### Context

This data item examines hospital admissions for tonsillectomy for children aged 17 years and under. Hospital admission data are sourced from the Admitted Patient Care National Minimum Data Set. This includes both public and private hospitals. Rates are described as the number of admissions per 100,000 people. Repeat admissions for one person and transfers to other hospitals are both counted as separate admissions.

Tonsillectomy is a surgical procedure to remove the tonsils (palatine tonsils), which are soft tissue masses on each side at the back of the throat.

Tonsils are prone to inflammation and enlargement that can lead to tonsillitis. In some children, significant enlargement of the tonsils may cause breathing problems or sleep apnoea.

International evidence-based guidelines recommend that watchful waiting is more appropriate than tonsillectomy for children with mild sore throats.<sup>1</sup>

The indications for tonsillectomy in children and young people include<sup>2</sup>:

- frequent recurring bouts of acute tonsillitis
- peritonsillar abscess
- suspected tumour or abnormality
- frequent ear infections associated with tonsillitis and/or adenoid infection
- upper airway obstruction in children with obstructive sleep apnoea
- failing to thrive because of difficulty in swallowing.

### Magnitude of variation

In 2012–13, there were 38,575 tonsillectomy admissions to hospital, representing 724 admissions per 100,000 people aged 17 years and under (the Australian rate).

The number of tonsillectomy admissions to hospital across 315\* local areas (SA3s) ranged from 254 to 1,640 per 100,000 people aged 17 years and under. The number of admissions was **6.5 times higher** in the area with the highest rate compared to the area with the lowest rate. The average number of admissions varied across states and territories, from 388 per 100,000 people aged 17 years and under in the Northern Territory, to 898 in South Australia.

After excluding the highest and lowest results, the tonsillectomy hospital admission rate across the 290 remaining local areas was **3.0 times higher** in one local area compared to another.

There was no pattern in the admission rates for tonsillectomy and socioeconomic status. Rates were highest in inner regional areas and lowest in remote areas.

### Interpretation

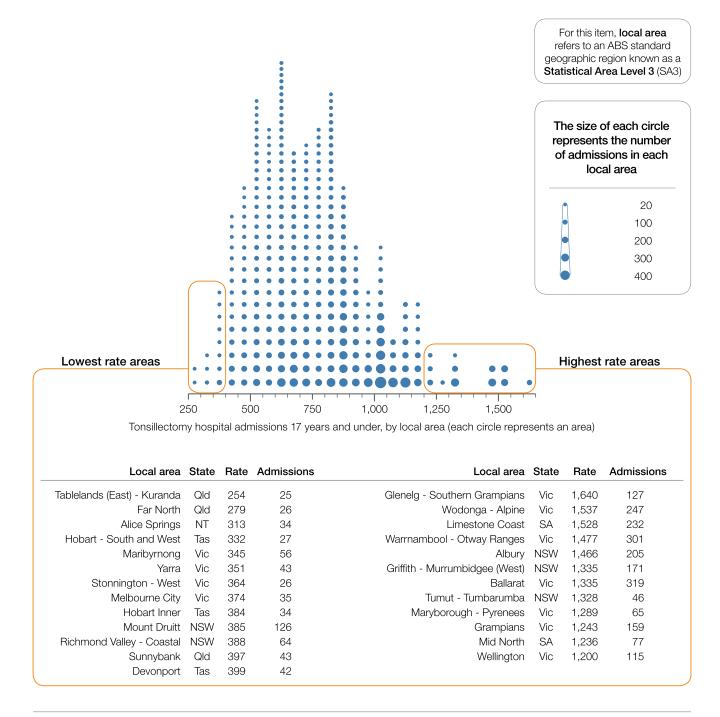
Potential reasons for the variation include differences in:

- private health insurance status and the accessibility of private hospitals, where most tonsillectomies are undertaken
- the availability of ear nose and throat surgeons, which varies across states and territories and is lower in remote areas
- public hospital elective surgery waiting times for tonsillectomy. Recent figures suggest the average waiting time for tonsillectomy in a public hospital is about 14 weeks<sup>3</sup>
- the decision-making criteria of individuals and specialists in assessing the need for tonsillectomy.

To explore this variation, further analysis could focus on:

- the influence of the private and public sectors on rates of tonsillectomy
- examining data on public hospital tonsillectomy, including waiting times for surgery, as it may show unequal access for those without private health cover.

<sup>\*</sup>There are 333 SA3s. For this item, data were suppressed for 18 SA3s. This is because of confidentiality requirements given the small numbers of admissions in these areas.





