

IS MEDICARE FAIR?

iii. OUT OF POCKET COSTS UNDER MEDICARE ACROSS AUSTRALIA

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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. Thanks to Sarah Williams for additional jurisdictional data analysis.

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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.

Out of pocket costs for services covered by Medicare vary considerably by type of service, by state and territory, and by remoteness.

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 out of pocket costs by:

- broad type of service
- state and territory, and
- Australia’s geographic classifications – major cities, inner and outer rural areas, and remote and very remote areas.

OTHER DATA ON OUT OF POCKET COSTS

The authors recommend the Australian Institute of Health and Welfare publication, *Patients' out-of-pocket spending on Medicare services, 2016-17*, which shows, among other things:

- 10.9 million Australians incurred out of pocket costs for non-hospital Medicare services
- An estimated 1.3 million people said the cost of services was the reason they delayed or did not seek specialist, general practice, imaging or pathology services when they needed them.
- Costs varied significantly across regions

This publication differs from the AIHW report, covering:

- Combined in-hospital and out of hospital out of pocket costs
- Consequentially, a broader set of services (including operations and anaesthetics)
- Aggregate totals rather than medians
- State and territory and remoteness area classification data
- Data from 2017-18.

**FOR EVERY DOLLAR OF MEDICARE
BENEFITS EXPENDITURE IN 2017-18,
THERE WAS AN AVERAGE OF 29 CENTS
IN OUT OF POCKET COSTS**

**MEDICARE BENEFITS
\$23.2 BILLION**











**OUT OF POCKET COSTS
\$6.645 BILLION**



OUT OF POCKET COSTS AS A PROPORTION OF MEDICARE BENEFITS HAVE GROWN OVER TIME

MEDICARE BENEFITS

OUT OF POCKET COSTS

2017-18	\$23.2 BILLION 	\$6.645 BILLION 
2007-08	\$13 BILLION 	\$3.422 BILLION 
1997-1998	\$6.33 BILLION 	\$1.127 BILLION 
1987-1988	\$3.09 BILLION 	\$0.544 BILLION 

OUT OF POCKET COSTS

The five broad types of service contributing to the largest proportion of out of pocket costs are operations, specialist attendances, general practice, anaesthetics and diagnostic imaging.

The proportion of out of pocket costs is not consistent with the proportion of Medicare benefits.

\$6.645 BILLION



OPERATIONS

9%
of benefits
29%
of out of
pocket costs



SPECIALIST ATTENDANCES

11%
of benefits
23%
of out of
pocket costs



GENERAL PRACTICE

34%
of benefits
12%
of out of
pocket costs



ANAESTHETICS

2%
of benefits
11%
of out of
pocket costs



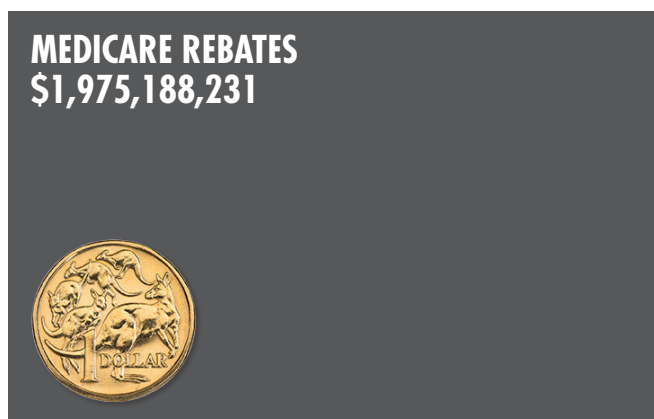
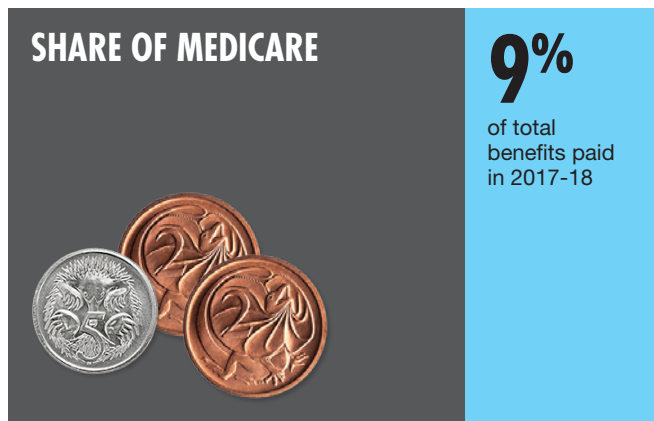
DIAGNOSTIC IMAGING

16%
of benefits
8%
of out of
pocket costs



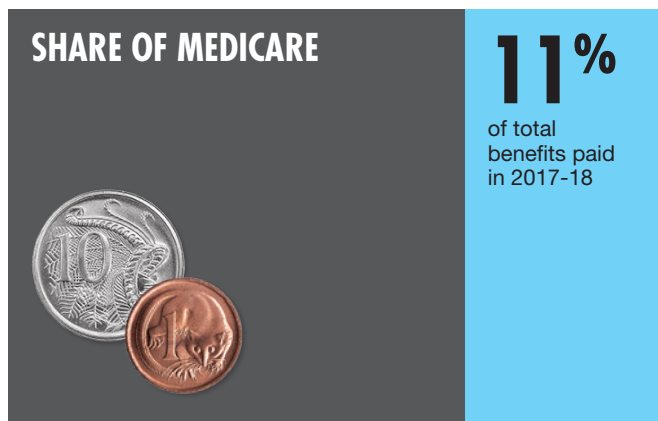
OPERATIONS

- Medicare benefits for operations and assistance at operations comprise 9% of total benefits paid, and 29% of all out of pocket costs.
- Fees charged for operations and assistance at operations totalled almost \$3.9 billion in 2017-18, of which Medicare rebates comprised \$1.975 billion and out of pocket costs were \$1.906 billion.
- 42.7% of operation and assistance at operation items were bulk billed, meaning that all of the out of pocket costs were incurred by 57.3% of services.
- Out of pocket costs for operations and assistance at operations has almost doubled in the last ten years; from \$982 million in 2007-08 to \$1.906 billion in 2017-18.



