Context

This data item examines cataract surgery rates for people 40 years and over. Data for cataract surgery is counted as services charged to the MBS, which is private cataract surgery performed in either a public or private hospital.

Cataract surgery is one of the most common operations performed in Australia. A cataract is the clouding of the eye's clear lens and is a very common cause of visual loss. Among Australians aged 55 and over, cataract is the primary cause of visual impairment in 40 per cent of cases.¹ The two most common presenting symptoms are reduced visual function and sensitivity to glare. The most common risk factor for cataracts is age. Diabetes, smoking and exposure to ultraviolet light also increase the risk.

The presence of a cataract does not necessarily indicate the need for surgery. In the very initial stages, symptoms may improve with new glasses, brighter lighting or magnifying lenses. Surgery is indicated when reduced vision affects the patient's daily functioning. However, the preferences of the surgeon or patient may affect the decision on whether and when to perform surgery. Surgery involves replacing the cloudy lens with a clear, permanent, artificial lens.

This item analyses data only on MBS item number 42702, which captures the lens extraction and insertion of the artificial lens in a single surgery. Where extraction and insertion cannot be done in the same operation, separate MBS items are used, which are not included in these data. This analysis also does not include publicly funded cataract surgery performed in public hospitals. It is known that cataract surgery performed in public hospitals and not funded by the MBS accounts for about 50 per cent of cataract procedures in the Northern Territory and Australian Capital Territory, 38 per cent in Western Australia and South Australia, 30 per cent in New South Wales² and Victoria, 12 per cent in Queensland and 11 per cent in Tasmania.³

Magnitude of variation

In 2013–14, there were 160,489 MBS-funded services for cataract surgery, representing 1,436 services per 100,000 people aged 40 years and over (the Australian rate).

The number of MBS-funded services for cataract surgery across 320* local areas (SA3s) ranged from 357 to 2,555 per 100,000 people aged 40 years and over. The number of services was **7.2 times higher** in the area with the highest rate compared to the area with the lowest rate. The average number of services varied across states and territories, from 1,132 per 100,000 people aged 40 years and over in the Northern Territory, to 1,685 in Queensland.

After excluding the highest and lowest results, the cataract surgery rate across the 298 remaining local areas was **2.8 times higher** in one local area compared to another.

As the rate of cataract surgery decreased, remoteness increased. Generally rates were lowest in areas of low socioeconomic status and increased in areas with higher socioeconomic status.

Interpretation

Potential reasons for the variation include differences in:

- risk factors for cataracts
- levels of private health insurance, and access to specialists and private hospitals (noting that the data are limited to procedures funded by the MBS)

- rates of private health insurance and levels of access to private hospitals among some population groups. For example, Aboriginal and Torres Strait Islander peoples have low rates of private health insurance and reduced access to private hospitals. In NSW, 80 per cent of Indigenous cataract surgery patients are public patients, compared with 28 per cent of non-Indigenous patients²
- availability of specialists in rural and remote locations
- the decision making criteria of patients and specialists about the level of acuity that indicates the need for surgery
- government policies, whereby governments purchase the services of private providers in private hospitals for public patients.

To explore this variation, further analysis could focus on:

- examining data on publically funded cataract surgery, including waiting times and the number of people operated on within 90 days of booking
- the influence of the private and public sectors on rates of cataract surgery
- waiting times for surgery for Indigenous people to determine the extent of any under-servicing of this population
- data linkage to investigate whether issues such as access to care are lengthening the time between first and second eye surgeries, which has been shown to influence the risk of falls
- determining the visual acuity of patients at the time of cataract surgery to establish whether variation is due to different thresholds for surgery.

^{*}There are 333 SA3s. For this item, data were suppressed for 13 SA3s. This is because of confidentiality requirements given the small numbers of services in these areas.

