



7.16 Variation in health care provision

The use of health care can vary according to where people live. Understanding variation across geographic areas is important to improve the quality, appropriateness and value of health care provided to patients. In 2017, the Australian Commission on Safety and Quality in Health Care (the Commission), in collaboration with the AIHW, published 'The second Australian atlas of healthcare variation' (the Atlas) (ACSQHC & AIHW 2017). The Atlas showed variation in health care use, depending on where people live.

Why measure variation in health care provision?

Some variation in health care use is to be expected. It can be associated with differences in patients' health or personal preferences for treatment. However, in certain cases, some people may receive inappropriate or unnecessary care, while others may miss out on care that might be beneficial (unwarranted variation). Unwarranted variation may indicate:

- the need to deliver services more fairly based on patient need
- the need for patients to have better information on their options and on the likely benefits and harms of a particular treatment
- gaps in accessible evidence for clinicians and the need for evidence-based guidelines or clinical care standards
- the need for changes in clinical training
- the need to review whether financial incentives could be changed to encourage more appropriate care (ACSQHC & AIHW 2017).

Tackling unwarranted variation can help to improve the quality of health care. Measuring it is the first step.

Information on unwarranted health care variation—such as presented in the Atlas series—can stimulate further awareness and investigation of the variation, and can be used to promote strategies to reduce unwarranted variation. For example, in response to the Atlas series:

- states and territories and professional bodies have instigated quality improvement initiatives (for example, changes to clinical care models, development of further training for health professionals, and updating of clinical guidelines)
- the Commission has developed clinical care standards to promote appropriate care (for example, the 'Heavy menstrual bleeding clinical care standard') (ACSQHC 2017a)
- health services accredited under the National Safety and Quality Health Service Standards (ACSQHC 2017b) will be required to monitor and review clinical variation from 2019 onwards.



Variation in the rates of selected health care

The Atlas included indicators for surgical interventions, women's health and maternity, chronic disease and infection, and cardiovascular conditions. Some summary findings are provided in this snapshot, and rates for hysterectomy are presented in more detail.

For example, the Atlas found that:

- the rate of hospitalisation for endometrial ablation (used to treat heavy menstrual bleeding) was 21 times as high in the Statistical Area Level 3 (SA3) with the highest rate compared with the SA3 with the lowest rate
- the rate of hospitalisation for lumbar spinal decompression (used to treat degeneration of the spinal joints) was 5.2 times as high in the SA3 with the highest rate compared with the SA3 with the lowest rate
- the rate for third or fourth degree perineal tears (tears of the skin and other tissues mainly during childbirth) per 1,000 vaginal births was 12 times as high in the SA3 with the highest rate compared to the SA3 with the lowest rate.

All rates are based on the population living in the area.

Hysterectomy

Hysterectomy, or the surgical removal of the womb (uterus), is a major surgical procedure commonly used to treat heavy menstrual bleeding. The Atlas examined rates of hysterectomy across Australia, excluding hysterectomies due to cancer. It found a 6.6-fold difference between the lowest and highest rate of hysterectomy between SA3s (Figure 7.16.1). Overall, rates were higher in *Inner regional* and *Outer regional* areas compared with *Major cities* or *Remote and Very remote* areas. The rate of hysterectomy for Aboriginal and Torres Strait Islander females was about 10% lower than the rate for other females.

