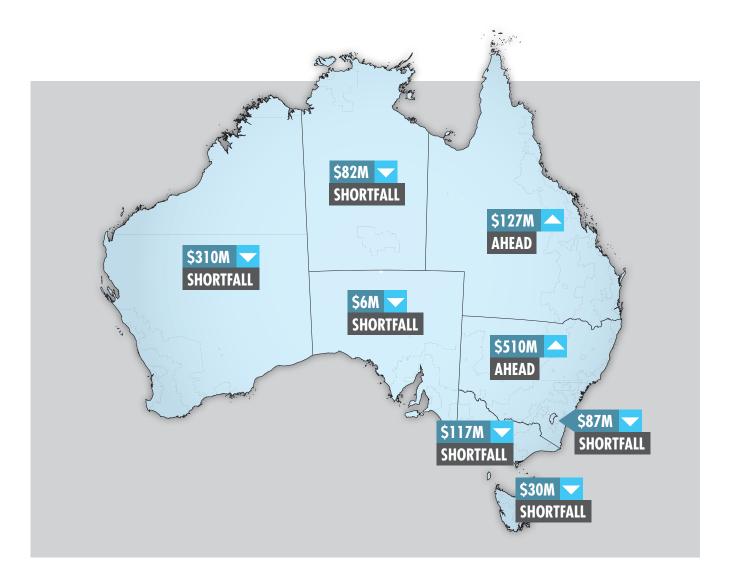
- Despite significant variations of healthcare needs within States and Territories, overall healthcare needs are distributed fairly evenly across the nation.
- But, the Northern Territory has a much larger burden of disease -1.4 times the national average. It receives an average of 65c per person.
- There is considerable variation in the distribution within States and Territories:
  - lower socioeconomic communities have a much higher burden of disease than those living in more affluent communities. (Medicare benefits data by socioeconomic status not available.)
  - large differences in burden of disease between city and country residents in each state and territory.
- 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.



Reference: Australian Institute of Health and Welfare Burden of Disease 2015 study 2019

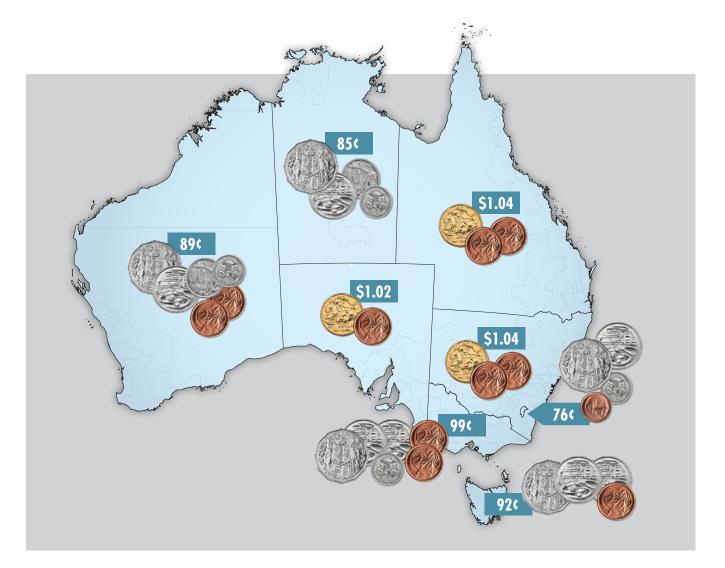
### IF EVERY STATE AND TERRITORY GOT EQUAL ACCESS TO MEDICARE BENEFITS, FUNDING DISTRIBUTION WOULD BE VERY DIFFERENT

- The differences in per person expenditure through Medicare translate into substantial differences in Medicare benefits received by residents in each state and territory.
- New South Wales, with the largest Medicare pay outs per person, and the largest population, ends up \$510 million ahead of where they would be if Medicare funds were evenly distributed by population in 2017-18.
- Western Australia has the largest shortfall, receiving \$310 million less.