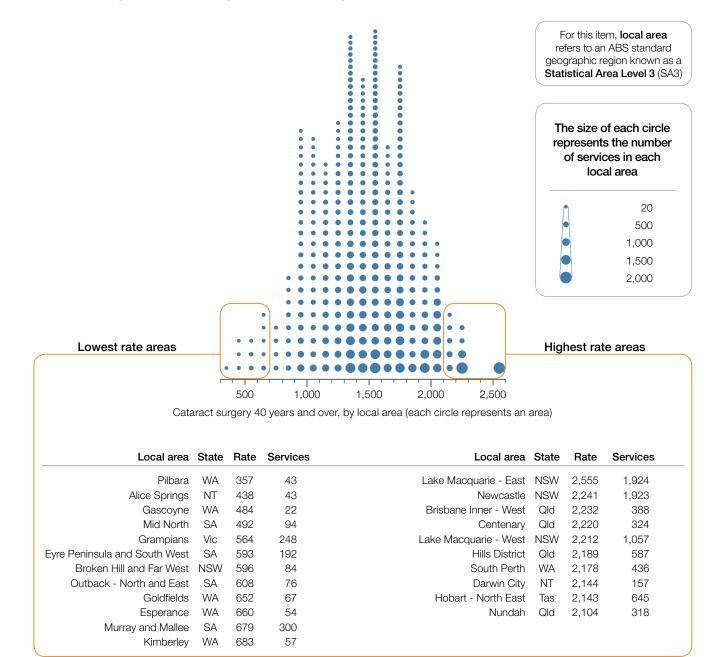


Figure 33: Number of MBS-funded services for cataract surgery per 100,000 people aged 40 years and over, age standardised, by local area, 2013–14

Notes:

Rates are standardised based on the age structure of the Australian population in 2001.

State/territory and national rates are based on the total number of services and people in the geographic area.

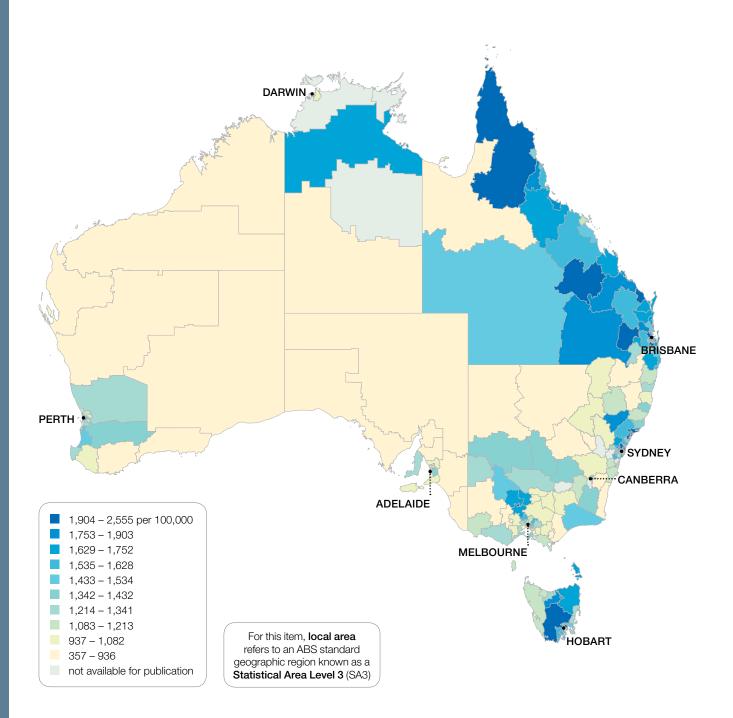
The term local area refers to an ABS standard geographic region known as a Statistical Area Level 3 (SA3).

MBS statistics exclude services provided free of charge to public patients in hospitals, to Department of Veterans' Affairs beneficiaries, some patients under compensation arrangements and through other publicly funded programs. SA3 analysis excludes approximately 115 services from GPO postcodes 2001, 2124, 3001, 4001, 5001, 6843 but these data are included in state/territory and national level analysis.