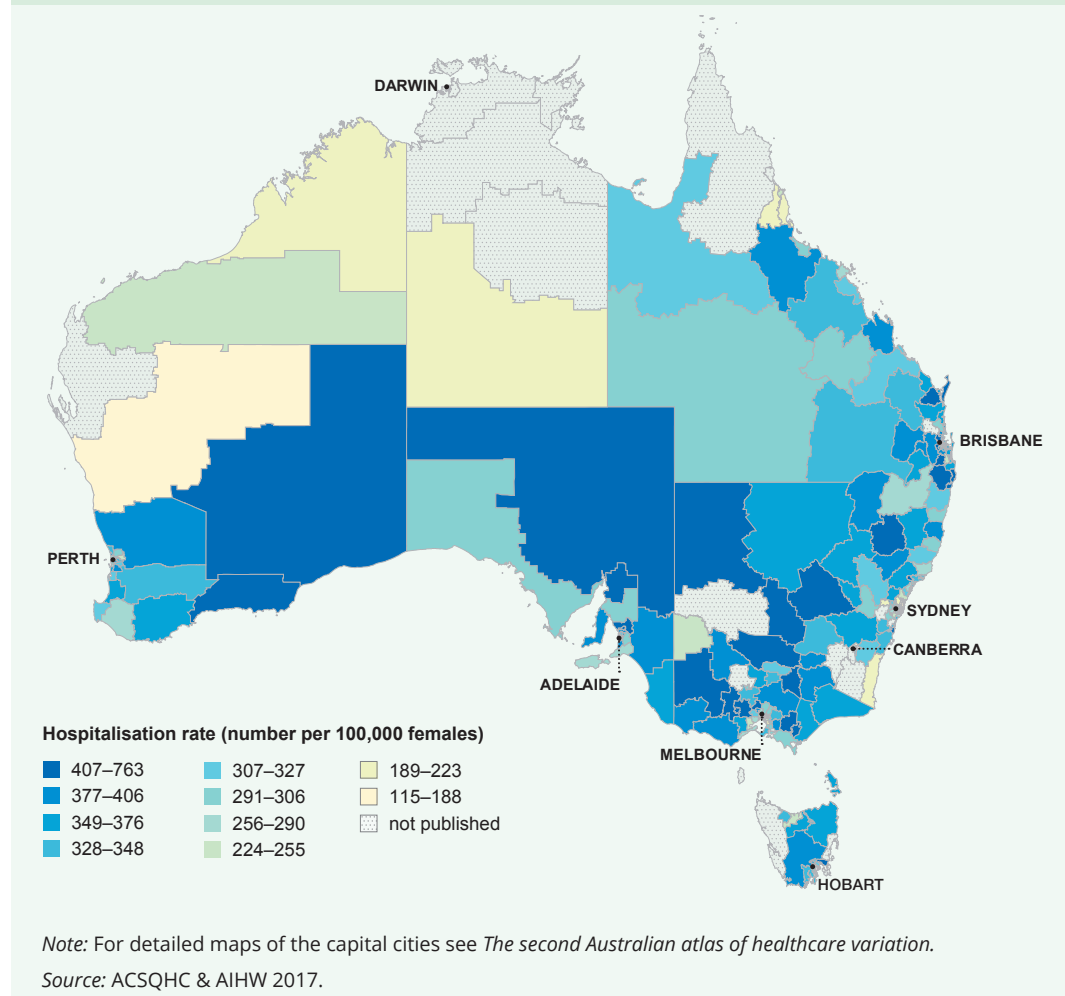
Potential reasons for the variation, outlined in the Atlas, include differences in:

- patient education and awareness of treatment options
- patient preferences
- clinician awareness of the guidelines for the management of heavy menstrual bleeding
- access to primary care services
- private health insurance coverage.

Improving access to less invasive treatments, such as pharmaceutical treatments and endometrial ablation, may help some adolescents and women avoid the need for hysterectomy.



Figure 7.16.1: Age-standardised hospitalisation rate for hysterectomy, females aged 15 and over, by SA3, 2014–15



What is the AIHW doing?

One of the key challenges in examining health care variation relates to the configuration of Australia's health data collections. Information about health care is recorded in a range of different collections, which can make it difficult to accurately monitor the care provided to patients. The AIHW, in collaboration with jurisdictions, is working to improve the integration of health services data—for example, routine linkage (for statistical purposes) of data for hospitals, Medicare Benefits Schedule, Pharmaceutical Benefits Scheme, residential aged care, and deaths—which will provide a better understanding of health care delivery and outcomes in the future.



What is missing from the picture?

The data in the Atlas series provide an overarching picture of health care variation. Further investigation of factors that may explain some of the variation—such as disease prevalence or differing supply of health professionals across Australia—can be informative and has already been conducted by some jurisdictions and/or service providers in response to the Atlas series. The Atlas series focuses on a relatively small number of types of health care, sometimes depending on data availability. Analysis of variation, such as this, is potentially possible for a wide range of health services.

Understanding the outcomes for patients who have received health care—for example, patient-reported wellbeing or post-surgery outcomes—is also a key factor when considering variation. Improved collection and integration of outcome data at a national level will enhance the understanding of health care variation in the future.

Where do I go for more information?

More information on health care variation is available in *The first Australian atlas of healthcare variation* and *The second Australian atlas of healthcare variation*.

The AIHW also publishes a range of data on health care variation across geographical areas, such as *Cancer screening in Australia*.

References

- ACSQHC (Australian Commission on Safety and Quality in Health Care) 2017a. Heavy Menstrual Bleeding Clinical Care Standard. Sydney: ACSQHC. Viewed 29 November 2018, <<https://www.safetyandquality.gov.au/publications/heavy-menstrual-bleeding-clinical-care-standard/>>.
- ACSQHC 2017b. National Safety and Quality Health Service Standards. 2nd edn. Sydney: ACSQHC.
- ACSQHC & AIHW (Australian Institute of Health and Welfare) 2017. The second Australian atlas of healthcare variation. Sydney: ACSQHC.