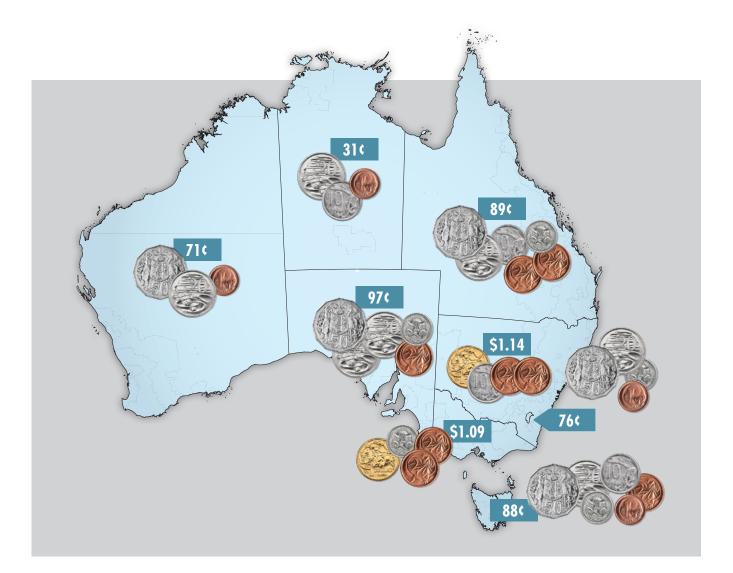
#### GENERAL PRACTICE AND PRIMARY CARE BENEFITS ARE NOT EVENLY DISTRIBUTED ACROSS THE STATES AND TERRITORIES

- 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 New South Wales and Queensland receive the highest shares of Medicare rebates for general practice services, while the ACT receives the lowest proportion.
- The distribution of general practitioners may influence the number of services, but does not explain the differences.
- New South Wales and Victoria have fewer doctors with general practice as their speciality on the medical register than the national average per head of population, while Tasmania, the Northern Territory and the ACT have the most.
- (Note that not all services provided in this category are performed by specialist general practitioners.)



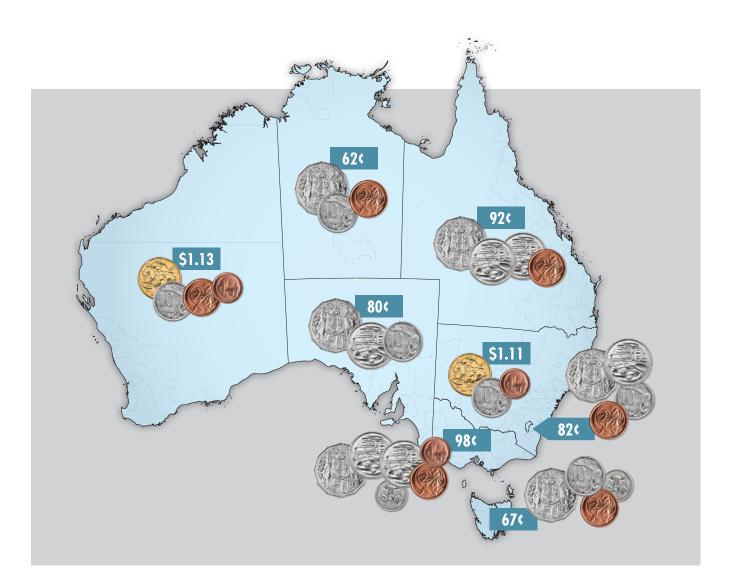
#### **SPECIALIST ATTENDANCE BENEFITS** ARE NOT EVENLY DISTRIBUTED ACROSS THE STATES AND TERRITORIES

- 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 Medicare benefits payable for specialist attendances in each state or territory is not strongly correlated to the number of specialists registered.
  - The ACT and South Australia have the highest proportion of registered medical specialists, while the Northern Territory and Western Australia have the fewest.
- Specialists may work in the public or private sector, and many work in both.



