Australian Government

Department of Health and Aged Care

Medicare Statistics: Explanatory Notes

Contents

Scope and Coverage of the Statistics:

The data and statistics include medical services that are performed by a registered provider, for services that qualify for Medicare Benefit, and for which a claim has been processed by Services Australia.

They do not include:

- services provided by hospital doctors to public patients,
- services provided under the Department of Veterans' Affairs National Treatment Account,
- services covered by third party or workers' compensation,
- services rendered to repatriation beneficiaries or defence personnel,
- services rendered for insurance or employment purposes,
- services that are funded directly by other Australian Government programs (e.g., health screening services), or
- services funded directly by State/Territory Government programs.

Dates and Time Periods

The Department of Health publishes Medicare data based on the date the claim was processed (date of processing) not the date the service was provided.

Figures are provided in Quarterly, Year-to-Date or Annual aggregations as well as a Rolling 12-month time series.

Quarterly

Seasonal trends and the timing of public holidays impact quarterly statistics. Service patterns by quarter can vary from year to year. Care must be taken to ensure that quarterly statistics are compared with the same period in the previous year.

Year-to-Date

Year-to-date figures are reported each quarter with the period covered increasing by 3 months each quarter.

In the first quarter of the year, the year-to-date figures will be the same as the quarterly figures. In the final quarter of the year, it will be the same as the annual figures.

Reporting of year-to-date figures each quarter illuminates ongoing trends with the immediacy of the quarterly data, while not suffering the same volatility. While some care must be taken to ensure that year-to-date figures are compared with the same period in the previous year, they are easier to calculate and conceptually easier for many users to understand than the other common approach to seasonal data, that is, seasonally adjusted figures.

Annual Figures

Annual figures provide a view of long-term trends. As they are not influenced by seasonal patterns, they are much more stable than quarterly figures.

Rolling 12-month Time Series Statistics

Reporting figures on a rolling 12-month basis allows for comparisons of trends between the same periods across years, while still correcting for seasonal variations and the timing of public holidays. Essentially, the new report uses the running total of the values of the last 12 months and highlights any trends in growth, flattening or decline.

The rolling 12-month time series is available by Broad Type of Service by State and Modified Monash. This will facilitate trend monitoring for Medicare services, benefits, the bulk billing rate and average out-of-pocket costs for patient billed services.

Impact of Work Days on Interpretation

Medicare data displays seasonal trends and is influenced by the timing of weekends or public holidays and whether the holiday falls on a weekend or weekday.

The timing of weekends or public holidays can make significant differences in the number of work days in the period and result in material differences to the number of services processed, even without underlying utilisation changes.

Comparison to previous periods (calculation of % change) may be misleading unless the underlying figures are corrected for the number of work days in the reference periods.

Published Medicare Summary Statistics include unadjusted and adjusted % change for services and benefits.

The calculation for unadjusted and adjusted % change is provided below for reference. Medicare Work Days by month and state are published by Services Australia.

Data Source: Services Australia, Medicare Australia work days

Calculation of % Change between two periods, corrected for working days

The same calculation can be used for any two periods of interest.

The example refers to the calculation of % change between the reference period (i.e. quarter, year-to-date or financial year) in the current year (i.e. 2020) compared to the same reference period in the previous year (i.e. 2019).

The same calculation can be used for % change in benefits.

$$\% \text{ Change} = \frac{\left(\frac{Total\ Services^{p\ yr\ i}}{Wking\ Days^{p\ yr\ i}}\right) - \left(\frac{Total\ Services^{p\ yr\ i-1}}{Wking\ Days^{p\ yr\ i-1}}\right)}{\left(\frac{Total\ Services^{p\ yr\ i-1}}{Wking\ Days^{p\ yr\ i-1}}\right)}$$

Where:

Total Services p yr I	=	total number of services for the reference period in the latest year
Wking Days p yr I	=	number of working days for the reference period in the latest year
Total Services p yr i-1	=	total number of services for the reference period in the previous

Wking Days p yr i-1 $\quad=\quad$ number of working days for the reference period in the previous year

The calculation for % change without correcting for working days simply removes the working days from the calculation.

$$\% \text{ Change} = \frac{\left(Total\ Services^{p\ yr\ i}\right) - \left(Total\ Services^{p\ yr\ i-1}\right)}{\left(Total\ Services^{p\ yr\ i-1}\right)}$$

Broad Type of Service

Medicare statistics are grouped to Broad Type of Service (BTOS) categories. Each BTOS category typically comprises a set of related groups of MBS items (for example, GP Attendances, Specialist Attendances, Operations, etc.).

Primary Care Service Type

An alternative classification for Medicare statistics is Primary Care Service Types (PCST). The PCST classification provides 16 categories for reporting against primary care items: covering GP and Practice Nurse non-referred attendances, Other Allied Health and Optometry plus Bulk Billing Incentives and Nurse Practitioner items.

In-Hospital versus Out-of-hospital

Medicare data distinguishes between services provided to privately admitted patients within a hospital or a day surgery facility and services provided out-of-hospital (for example, practitioners' consulting rooms).

For in-hospital services, all patients are private admissions with the distinction that a patient can be a private patient in a private hospital or a private patient in a public hospital.

