Chapter 6
Response to the Atlas series

The aim of the *Australian Atlas of Healthcare Variation* series (the Atlas series) is to provide clinically meaningful information that can be used to investigate and improve the appropriateness, effectiveness and efficiency of health care in Australia. The first and second Atlases were published relatively recently (2015 and 2017, respectively), and implementing changes in complex systems takes time. The Commission will provide future updates to evaluate progress in the clinical areas examined in the Atlas series.

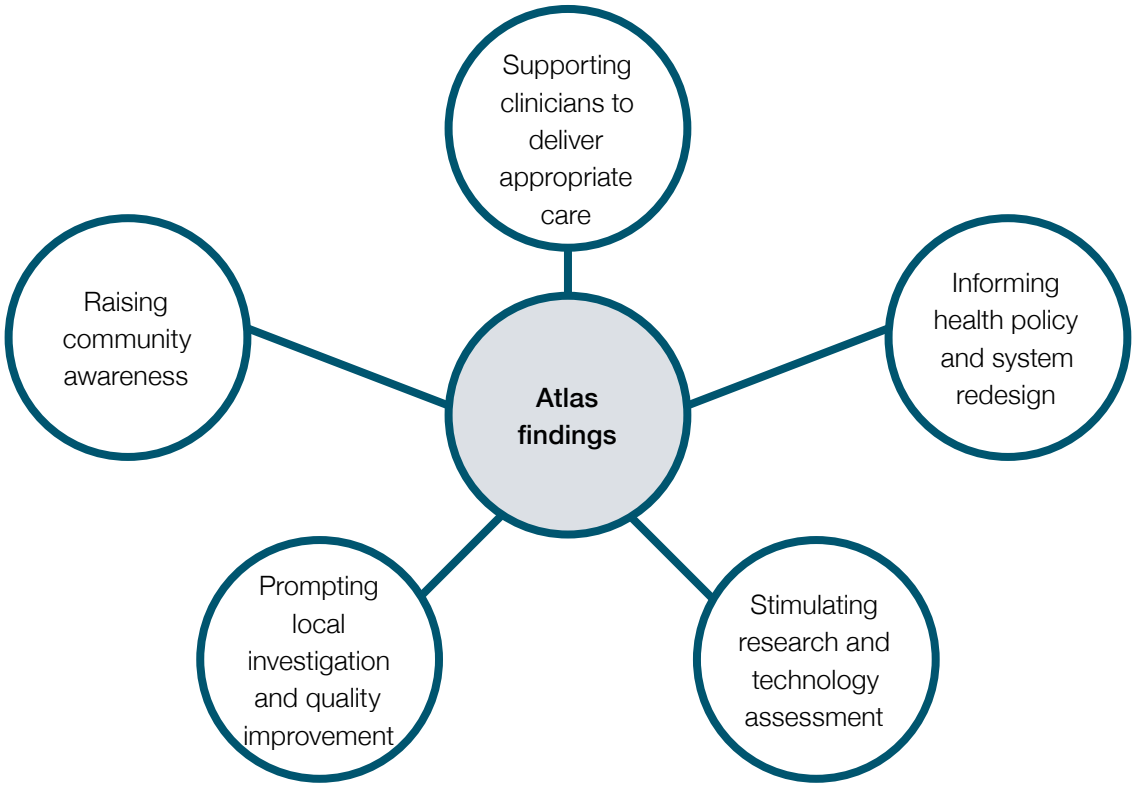
Mapping data is only the first step in using data on clinical variation for quality improvement. Translating the information in the Atlas series into better patient care and outcomes also depends on:

- Raising awareness of how to use data on variation to improve health care
- Building capacity for data collection and audit into clinical practice
- Engaging clinicians, policymakers and system managers to investigate reasons for variation and to address unwarranted variation
- Raising awareness among consumers of risks and benefits of healthcare interventions
- Implementing appropriate change at all relevant levels of the health system.

Figure 6.1 illustrates how the Atlas series can improve the value of healthcare delivery.