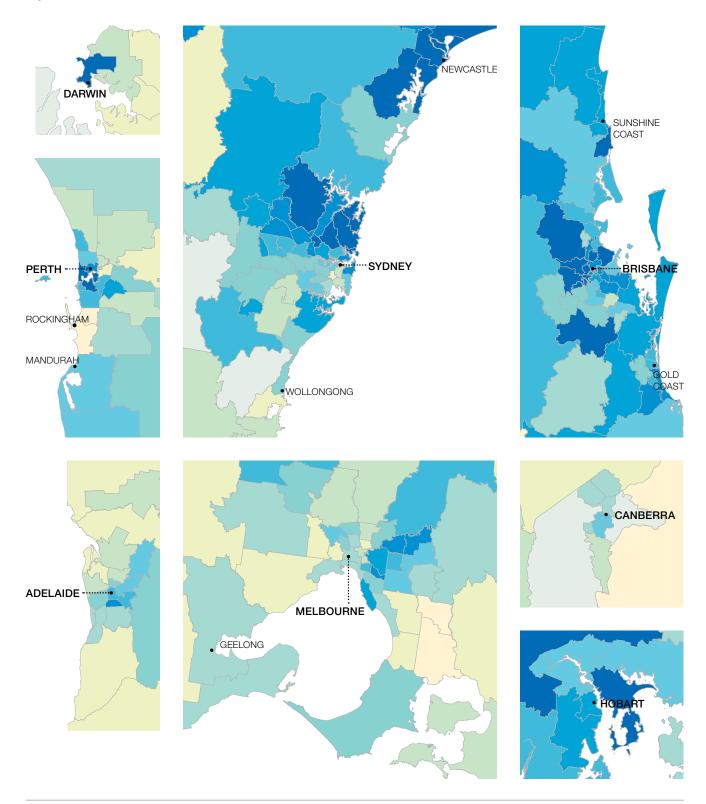
For more technical information please refer to the Technical Supplement.

Sources: National Health Performance Authority analysis of Department of Human services Medicare Benefits statistics 2013–14 (data supplied 12/08/2014) and Australian Bureau of Statistics Estimated Resident Population 30 June 2013.

Figure 34: Number of MBS-funded services for cataract surgery per 100,000 people aged 40 years and over, age standardised, by local area, 2013–14

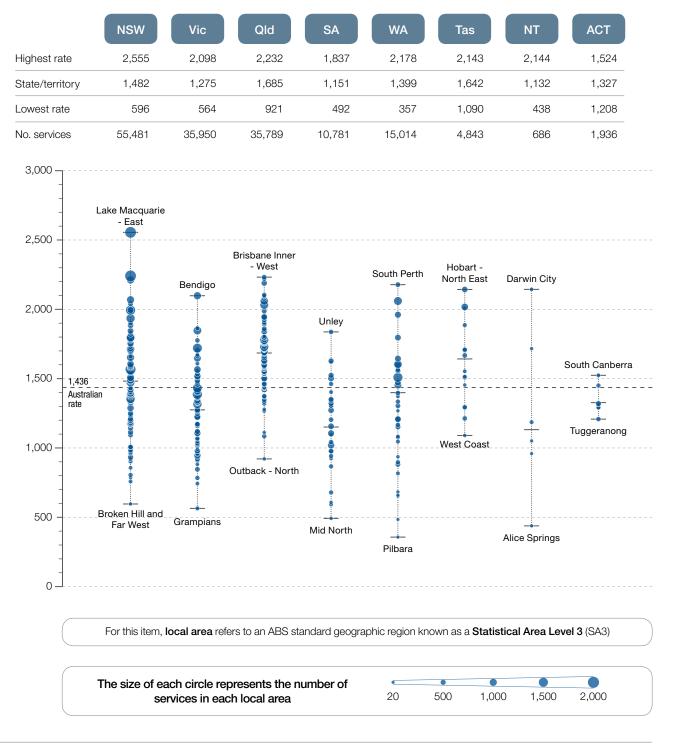


Sources: National Health Performance Authority analysis of Department of Human services Medicare Benefits statistics 2013–14 (data supplied 12/08/2014) and Australian Bureau of Statistics Estimated Resident Population 30 June 2013. The number of MBS-funded services for cataract surgery across 320 local areas (SA3s) ranged from 357 to 2,555 per 100,000 people aged 40 years and over. The number of services was **7.2 times higher** in the area with the highest rate compared to the area with the lowest rate.



Sources: National Health Performance Authority analysis of Department of Human services Medicare Benefits statistics 2013–14 (data supplied 12/08/2014) and Australian Bureau of Statistics Estimated Resident Population 30 June 2013.