#### 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 admissions and people in the geographic area.

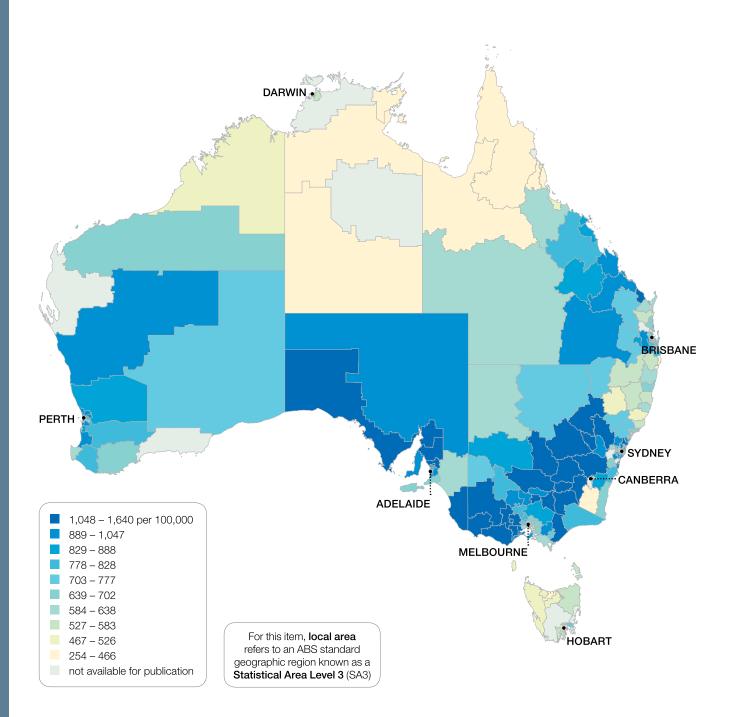
The term local area refers to an ABS standard geographic region known as a Statistical Area Level 3 (SA3).

Includes all public hospitals, private hospitals and day hospital facilities.

For more technical information please refer to the Technical Supplement.

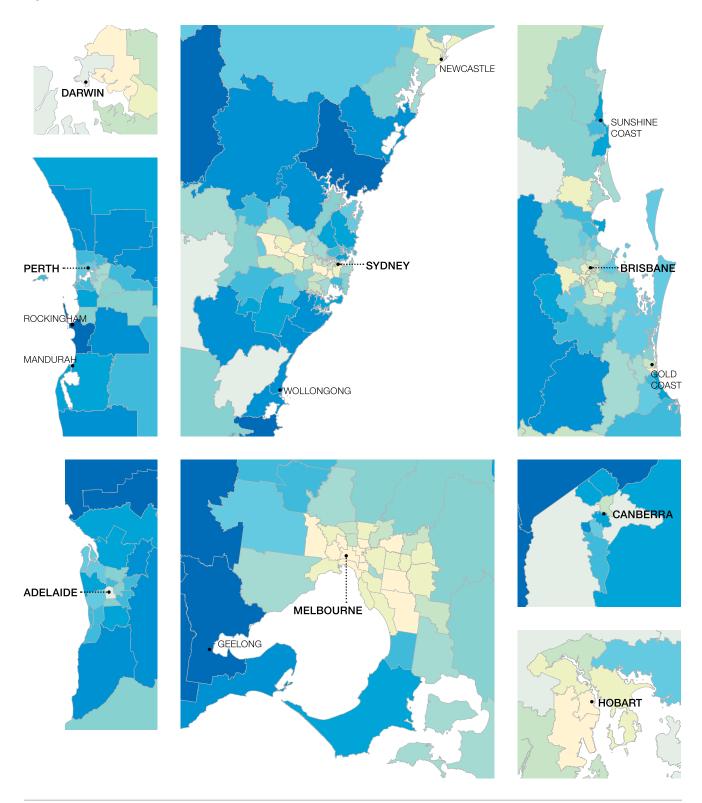
Sources: National Health Performance Authority analysis of Admitted Patient Care National Minimum Data Set 2012–13 (data supplied 09/04/2014) and Australian Bureau of Statistics Estimated Resident Population 30 June 2013.

Figure 49: Number of tonsillectomy admissions to hospital per 100,000 people aged 17 years and under, age standardised, by local area, 2012–13



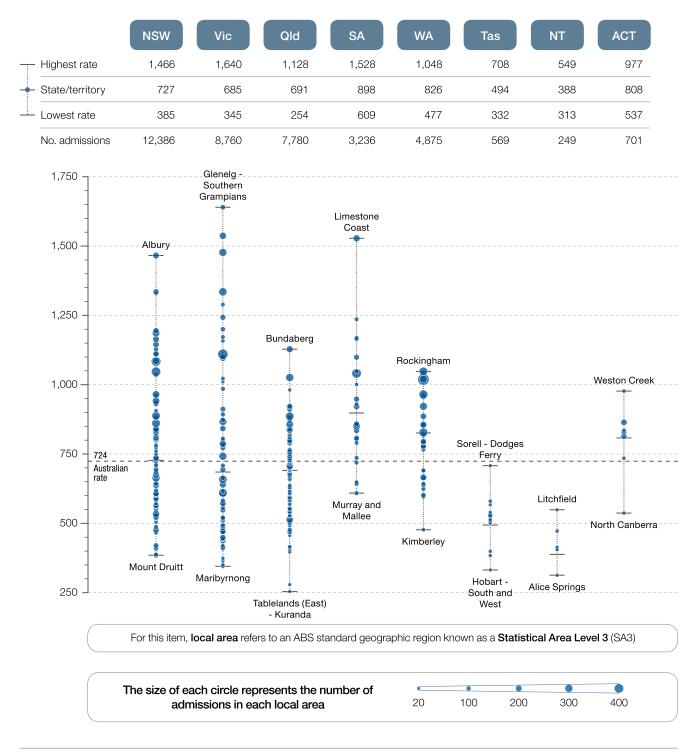
Sources: National Health Performance Authority analysis of Admitted Patient Care National Minimum Data Set 2012–13 (data supplied 09/04/2014) and Australian Bureau of Statistics Estimated Resident Population 30 June 2013.