SPECIALIST ATTENDANCES

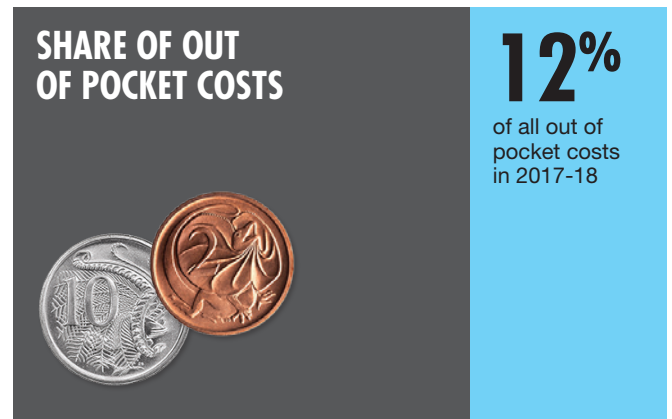
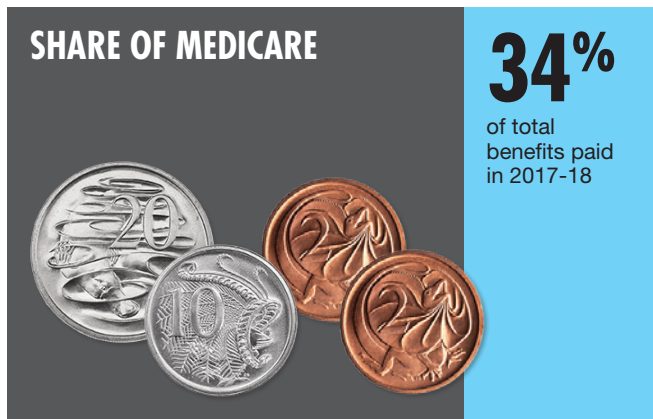
- Medicare benefits for specialist attendances comprise 11% of total benefits paid, and 23% of all out of pocket costs.
- Fees charged for specialist attendances totalled just under \$4 billion in 2017-18, of which Medicare rebates comprised \$2.486 billion and out of pocket costs were \$1.511 billion.
- 31.1% of specialist attendances were bulk billed, meaning that all of the out of pocket costs were incurred by 68.9% of services.
- Out of pocket costs for specialist attendances has more than doubled in the last ten years; from \$655 million in 2007-08 to \$1.511 billion in 2017-18.
- the Australian Institute of Health and Welfare publication, *Patients' out-of-pocket spending on Medicare services, 2016-17*, contains data at a local level on median out of pocket costs for specialist attendances.



GENERAL PRACTICE

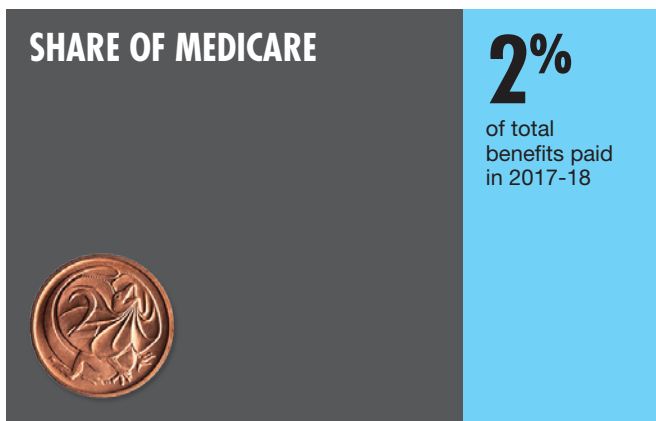
- Medicare benefits for general practice attendances* comprise 34% of total benefits paid, and 12% of all out of pocket costs.
- Fees charged for general practice attendances were approximately \$8.65 billion in 2017-18, of which Medicare rebates comprised \$7.85 billion and out of pocket costs were \$804 million.
- 86.3% of general practice attendances were bulk billed, meaning that all of the out of pocket costs were incurred by 13.7% of services.
- Out of pocket costs for general practice have declined as a proportion of Medicare benefits paid over the last ten years – Medicare benefits have increased by 76% and out of pocket costs have increased by 67%.
- the Australian Institute of Health and Welfare publication, *Patients' out-of-pocket spending on Medicare services, 2016-17*, contains data at a local level on median out of pocket costs for general practice services.