Figure 35: Number of MBS-funded services for cataract surgery per 100,000 people aged 40 years and over, age standardised, by local area, state and territory, 2013–14



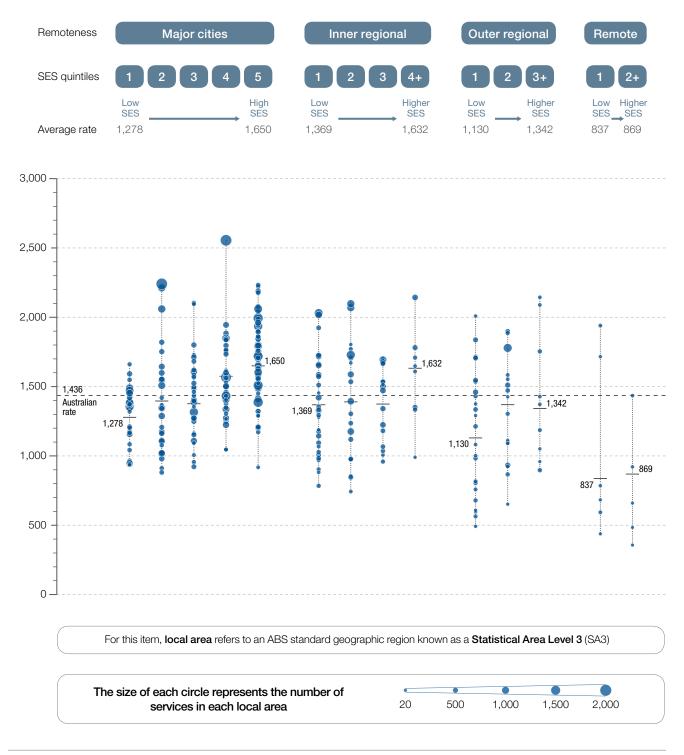
Notes:

Rates are standardised based on the age structure of the Australian population in 2001.

State/territory and national rates are based on the total number of services and people in the geographic area.

Sources: National Health Performance Authority analysis of Department of Human services Medicare Benefits statistics 2013–14 (data supplied 12/08/2014) and Australian Bureau of Statistics Estimated Resident Population 30 June 2013.

Figure 36: Number of MBS-funded services for cataract surgery per 100,000 people aged 40 years and over, age standardised, by local area, remoteness and socioeconomic status (SES), 2013–14



Notes:

Rates are standardised based on the age structure of the Australian population in 2001.

The national rate is based on the total number of services and people in Australia.

Average rates are based on the total number of services and people in the local areas within each group.

Sources: National Health Performance Authority analysis of Department of Human services Medicare Benefits statistics 2013–14 (data supplied 12/08/2014) and Australian Bureau of Statistics Estimated Resident Population 30 June 2013.

Resources

- American Academy of Ophthalmology Cataract and Anterior Segment Panel. American Academy of Ophthalmology. *Preferred Practice Pattern® guidelines*. Cataract in the Adult Eye. 2011. Available at: www.aao.org/ppp.
- Royal College of Ophthalmologists. *Cataract Surgery Guidelines*. 2010. Available at: www.rcophth.ac.uk/wp-content/ uploads/2014/12/2010-SCI-069-Cataract-Surgery-Guidelines-2010-SEPTEMBER-2010.pdf.
- Australian Institute of Health and Welfare. Eye health in Australia: A hospital perspective.
 2008. Available at: www.aihw.gov.au/WorkArea/ DownloadAsset.aspx?id=6442459888.

- 1 Australian Institute of Health and Welfare. Vision problems among older Australians. Bulletin no. 27. Canberra: AIHW, 2005.
- 2 Randall DA, Reinten T, Maher L, Lujic S, Stewart J, Keay L, Leyland AH, Jorm LR. Disparities in cataract surgery between Aboriginal and non-Aboriginal people in New South Wales, Australia. Clinical and Experimental Ophthalmology 2014;42(7):629–36.
- 3 Australian Institute of Health and Welfare Australian hospital statistics 2011–12. Health services series no. 50. Cat. no. HSE 134. Canberra: AIHW, 2013.