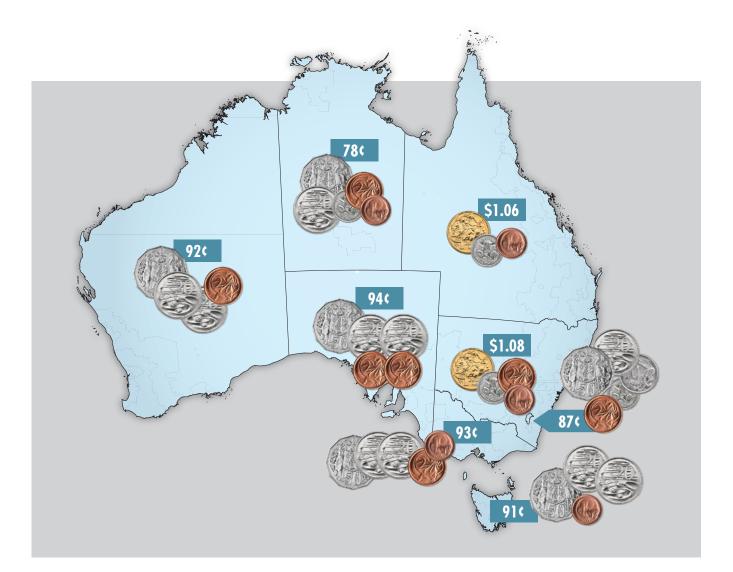
#### **OBSTETRICS BENEFITS** ARE NOT EVENLY DISTRIBUTED ACROSS THE STATES AND TERRITORIES

- Obstetrics rebates comprise less than 1% of Medicare expenditure.
- Western Australia and New South Wales have the highest rates of obstetric rebates through Medicare, and the Northern Territory and Tasmania have the lowest.
- The proportion of Medicare rebates is not related to the rate of births in each jurisdiction.
  - Fertility rates in New South Wales are below the national average, while the highest birth rates in the country are in the Northern Territory.



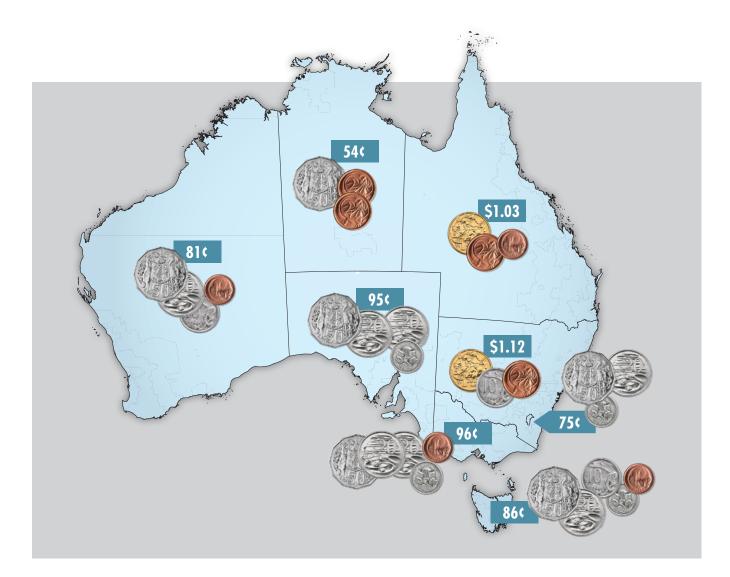
#### PATHOLOGY BENEFITS ARE NOT EVENLY DISTRIBUTED ACROSS THE STATES AND TERRITORIES

- Pathology rebates, including rebates for pathology episode initiation and pathology tests, accounted for 13% of Medicare Benefits expenditure in 2017-18.
- New South Wales and Queensland had the highest rates of pathology benefits, while the Northern Territory had the lowest.