* Total non-referred attendances including practice nurse items



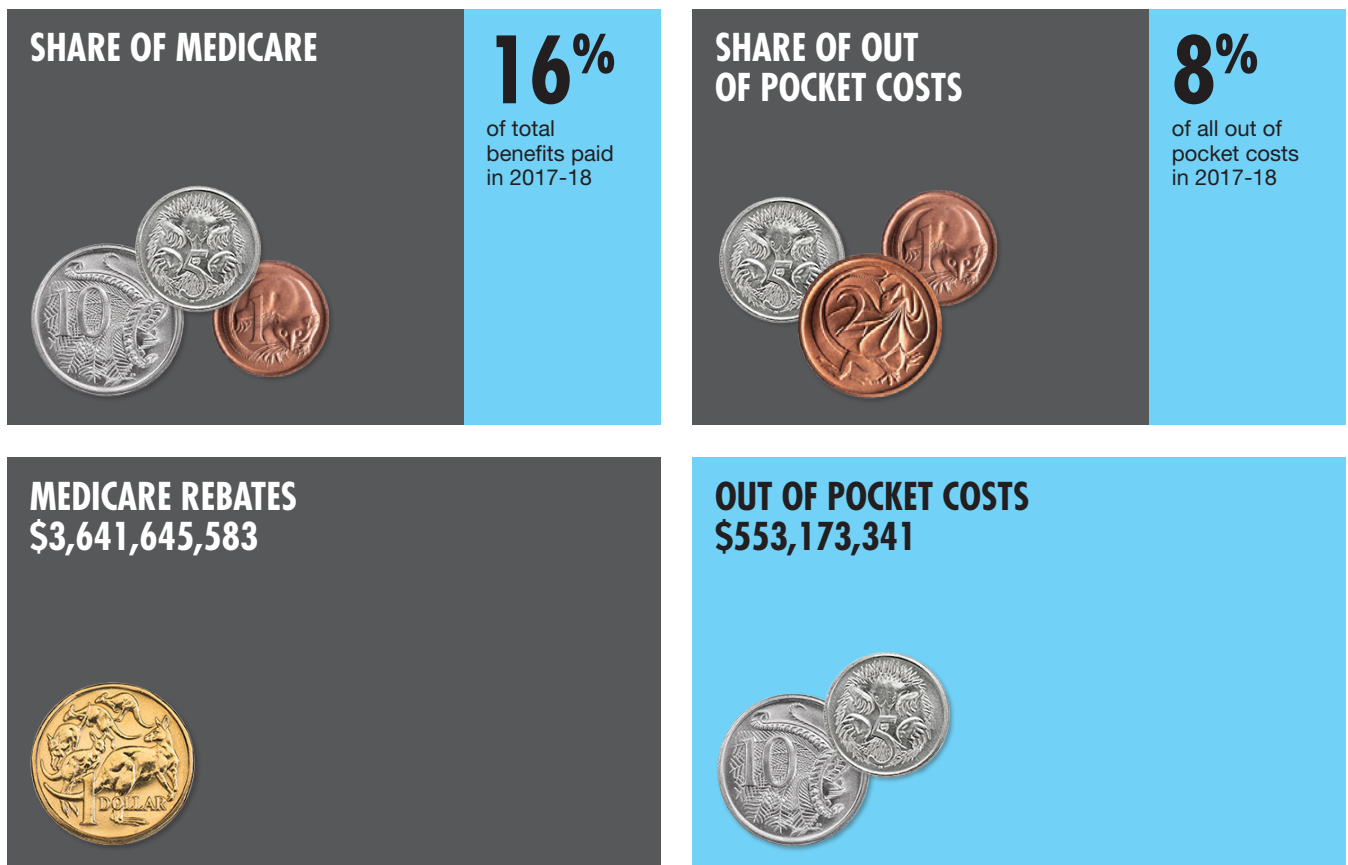
ANAESTHETICS

- Medicare benefits for anaesthetics comprise 2% of total benefits paid, and 11% of all out of pocket costs.
- Fees charged for anaesthetics were approximately \$1.177 billion in 2017-18, of which Medicare rebates comprised \$478 million and out of pocket costs were \$699 million.
- 10.7% of anaesthetics services were bulk billed, meaning that all of the out of pocket costs were incurred by 89.3% of services.
- Out of pocket costs for anaesthetics has increased by 80% in the last ten years; from \$388 million in 2007-08 to \$699 million in 2017-18.



DIAGNOSTIC IMAGING

- Medicare benefits for diagnostic imaging comprise 16% of total benefits paid, and 8% of all out of pocket costs.
- Fees charged for diagnostic imaging were almost \$4.2 billion in 2017-18, of which Medicare rebates comprised \$3.641 billion and out of pocket costs were \$553 million.
- 78% of diagnostic imaging services were bulk billed, meaning that all of the out of pocket costs were incurred by 22% of services.
- Out of pocket costs for diagnostic imaging have declined significantly as a proportion of Medicare benefits paid over the last ten years – Medicare benefits have increased by 99% and out of pocket costs have increased by 45%.
- the Australian Institute of Health and Welfare publication, *Patients' out-of-pocket spending on Medicare services, 2016-17*, contains data at a local level on median out of pocket costs for diagnostic imaging services.



NEW SOUTH WALES

- People living in New South Wales received the highest rate of Medicare payments in the country in 2017-18, 7% above the national average.
- However, New South Wales also has the highest rate of co payments of any state, 30c on top of the average Medicare dollar.
- 80% of Medicare services in New South Wales were bulk billed in 2017-18, at no cost to the patient. This was the highest rate of any state. All of the out of pocket costs were incurred by 20% of services.
- Out of pocket costs for general practice have increased as a proportion of Medicare benefits paid over the last ten years in New South Wales, unlike most states and territories.
- Out of pocket costs overall in New South Wales increased by 92% in the last ten years; from \$1.167 billion in 2007-08 to \$2.245 billion in 2017-18.
 - Medicare benefits have increased by 68% over this time.

MEDICARE BENEFITS \$7,923,611,922



OUT OF POCKET COSTS \$2,245,892,971



VICTORIA

- People living in Victoria received slightly lower Medicare payments on average in 2017-18.
- Victorians paid an average co payment of 28c on top of the average Australian Medicare dollar.
- 78.3% of Medicare services in Victoria were bulk billed, at no cost to the patient. All of the out of pocket costs were incurred by 21.7% of services.
- Out of pocket costs in Victoria have more than doubled in the last ten years; from \$826 million in 2007-08 to \$1.676 billion in 2017-18.
 - Medicare benefits have increased by 79% over this time.

MEDICARE BENEFITS
\$5,844,979,434



OUT OF POCKET COSTS
\$1,676,239,263



QUEENSLAND

- People living in Queensland received a higher rate of Medicare payments in 2017-18, 3% above the national average.
- Queenslanders paid an average co payment of 28c on top of the average Australian Medicare dollar.
- 79.3% of Medicare services in Queensland were bulk billed, at no cost to the patient. All of the out of pocket costs were incurred by 20.7% of services.
- Out of pocket costs for diagnostic imaging and general practice have declined significantly as a proportion of Medicare benefits paid over the last ten years in Queensland.
- Out of pocket costs in Queensland overall increased by 83% in the last ten years; from \$706 million in 2007-08 to \$1.298 billion in 2017-18.
 - This increase is less than the increase in Medicare benefits; 93% over this time.
- Queensland is the only state where out of pocket costs have declined relative to Medicare Benefits over the last ten years.

MEDICARE BENEFITS \$4,775,458,147



OUT OF POCKET COSTS \$1,297,890,404



SOUTH AUSTRALIA

- People living in South Australia received an average rate of Medicare payments in 2017-18.
- South Australians had the lowest rate of co payments of any state, 26c on top of the average Medicare dollar.
- 78.9% of Medicare services in South Australia are bulk billed, at no cost to the patient. All of the out of pocket costs were incurred by 21.1% of services.
- Out of pocket costs for general practice have increased as a proportion of Medicare benefits paid over the last ten years in South Australia, unlike most states and territories.
- Out of pocket costs in South Australia increased by 90% in the last ten years; from \$221 million in 2007-08 to \$421 million in 2017-18.
 - Medicare benefits have increased by 68% over this time.

MEDICARE BENEFITS
\$1,619,402,557



OUT OF POCKET COSTS
\$421,454,981



WESTERN AUSTRALIA

- People living in Western Australia receive the lowest rate of Medicare payments of any state, 13% below the national average.
- Western Australians paid an average co payment of 29c on top of the average Australian Medicare dollar.
- 77.2% of Medicare services in Western Australia are bulk billed, at no cost to the patient. All of the out of pocket costs were incurred by 22.8% of services.
- Out of pocket costs for general practice have declined significantly as a proportion of Medicare benefits paid over the last ten years in Western Australia.
- Out of pocket costs overall in Western Australia have doubled in the last ten years; from \$346 million in 2007-08 to \$693 million in 2017-18.
 - Medicare rebates have almost doubled over the last decade in Western Australia (94% increase).

MEDICARE BENEFITS \$2,118,584,293



OUT OF POCKET COSTS \$692,998,943



TASMANIA

- People living in Tasmania received 6% below the national average of Medicare payments in 2017-18.
- However, Tasmania also has a slightly lower rate of co payments than the national average, paying 27c on top of the average Medicare dollar.
- 75.6% of Medicare services in Tasmania are bulk billed, at no cost to the patient – the lowest rate of any state. All of the out of pocket costs were incurred by fewer than a quarter of services.
- Out of pocket costs for general practice have increased as a proportion of Medicare benefits paid over the last ten years in Tasmania, unlike most states and territories.
 - Tasmania has had the largest increase in relative out of pocket costs for general practice in the country.
- Out of pocket costs overall in Tasmania have increased by 91% in the last ten years; from \$70 million in 2007-08 to \$134 million in 2017-18.
 - Medicare benefits have increased by 69% over this time.