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Sources: National Health Performance Authority analysis of Admitted Patient Care National Minimum Data Set 2012–13 (data supplied 09/04/2014) and Australian Bureau of Statistics Estimated Resident Population 30 June 2013.

### Figure 50: Number of tonsillectomy admissions to hospital per 100,000 people aged 17 years and under, age standardised, by local area, state and territory, 2012–13



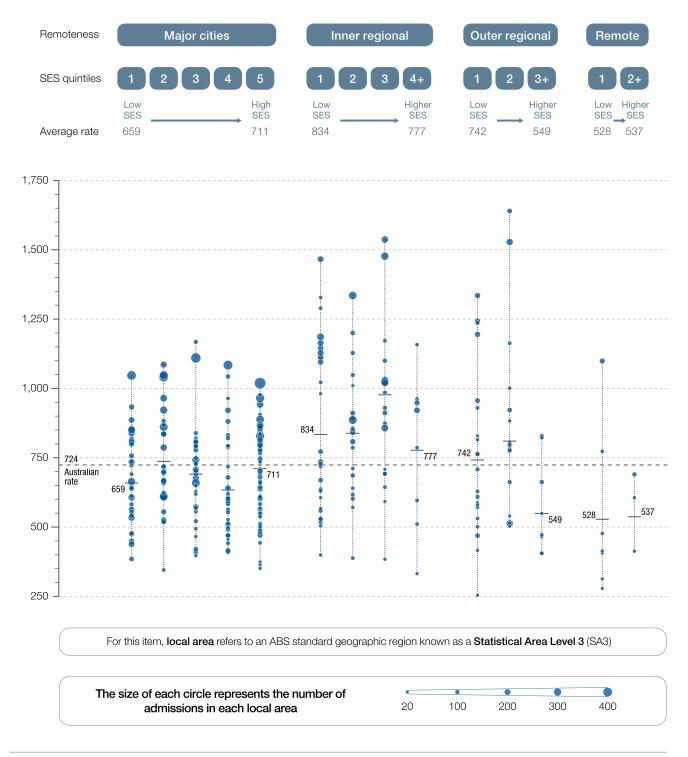
#### Notes:

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 admissions and people in the geographic area.

Sources: National Health Performance Authority analysis of Admitted Patient Care National Minimum Data Set 2012–13 (data supplied 09/04/2014) and Australian Bureau of Statistics Estimated Resident Population 30 June 2013.

### Figure 51: Number of tonsillectomy admissions to hospital per 100,000 people aged 17 years and under, age standardised, by local area, remoteness and socioeconomic status (SES), 2012–13



#### 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 admissions and people in Australia.

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

Sources: National Health Performance Authority analysis of Admitted Patient Care National Minimum Data Set 2012–13 (data supplied 09/04/2014) and Australian Bureau of Statistics Estimated Resident Population 30 June 2013.

#### Resources

- Paediatrics & Child Health Division of the Royal Australasian College of Physicians and the Australian Society of Otolaryngology, Head and Neck Surgery. *Indications for Tonsillectomy and Adenotonsillectomy in Children – A joint position paper.* 2008. Available at: www.kidshealth.org. nz/sites/kidshealth/files/pdfs/Final\_approved\_ Tonsillectomy\_document-3.pdf.
- National Institute for Health and Care Excellence. *Commissioning guide: Tonsillectomy.* 2013. Available at: www.rcseng.ac.uk/healthcarebodies/docs/published-guides/tonsillectomy.

<sup>1</sup> Scottish Intercollegiate Guidelines Network. Management of sore throat and indications for tonsillectomy. A national clinical guideline. Edinburgh: SIGN, 2010.

<sup>2</sup> Paediatrics & Child Health Division of the Royal Australasian College of Physicians and The Australian Society of Otolaryngology, Head and Neck Surgery. Indications for Tonsillectomy and Adenotonsillectomy in Children – A joint position paper. Sydney: RACP, ASOHNS, 2008.

<sup>3</sup> Australian Institute of Health and Welfare. Australia's hospitals 2013–14: at a glance. Health services Series no. 61. Cat. no. HSE 157. Canberra: AIHW, 2015.