Response to the Atlas series

Figure 6.1: Channels of influence for the *Australian Atlas of Healthcare Variation* series



Raising awareness

Media reporting of the Atlas findings played an important role in communicating the findings. It also brought discussions about variation and improving appropriateness of care into the mainstream. Atlas findings were featured in more than 70 print media stories, with a total audience of more than 4 million, and more than 15 articles in medical journals. The Atlas also generated more than 15,000 website hits and 120,000 Twitter impressions.

Clinician engagement

Clinicians have been central to the development of the Atlas series, leading the analysis of Atlas findings and development of recommendations to improve appropriateness of care. This strong engagement with clinicians is reflected in the many statements of support for the Atlases from clinical colleges and societies. Atlas data have also been presented at national educational meetings of clinician groups.

Health services to monitor clinical variation at a local level

The value of monitoring clinical variation is now reflected in the National Safety and Quality Health Service Standards (second edition), effective in 2019.[1] The Clinical Governance Standard ensures that patients and consumers receive safe and high-quality health care. Action 1.28 of this standard requires health services to have systems in place to monitor and respond to variation in clinical care.

Health sector responses

State and territory health departments have been important partners in both developing and responding to the Atlas series. Some states of Australia have been investigating and addressing clinical variation for many years, whereas others have started using this approach in quality improvement more recently. However, the Atlas is the first national-level report series of its kind, and provides states and territories with a unique perspective for assessing variation.

Changes in the health system are usually the result of the accumulated efforts of many players over many years, rather than a single intervention such as the Atlas series. Table 6.2 gives examples of how different groups within the health sector have addressed issues highlighted in the first and second Atlases, in the context of the many other organisations working to improve health care in Australia.

Table 6.2: Example initiatives to address unwarranted variation in Atlas topics

Medicines for psychiatric conditions
• Clinicians and consumers developed strategies to reduce use of antipsychotic medicines in older people at a Commission-led meeting
• Tasmanian health services led improvements in prescribing through new mental health pathways, as well as education and audits (see 'Case study: State response to high rates of psychotropic medicines use', page 294)
• ACT Health implemented mental health pathways with general practitioners to reduce unnecessary prescribing of antidepressants
• The Royal Australian and New Zealand College of Psychiatrists has produced updated clinical practice guidelines on the management of mood disorders (depressive and bipolar disorders), schizophrenia and anxiety disorders, to provide greater clarity about treatment options and when medication is appropriate
• Paediatricians are researching reasons for variation in prescribing medicines for attention deficit hyperactivity disorder, and antidepressants and antipsychotic medicines for children (see 'Case study: Studying reasons for variation in use of attention deficit hyperactivity disorder medicines, page 295)
• The National Safety and Quality Health Service Standards (second edition) requires the use of antipsychotics and other psychoactive medicines to be in accordance with best practice and legislation[1]

Knee arthroscopy
• The Medicare Benefits Schedule (MBS) Review Taskforce used Atlas data on knee arthroscopy to guide its review
• The Commission released the Osteoarthritis of the Knee Clinical Care Standard[2] (see 'Case study: Falling rates of knee arthroscopy in people aged 55 years and over', page 296)

Potentially preventable hospitalisations
• The Queensland Clinical Senate held a meeting to discuss the Atlas findings and strategies to reduce potentially preventable hospitalisations[3]
• The Northern Territory Clinical Senate discussed Atlas findings at its inaugural meeting

Colonoscopy
• The MBS Review Taskforce used Atlas data on colonoscopy to guide its review

Hysterectomy
• The Commission released the Heavy Menstrual Bleeding Clinical Care Standard[4]

Caesarean section
• The Australian Institute of Health and Welfare adopted the Robson classification for reporting data on caesarean sections, as recommended in the first Atlas. Data reported using this system allow comparison of rates of caesarean section between groups with the same obstetric and neonatal risk factors. This makes it easier to see where variation in rates is likely to be due to differences in clinical practice rather than patient characteristics.

Response to the Atlas series

Case study: State response to high rates of psychotropic medicines use

Several areas of Tasmania were among the highest users in Australia of anxiety and depression medicines in the first Atlas, and Hobart–North West had more than double the national average rate of use of anxiety medicines.[5] Differences in rates of anxiety and depression in the population did not account for these high rates. A lack of awareness of, and access to, non-medicine treatment for mental illnesses was thought to be a potential problem.