MEDICARE BENEFITS \$462,147,399



OUT OF POCKET COSTS \$134,277,841



NORTHERN TERRITORY

- People living in the Northern Territory receive the lowest rate of Medicare payments in the country, 35% below the national average.
- The Northern Territory also has the lowest rate of co payments of any state, 13c on top of the average Medicare dollar. This rate of co payment is half that of the second-lowest jurisdiction.
- 89.2% of Medicare services in the Northern Territory are bulk billed, at no cost to the patient – the highest rate in the country. All of the out of pocket costs were incurred by 10.8% of services.
- Out of pocket costs for general practice have fallen in actual terms in the Northern Territory in the last ten years, despite the number of services doubling. This has led to a very large reduction in relative out of pocket costs.
- Out of pocket costs in the Northern Territory have increased by 63% in the last ten years; from \$18.4 million in 2007-08 to \$30.2 million in 2017-18.
 - The growth in out of pocket costs (63%) is substantially lower than the growth in Medicare benefits paid in the Northern Territory over the last ten years (122%).

MEDICARE BENEFITS \$151,046,215



OUT OF POCKET COSTS \$30,171,496



AUSTRALIAN CAPITAL TERRITORY

- People living in the ACT received a lower rate of Medicare payments in 2017-18, 22% below the national average.
- The ACT also has the highest rate of co payments in the country, 38c on top of the average Medicare dollar.
- 68.6% of Medicare services in the ACT are bulk billed, at no cost to the patient – the lowest rate in the country. All of the out of pocket costs were incurred by 31.4% of services.
- Out of pocket costs for general practice have increased as a proportion of Medicare benefits paid over the last ten years in the ACT, unlike most states and territories.
- Out of pocket costs in the ACT have more than doubled in the last ten years; from \$70 million in 2007-08 to \$146 million in 2017-18.
 - Medicare benefits have increased by 77% over this time.

MEDICARE BENEFITS \$301,078,345



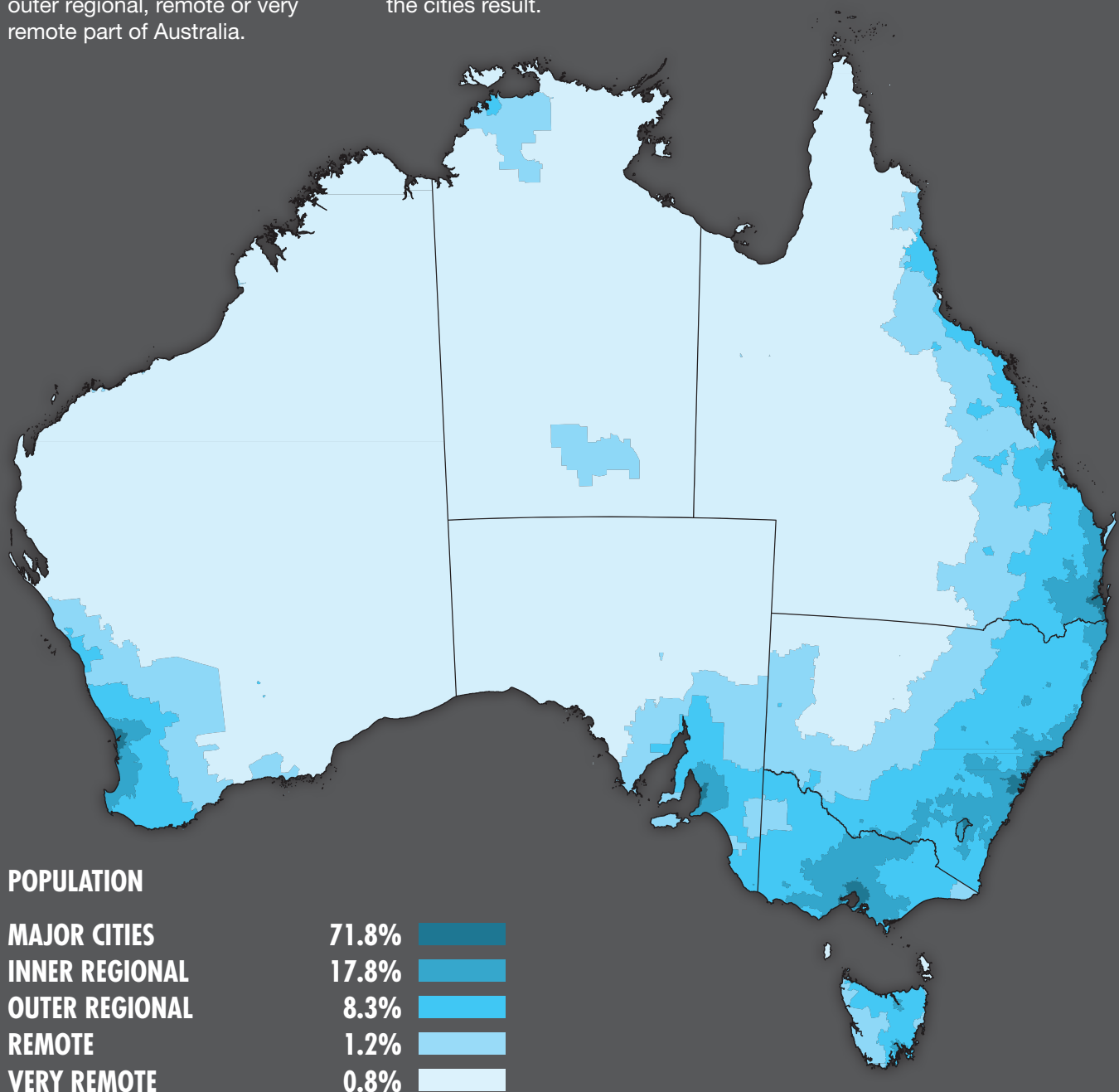
OUT OF POCKET COSTS \$146,115,883



CITY AND COUNTRY

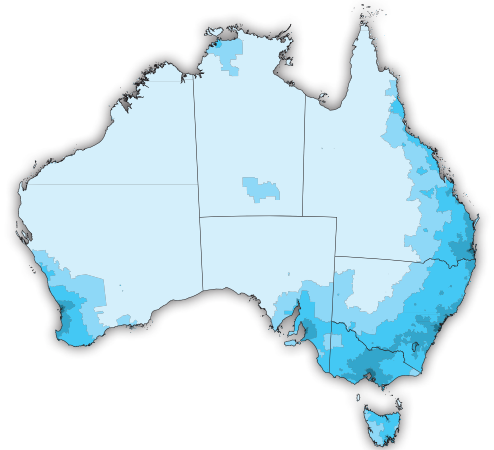
The Australian Bureau of Statistics uses the Australian Statistical Geography Standard (ASGS) to determine whether someone lives in a major city, an inner regional, outer regional, remote or very remote part of Australia.

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.



OUT OF POCKET COSTS GENERALLY DECREASE WITH REMOTENESS

- 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 56c in very remote areas.
- Out of pocket costs decrease with remoteness.