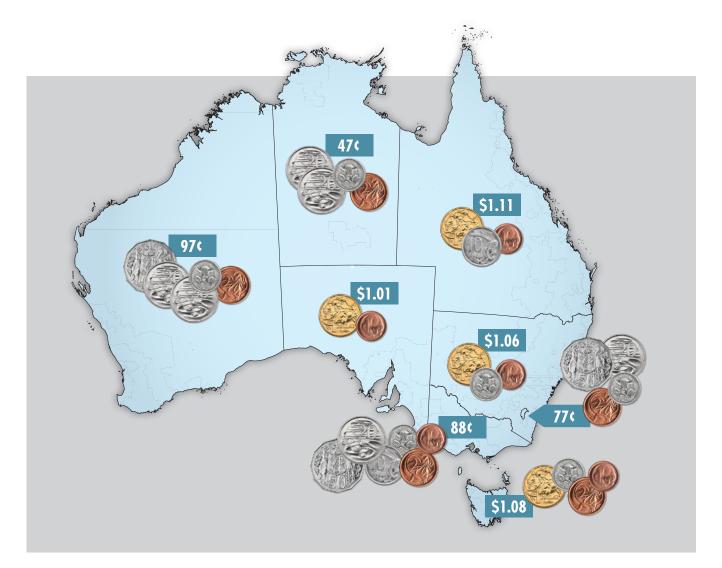
### DIAGNOSTIC IMAGING BENEFITS ARE NOT EVENLY DISTRIBUTED ACROSS THE STATES AND TERRITORIES

- Diagnostic imaging rebates accounted for 16% of Medicare Benefits expenditure in 2017-18.
- New South Wales had the highest rates of diagnostic imaging benefits (\$1.12), while the Northern Territory had the lowest (54c). Western Australia was the lowest of the states (81c).



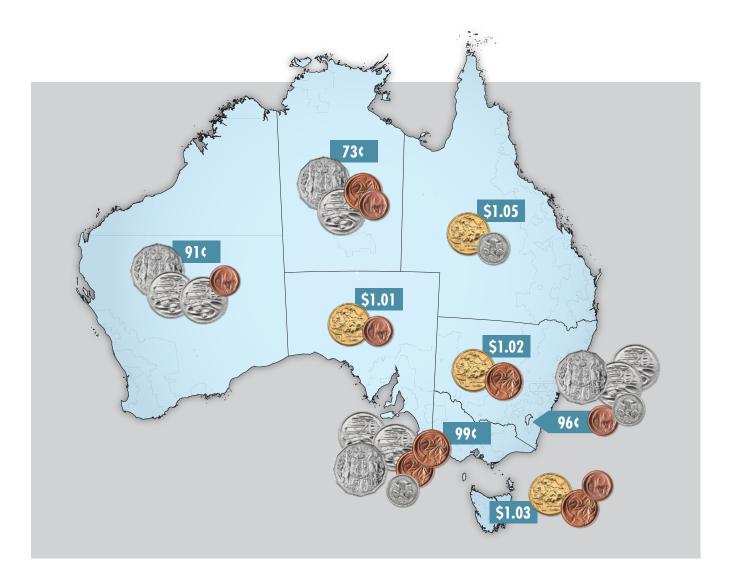
#### MEDICARE BENEFITS FOR OPERATIONS ARE NOT EVENLY DISTRIBUTED ACROSS THE STATES AND TERRITORIES

- Medicare benefits for operations and assistance at operations comprise 9% of total benefits paid.
- Queensland (\$1.11) and Tasmania (\$1.08) have the highest rates of Medicare expenditure on operations, and the Northern Territory the lowest (47c). Victoria has the lowest proportion of rebates for operations of the states (88c).
- The Medicare benefits payable for operations in each state or territory is not strongly correlated to the number of surgeons.
  - The Northern Territory has the lowest number of surgeons per head of population in the country, almost 40% below the national average. Western Australia is also low, with more than 20% fewer surgeons per head of population.
- South Australia is the only jurisdiction over 10% higher in the rates of registered surgeons per head of population.
- Surgeons may work in the public or private sector, and many work in both.