Patient Billing

Bulk Billed versus Patient Billed Services

Bulk Billed (direct billed) claims are when the provider of the service accepts the Medicare benefit as full payment for the service. This occurs when the patient assigns their right to the benefit to the provider. There is no out-of-pocket cost for these services.

Patient billed claims are when the provider of the service does not accept the Medicare benefit as full payment for the service. There is usually an out-of-pocket cost for these services.

Calculation of Bulk Billing Rate

$$\text{Bulk Billing Rate} = \frac{\text{Number of Services Bulk-Billed}}{\text{Total Number of Services}} \ x \ 100$$

Bulk Billing Ranges

Many patients have more than one Medicare service in a given period (e.g., a financial year). The bulk billing range refers to how frequently each patient was bulk billed that given period. These are categorised as always (100%), usually (50% to <100%), sometimes (>0% to <50%), and never (0%) bulk billed. The number of patients is each category is then divided by all patients to produce a proportion of patients who fall in each category.

Average Patient Contribution per Service

The average patient contribution, also known as the average out-of-pocket, is based on patient billed services rendered out-of-hospital.

The average patient contribution is not calculated for in-hospital services as Medicare data does not include any information on the contribution from private health insurance.

Calculation of Average Patient Contribution

$$\text{Average Patient Contribution} = \frac{((\text{FC PB OOH}) - (\text{BP PB OOH}))}{\text{Services PB OOH}}$$

Where:

FC PB OOH = total fee charge for patient billed services rendered out-of-hospital

BP PB OOH = total benefit paid for patient billed services rendered out-of-hospital

Services PB OOH = total number of patient billed services rendered out-of-hospital

For Total Medicare, the number of services excludes BTOS Pathology Episode Initiation to avoid double counting, since a Pathology Episode Initiation is assigned to each patient episode, therefore only the service for the pathology test item is counted.

For patient billed services, the fee charged reflects the amount recorded on the account, not necessarily the amount received by the medical practitioner, since some practitioners accept the Medicare benefit as full settlement of the account and some discount for early payment.

Geography

Primary Health Network (PHN)

PHNs are independent organisations that the Department of Health and Aged Care funds to coordinate primary health care in their region. PHNs assess the needs of their community and commission health services so that people in their region can get coordinated health care where and when they need it.

For more information on PHNs: https://www.health.gov.au/our-work/phn.

Socio-Economic Indexes for Areas (SEIFA)

SEIFA is a set of four indexes developed by the ABS based on information from the 5-yearly Census. The statistics published in the Medicare statistics collection uses only one of the indexes: the index of relative socio-economic disadvantage (IRSD). This index ranks areas (based on Statistical Area 1) by their relative

disadvantage; from most disadvantaged to least disadvantaged. Some of the variables used in the IRSD include lower educational attainment, lower income, and unemployment.

More information on SEIFA can be found on the ABS website at:
https://www.abs.gov.au/methodologies/socio-economic-indexes-areas-seifa-australia-methodology/2021#introduction

Modified Monash Model (MMM)

The MMM is a geographical classification that categorises different areas in Australia into seven remoteness categories. It was developed to better target health workforce programs to attract health professionals to remote and smaller communities. The MMM classifies metropolitan, regional, rural, and remote areas according to geographical remoteness, as defined by the Australian Bureau of Statistics (ABS), and town size.

The MMM is used to determine eligibility for a range of health programs.

Modified Monash Category	Description (including the Australian Standard Geographical Classification (ASGS) – Remoteness Area (2016)
MM 1	Metropolitan areas: Major cities accounting for 70% of Australia's population. All areas categorised ASGS-RA1
MM 2	Regional centres: Inner (ASGS-RA 2) and Outer Regional (ASGS-RA 3) areas that are in, or within a 20km drive of a town with over 50,000 residents
MM 3	Large rural towns: Inner (ASGS-RA 2) and Outer Regional (ASGS-RA 3) areas that are not MM 2 and are in, or within a 15km drive of a town between 15,000 to 50,000 residents
MM 4	Medium rural towns: Inner (ASGS-RA 2) and Outer Regional (ASGS-RA 3) areas that are not MM 2 or MM 3, and are in, or within a 10km drive of a town with between 5,000 to 15,000 residents
MM 5	Small rural towns: All remaining Inner (ASGS-RA 2) and Outer Regional (ASGS-RA 3) areas. Islands that have an MM 5 classification with a population of less than 1,000 without bridges to the mainland will now be classified as MM 6
MM 6	Remote communities: Remote mainland areas (ASGS-RA 4) AND remote islands less than 5kms offshore. Islands that have an MM 5 classification with a population of less than 1,000 without bridges to the mainland will now be classified as MM 6
MM 7	Very remote communities: Very remote areas (ASGS-RA 5) and all other remote island areas more than 5kms offshore.

Determining Patient State and Modified Monash (MMM)

In current publications the patient's geographic location is determined using their geocoded Medicare enrolment address as at the date the claim was processed. There may be minor changes to the figures in subsequent publications as geospatial information is updated. The most recent publication should always be considered to supersede earlier publications covering the same time periods.

Time series break from September 2009-10

In reports containing figures prior to September 2009-10 (i.e., Quarterly Report: March quarter 1984 to June quarter 2009 and Annual Report: 1984-85 to 2008-09) the patient's geographic location was determined using the patient's Medicare enrolment postcode as at the date their claim was processed.

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