MEDICARE



OUT OF POCKET COSTS



SUMMARY

This paper looks at out of pocket costs paid for services covered by the Medicare Benefits Schedule. This is one lens we can use to help make an assessment of fairness.

Out of pocket costs can be a significant barrier to accessing health care. The Australian Bureau of Statistics Patient Experience Survey shows that one in 13 Australians (7.6%) delayed or did not see a specialist or general practitioner, or use a pathology or imaging service in 2016-17.

Out of pocket costs were over \$6.6 billion in 2017-18. Out of pocket costs are not evenly distributed by broad type of service, by state or territory, or 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.

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 out of pocket costs.

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.

KEY QUESTIONS

The data presented in this report raise a number of key questions for governments, providers and policy makers. Some questions include:

How much are out of pocket costs affecting people's access to care?

What is contributing to country patients receiving fewer Medicare Benefits and lower out of pocket costs?

Are other parts of the health system supporting those missing out on Medicare services due to out of pocket costs?

Why are out of pocket costs increasing as a proportion of Medicare Benefits while bulk billing rates are also increasing?

Do people in lower socioeconomic areas have lower out of pocket costs for all types of services?

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?

How much does informed financial consent play a role in out of pocket costs?

To what extent are state and territory health systems affecting out of pocket costs?

Why does the state with the greatest expenditure on Medicare Benefits also have the highest out of pocket costs?

How much does the distribution of providers affect out of pocket costs?

Why are the proportion of out of pocket costs declining in the Northern Territory and Queensland, and increasing elsewhere?

Are there business structures or cultural issues that affect out of pocket costs?

What local conditions are affecting out of pocket costs?

APPENDICES: TRENDS OVER TIME FOR EACH STATE AND TERRITORY

The graphs in these appendices show trends over the last ten years for each jurisdiction. The graphs show:

An index of Medicare rebates paid

An index of total out of pocket costs

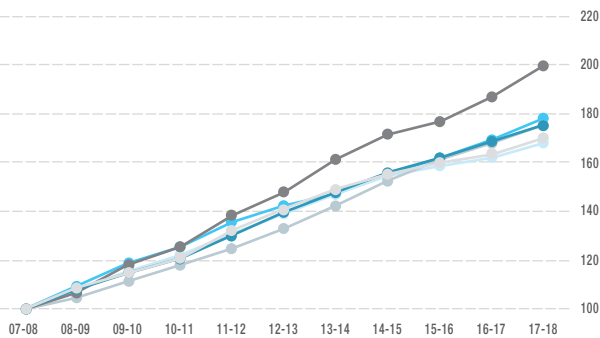
The difference in the two indices above

The latter shows the relative change in out of pocket costs as a proportion of Medicare rebates. A result of zero means that Medicare rebates and out of pocket costs have increased (or decreased) at the same rate; meaning services are relatively as affordable as they were ten years ago. A positive result means that out of pocket costs have increased more than Medicare rebates, increasing the burden on patients. A negative result means that Medicare rebates have increased more than out of pocket costs; meaning services are on average more affordable for patients.

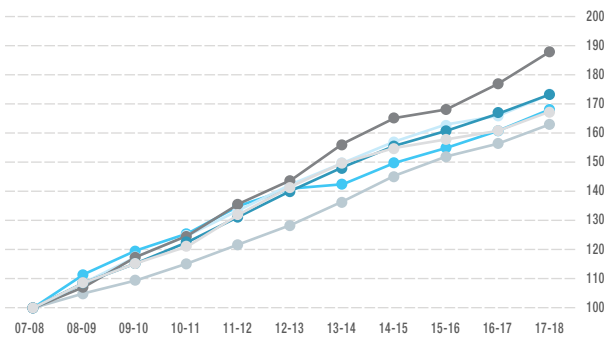
AUSTRALIA

NEW SOUTH WALES

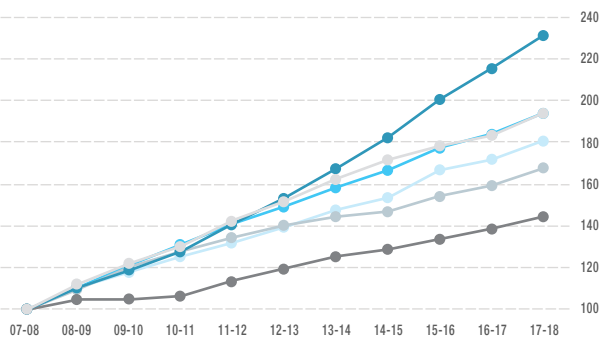
**AUSTRALIA MEDICARE REBATE INDEXED
2007-08 TO 2017-18**



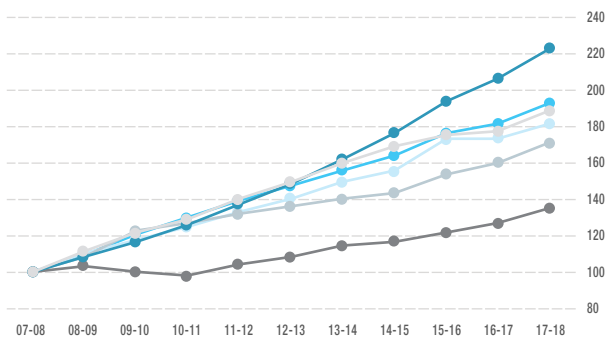
**NSW MEDICARE REBATE INDEXED
2007-08 TO 2017-18**



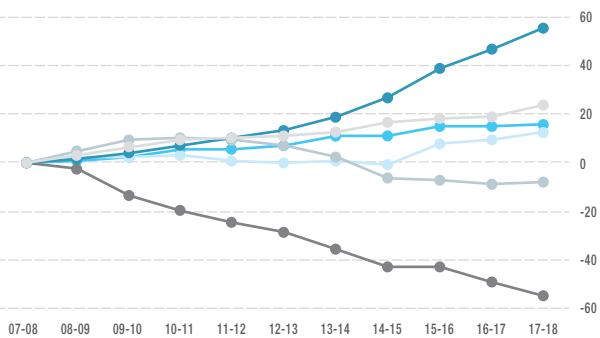
**AUSTRALIA OUT OF POCKET COSTS INDEXED
2007-08 TO 2017-18**



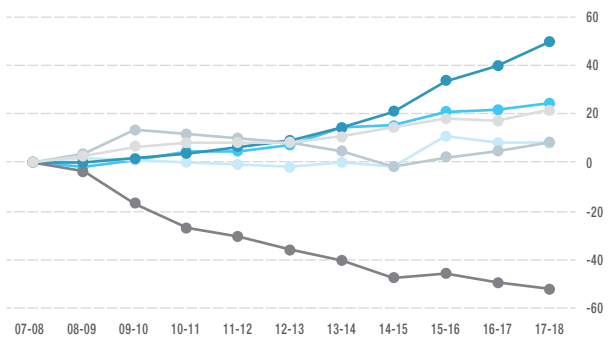
**NSW OUT OF POCKET COSTS INDEXED
2007-08 TO 2017-18**