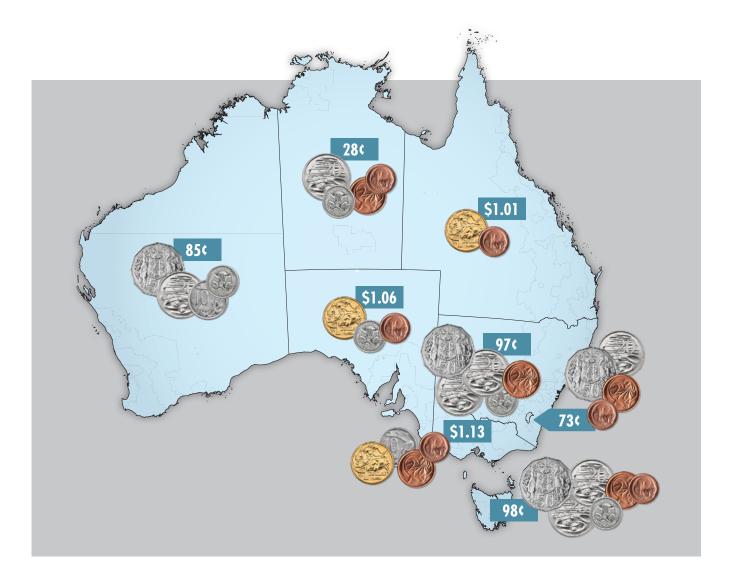
#### **OPTOMETRY BENEFITS** ARE NOT EVENLY DISTRIBUTED ACROSS THE STATES AND TERRITORIES

- Optometry consultations are covered by Medicare, and do not need a referral. Optometry benefits comprise less than 2% of Medicare expenditure.
- Queensland has the highest proportion of optometry rebates (\$1.05), and the Northern Territory the lowest (73c).



#### ALLIED HEALTH BENEFITS ARE NOT EVENLY DISTRIBUTED ACROSS THE STATES AND TERRITORIES

- 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.
- Victoria has the highest rate of allied health Medicare benefits (\$1.13), and the Northern Territory the lowest (28%).



#### LIMITATIONS

This paper looks at the distribution of rebates paid to patients through the Medicare Benefits Schedule by state and territory of residence. 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 the state and territories. 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 state and territory and by geographical classification (the subject of the upcoming second 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.

#### **KEY QUESTIONS**

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?	To what extent are state and territory health systems a barrier to or enabling access to care subsidised by the	How much does the number, mix and distribution of providers affect Medicare rebates?			
Is our universal health system a fair health system? What does "fair" mean?	Medicare Benefits Schedule?	Are some providers inducing demand in some areas?			
	Are there cultural or commercial aspects of states'				
Should our health system be equitable across states and territories, or should we be	and territories' health services that affect MBS rebates?	What should be done to address inequitable health			
considering other factors?	What local conditions are affecting Medicare spending?	outcomes if Medicare is not meeting the needs of a large number of Australians?			
Why are Territorians, Western Australians and Tasmanians					
getting much lower shares of Medicare spending?	Is our health infrastructure in the right place?	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?			
Are people in New South Wales healthier because they are receiving more support from the MBS? Or are factors outside the health system,	Are other parts of the health system supporting those missing out on Medicare rebates?				
such as jobs, education,					
transport and access to parks and good food, a factor?	What is it about the service mix in different states and territories contributing to				
Are we getting value for money as taxpayers for our health dollars?	these results?				

### **NOTES ON THE DATA**

Most of these data are sourced from:

Australian Government Department of Health 2018, *Annual Medicare Statistics*, Available at https:// www.health.gov.au/internet/main/ publishing.nsf/Content/Annual-Medicare-Statistics, Accessed June 2019.

