3.7 Myringotomy hospital admissions 17 years and under

Context

This data item examines hospital admissions for myringotomy 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.

Myringotomy is a surgical intervention used to treat otitis media, which is inflammation and infection of the middle ear. Otitis media with effusion (fluid in the middle ear space) is a common condition of early childhood and can cause hearing impairment. It is usually transient and self-limiting over several weeks, but may be more persistent and lead to educational, language and behavioural problems.

In most instances of uncomplicated otitis media with effusion, no intervention is needed because the fluid clears spontaneously and hearing recovers. Children experiencing recurrent symptoms may undergo surgical intervention. This involves a small incision into a membrane in the ear to release fluid (myringotomy), and/or the insertion of ventilation tubes (grommets) to assist with drainage.

Surgical intervention should be considered for children:

• with persistent bilateral otitis media with effusion for more than three months with a moderate to severe conductive hearing loss
• who are at increased risk of speech, language or learning problems from otitis media because of baseline sensory, physical, cognitive or behavioural factors.
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Magnitude of variation

In 2012–13, there were 34,065 myringotomy admissions to hospital, representing 621 admissions per 100,000 people aged 17 years and under (the Australian rate).

The number of myringotomy admissions to hospital across 308* local areas (SA3s) ranged from 205 to 1,398 per 100,000 people aged 17 years and under. The number of admissions was 6.8 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 384 per 100,000 people aged 17 years and under in the Northern Territory, to 1,046 in South Australia.

After excluding the highest and lowest results, the myringotomy hospital admission rate across the 281 remaining local areas was 3.3 times higher in one local area compared to another.

There was a correlation between higher rates of myringotomies and higher socioeconomic status. This was seen in metropolitan, inner regional and remote areas, but was reversed in outer regional areas, which also had lower rates of surgery than other remote categories.

Interpretation

Potential reasons for the variation include differences in:

- the influence of the private and public sectors on rates of myringotomy
- the distribution of Indigenous people and their access to targeted ear health services. Despite more cases of otitis media in Aboriginal and Torres Strait Islander peoples, rates of myringotomy in Indigenous children aged under four are about one-third lower than in non-Indigenous children in NSW.
- public hospital elective surgery waiting times for myringotomy.

To explore the variation in admissions, further analysis could focus on:

- the influence of the private and public sectors on rates of myringotomy admissions
- the rates of admission for Indigenous children.

*There are 333 SA3s. For this item, data were suppressed for 25 SA3s. This is because of confidentiality requirements given the small numbers of admissions in these areas.
Figure 52: Number of myringotomy admissions to hospital per 100,000 people aged 17 years and under, age standardised, by local area, 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.
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.


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<th>Local area</th>
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<th>Rate</th>
<th>Admissions</th>
<th>Local area</th>
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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).
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For more technical information please refer to the Technical Supplement.

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Figure 53: Number of myringotomy admissions to hospital per 100,000 people aged 17 years and under, age standardised, by local area, 2012–13

The number of myringotomy admissions to hospital across 308 local areas (SA3s) ranged from 205 to 1,398 per 100,000 people aged 17 years and under. The number of admissions was 6.8 times higher in the area with the highest rate compared to the area with the lowest rate.

Myringotomy hospital admissions 17 years and under

Figure 54: Number of myringotomy admissions to hospital per 100,000 people aged 17 years and under, age standardised, by local area, state and territory, 2012–13

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<thead>
<tr>
<th>State/territory</th>
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<th>Qld</th>
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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:

For this item, local area refers to an ABS standard geographic region known as a Statistical Area Level 3 (SA3)

The size of each circle represents the number of admissions in each local area

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.

Figure 55: **Number of myringotomy 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

For this item, **local area** refers to an ABS standard geographic region known as a **Statistical Area Level 3 (SA3)**

The size of each circle represents the number of admissions in each local area.
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Resources