AUSTRALIA DIFFERENCES IN MBS REBATES AND OUT OF POCKET COSTS INDICES 2007-08 TO 2017-18



NSW DIFFERENCES IN MBS REBATES AND OUT OF POCKET COSTS INDICES 2007-08 TO 2017-18

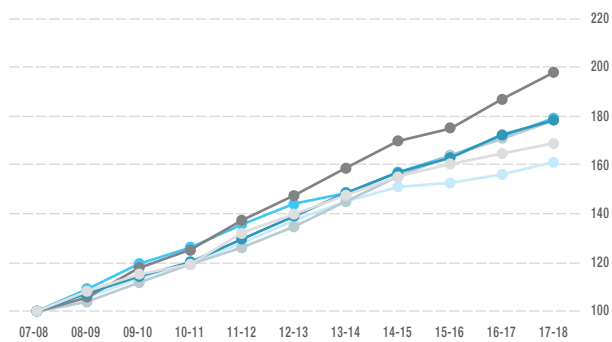


● Total Medicare Total
 ● Non-Referred Attendances
 ● Specialist Attendances
 ● Anaesthetics
 ● Diagnostic Imaging
 ● Total Operations & Assistance

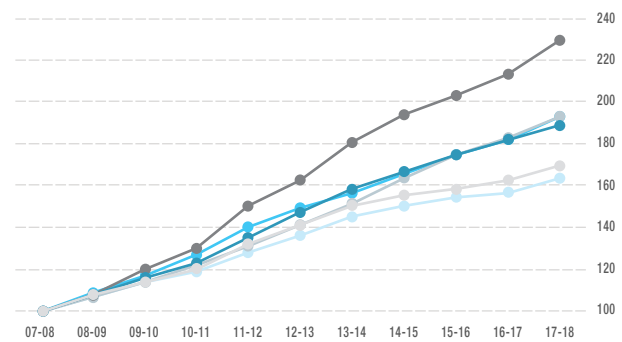
VICTORIA

QUEENSLAND

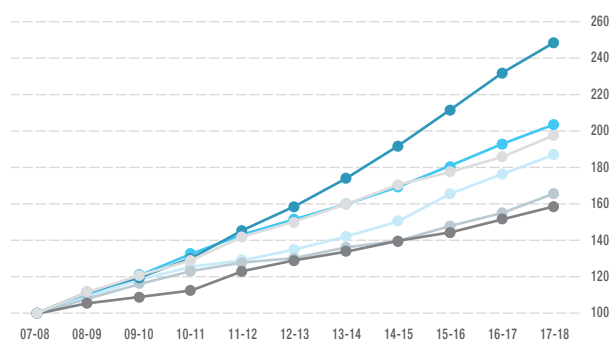
**VIC MEDICARE REBATE INDEXED
2007-08 TO 2017-18**



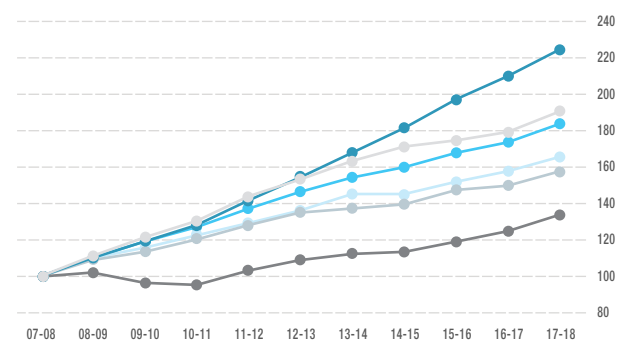
**QLD MEDICARE REBATE INDEXED
2007-08 TO 2017-18**



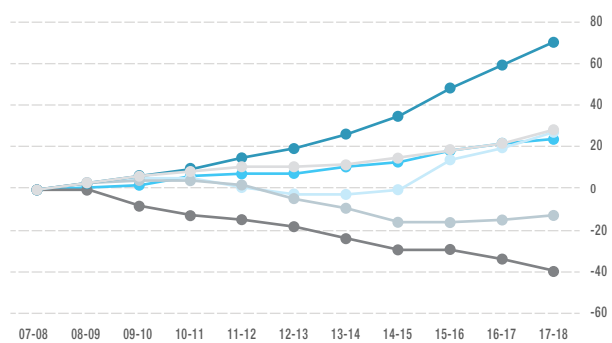
**VIC OUT OF POCKET COSTS INDEXED
2007-08 TO 2017-18**



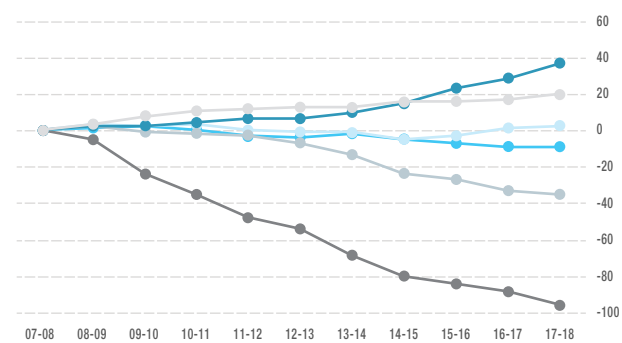
**QLD OUT OF POCKET COSTS INDEXED
2007-08 TO 2017-18**



VIC DIFFERENCES IN MBS REBATES AND OUT OF POCKET COSTS INDICES 2007-08 TO 2017-18



QLD DIFFERENCES IN MBS REBATES AND OUT OF POCKET COSTS INDICES 2007-08 TO 2017-18

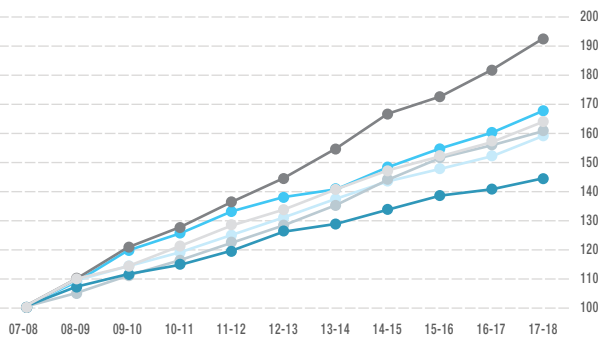


● Total Medicare Total
 ● Non-Referred Attendances
 ● Specialist Attendances
 ● Anaesthetics
 ● Diagnostic Imaging
 ● Total Operations & Assistance