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-Referred 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 state and territory and benefits paid
- Resident population by remoteness category and benefits paid
- Resident population by state and territory and benefits paid by broad type of service
- Resident population by remoteness category and benefits paid by broad type of service

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

### **NOTES ON THE DATA**

#### 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.

#### State and territory breakdown

Sourced from the working spreadsheet Resident population by state and territory and benefits paid. An Australian average and state and territory benefits per person were calculated by dividing benefits paid by estimated resident population. The comparison was generated by dividing each state and territory 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 state or territory benefits paid per person and Australian benefits paid per person.

#### **Other references**

The expenditure data providing context "Where does Medicare fit" are from Australian Institute of Health and Welfare 2018, Health Expenditure Australia 2016-17, cat. No. HWE 74, Available at https:// www.aihw.gov.au/reports/healthwelfare-expenditure/healthexpenditure-australia-2016-17/ contents/summary, Accessed 2 July 2019.

These data to provide context relate to the 2016-17 financial year, while the data in the body of the report are from 2017-18.

Burden of disease data are referenced from Australian Institute of Health and Welfare 2019, Australian Burden of Disease Study: impact and causes of illness and death in Australia 2015, cat. no. BOD 22, Available at https://www. aihw.gov.au/reports/burden-ofdisease/burden-disease-studyillness-death-2015/contents/tableof-contents, Accessed 30 June 2019. Specialists by remoteness area data from 2015 sourced from AIHW 2016, Medical practitioners workforce, web report, Available at https://www. aihw.gov.au/reports/workforce/ medical-practitioners-workforce-2015/data, table 24, Accessed 20 June 2019.

Birth rates by jurisdiction are from ABS 2018, Births Australia 2017, ABS cat no. 3301.0, Available at https://www.abs.gov.au/ausstats/ abs@.nsf/Latestproducts/3301. 0Main%20Features52017? opendocument&tabname= Summary&prodno=3301.0& issue=2017&num=&view=, Accessed 20 June 2019. The state and territory numbers of general practitioners, medical specialists and surgeons was derived from:

Australian Health Practitioner Registration Agency 2017-18 *Medial Board of Australia: annual report summary*, Available at https://www. ahpra.gov.au/annualreport/2018/ downloads.html, Accessed 30 June 2019.

The agency made available an excel spreadsheet of table 8: Medical practitioners by specialty and principal place of practice at 30 June 2018, from which the *Medicare Statistics* resident population figures were used to determine the number of practitioners per 100,000 people. Notes of caution:

- Where a practitioner registers is not necessarily where they practice;
- 1,338 practitioners did not provide a principal place of practice, and were excluded;

- Medical practitioners registered as specialist general practitioners does not include a number of practitioners (medical and practice nurses) who provide non-referred attendances under Medicare;
- The sum of specialists include medical practitioners registered under the following specialist categories:
  - Addiction medicine
  - Anaesthesia
  - Dermatology
  - Emergency medicine
  - Intensive care medicine
  - Medical administration
  - Obstetrics and gynaecology
  - Paediatrics and child health
  - Pain medicine
  - Palliative medicine
  - Pathology
  - Physician
  - Psychiatry
  - Public health medicine
  - Radiation oncology

- Radiology
- Rehabilitation medicine
- Sexual health medicine
- Sport and exercise medicine
- Surgery
- Many specialists work exclusively in the public sector; many work in both the public and private sector.
- A significant number of medical practitioners are registered but do not practise medicine.
- Individual practitioners may be registered in more than one specialist category.

With these caveats in mind, the number of doctors in each category per 100,000 in each state and territory were calculated as:

	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	National
General practice	115.38	99.64	123.24	112.66	115.45	126.21	98.14	105.88	105.62
Specialists	193.60	162.94	146.27	162.18	182.34	157.43	171.32	151.20	169.64
Surgeons	23.32	23.74	14.95	23.31	27.85	20.88	24.39	19.96	24.13



Mitchell Institute at Victoria University 300 Queen Street, Melbourne, Victoria 3000 +61 3 9919 1820 info@mitchellinstitute.org.au mitchellinstitute.org.au