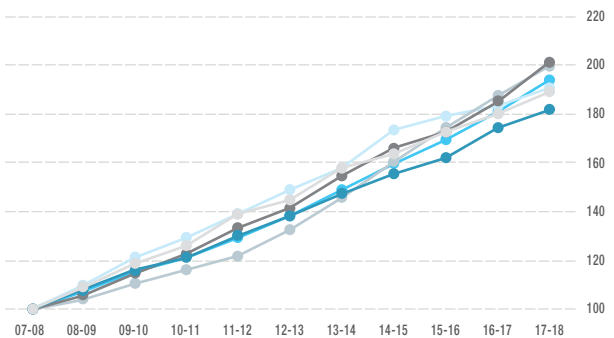
SOUTH AUSTRALIA

WESTERN AUSTRALIA

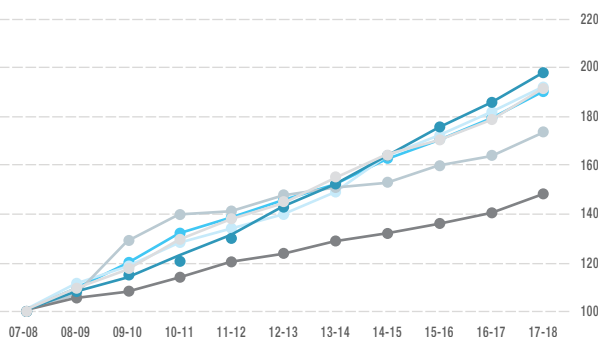
**SA MEDICARE REBATE INDEXED
2007-08 TO 2017-18**



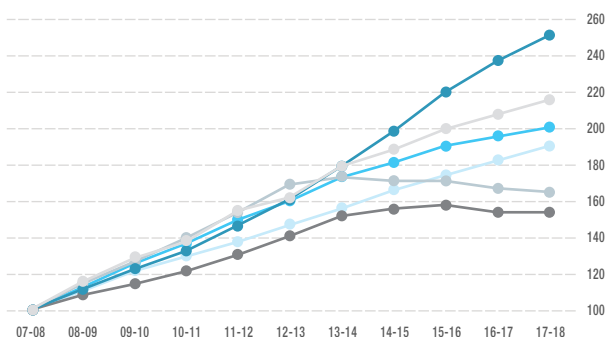
**WA MEDICARE REBATE INDEXED
2007-08 TO 2017-18**



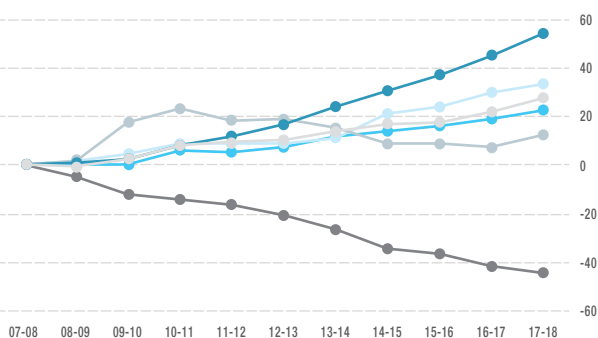
**SA OUT OF POCKET COSTS INDEXED
2007-08 TO 2017-18**



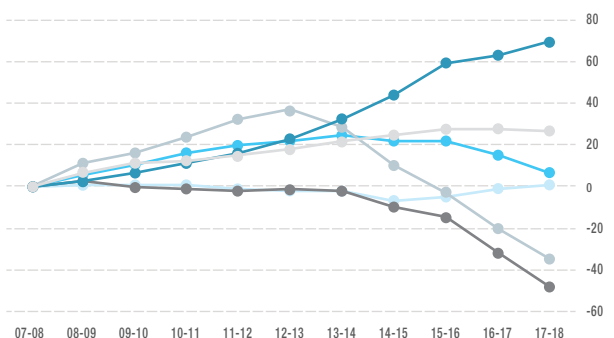
**WA OUT OF POCKET COSTS INDEXED
2007-08 TO 2017-18**



SA DIFFERENCES IN MBS REBATES AND OUT OF POCKET COSTS INDICES 2007-08 TO 2017-18



WA DIFFERENCES IN MBS REBATES AND OUT OF POCKET COSTS INDICES 2007-08 TO 2017-18

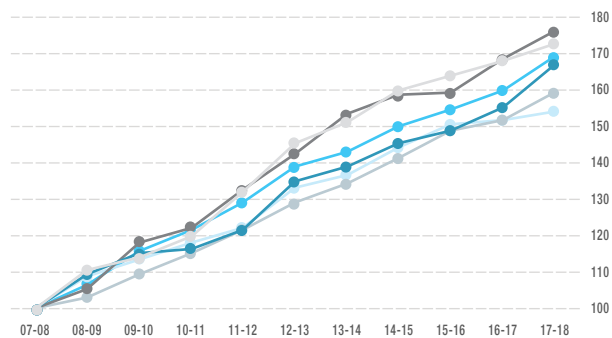


● Total Medicare Total
 ● Non-Referred Attendances
 ● Specialist Attendances
 ● Anaesthetics
 ● Diagnostic Imaging
 ● Total Operations & Assistance

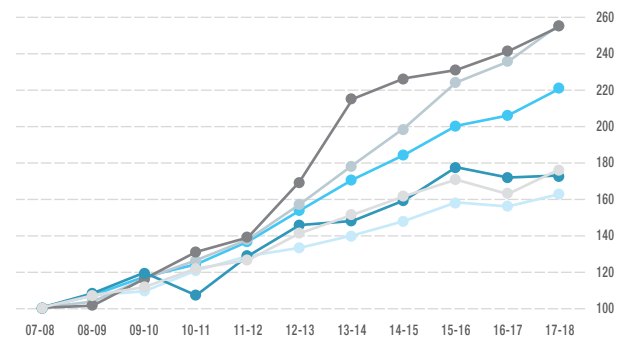
TASMANIA

NORTHERN TERRITORY

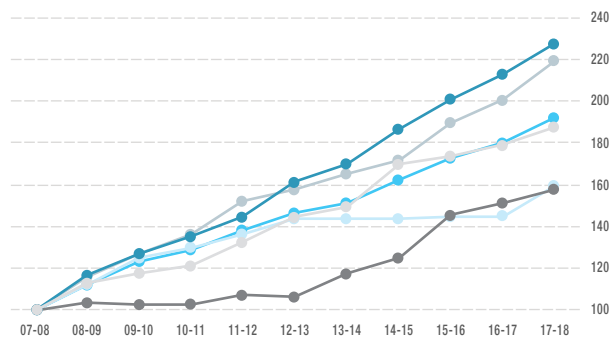
**TAS MEDICARE REBATE INDEXED
2007-08 TO 2017-18**



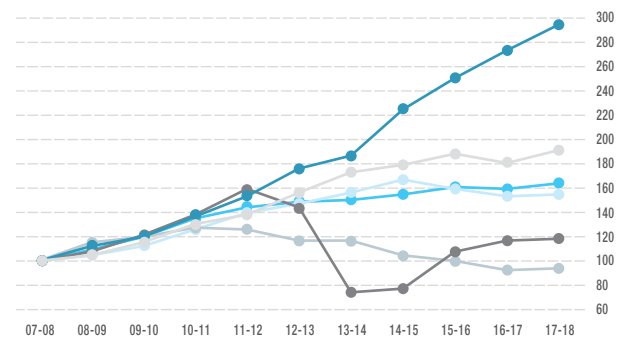
**NT MEDICARE REBATE INDEXED
2007-08 TO 2017-18**



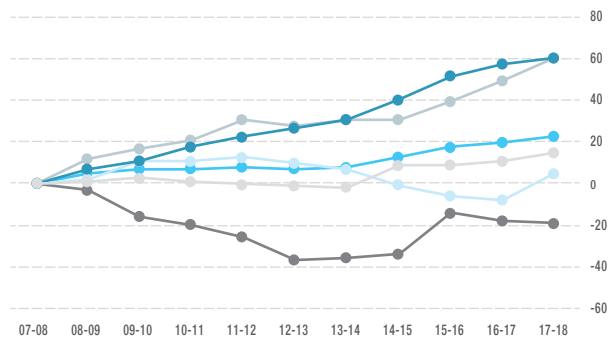
**TAS OUT OF POCKET COSTS INDEXED
2007-08 TO 2017-18**



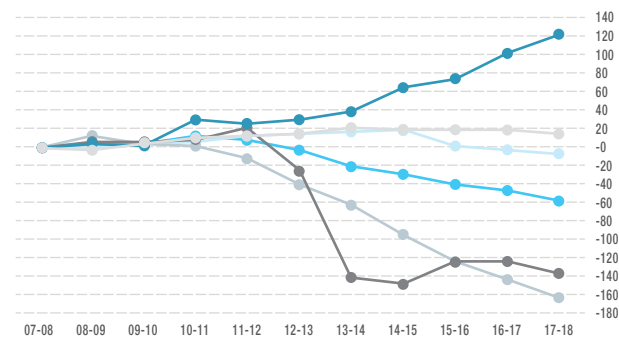
**NT OUT OF POCKET COSTS INDEXED
2007-08 TO 2017-18**



TAS DIFFERENCES IN MBS REBATES AND OUT OF POCKET COSTS INDICES 2007-08 TO 2017-18



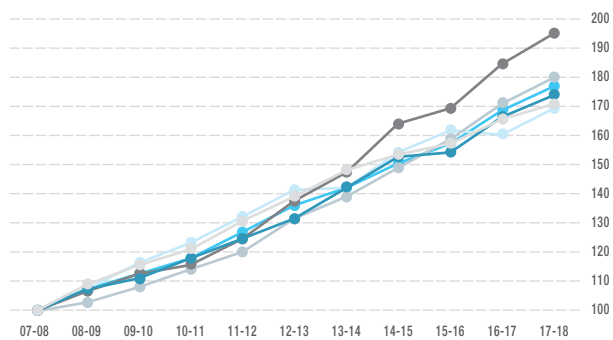
NT DIFFERENCES IN MBS REBATES AND OUT OF POCKET COSTS INDICES 2007-08 TO 2017-18



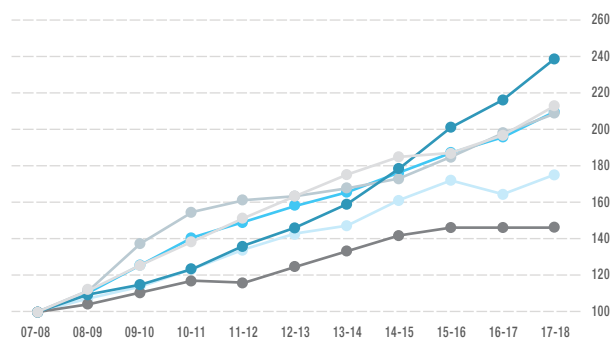
● Total Medicare Total
 ● Non-Referred Attendances
 ● Specialist Attendances
 ● Anaesthetics
 ● Diagnostic Imaging
 ● Total Operations & Assistance

AUSTRALIAN CAPITAL TERRITORY

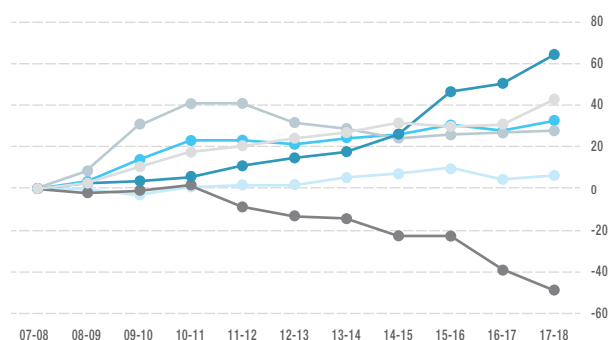
**ACT MEDICARE REBATE INDEXED
2007-08 TO 2017-18**



**ACT OUT OF POCKET COSTS INDEXED
2007-08 TO 2017-18**



ACT DIFFERENCES IN MBS REBATES AND OUT OF POCKET COSTS INDICES 2007-08 TO 2017-18



● Total Medicare Total
 ● Non-Referred Attendances
 ● Specialist Attendances
 ● Anaesthetics
 ● Diagnostic Imaging
 ● Total Operations & Assistance

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.

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.

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.

Other references

The burden of disease data are from AIHW 2019, Australian burden of disease study 2015: interactive data on disease burden, web report, cat. no. BOD 24, Available at <https://www.aihw.gov.au/reports/burden-of-disease/abds-2015-interactive-data-disease-burden/contents/overview>, 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.

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.

Appendix

Data in these charts are sourced from spreadsheets 2 (Australia) – 10 (ACT).

Charts are also available for ASGS classifications through request to info@mitchellinstitute.org.au.

All charts tracked the following services; total Medicare, total non-referred attendances, specialist attendances, anaesthetics, diagnostic imaging and total operations & assistance.

The charts 'Out of Pocket Costs Indexed from 2007-08 to 2017-18' were calculated by first finding the total amount of out of pocket costs for each year (fees charge, in and out of hospital minus benefits paid, in and out of hospital). Then by assigning an index of 100 to the 2007-08 column N and dividing each proceeding year by the fixed column N, which was subsequently multiplied by 100.

The charts 'Medicare Rebate Index 2007-08 to 2017-18' were calculated by taking the benefits paid, in and out of hospital and dividing by the fixed year 2007-08 column N, which was subsequently multiplied by 100.

The charts 'Difference in Out of pocket costs and Medicare Rebate Indices 2007-08 to 2017-18' were calculated by taking the indexed out of pocket costs for each year and subtracting the Medicare rebate index for the same year.



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