Primary Health Tasmania undertook a comprehensive needs assessment to gain a deeper understanding of the Atlas findings, and to see how resources to support optimal treatment of anxiety and depression could best be used. Staff from Primary Health Tasmania collaborated with other clinicians, including the Chief Psychiatrist, and consulted with the Chief Pharmacist, to look more closely at treatment of mental illnesses in different parts of Tasmania.

Primary Health Tasmania, together with the Tasmanian Health Service and the Department of Health and Human Services, took a multi-pronged approach to improving the quality of clinical care.

Quality improvement initiatives included:

- Auditing practice data
- Having conversations with clinicians in target areas and providing peer support to improve practice
- Developing deprescribing resources and training clinicians in their use
- Developing and promoting Tasmanian Health Pathways for mental health.

The team assessed the availability of mental health services in different areas of Tasmania, and increased access where gaps were found. The team increased access to face-to-face social work and psychology supports, promoted consumer self-management tools for depression and anxiety, and increased the use of GP Mental Health Treatment Plans.

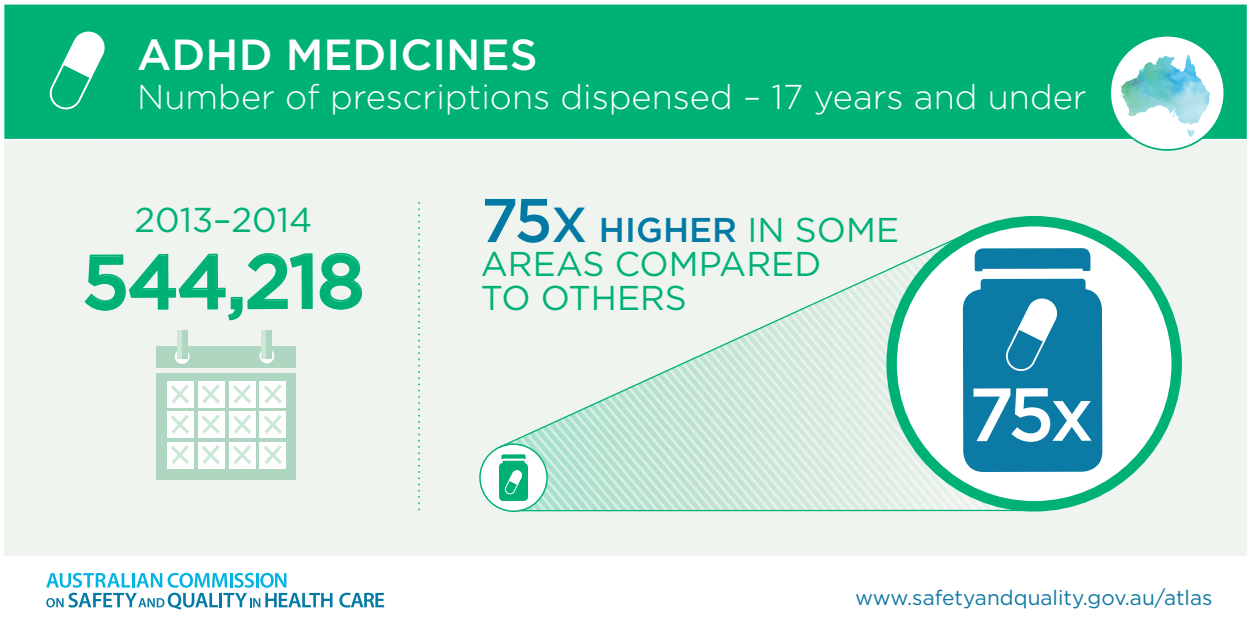
Primary Health Tasmania is continuing to explore local management of other illnesses examined in the Atlas, such as diabetes.

Case study: Studying reasons for variation in use of attention deficit hyperactivity disorder medicines

In the first Atlas, the rate of prescriptions for attention deficit hyperactivity disorder (ADHD) medicines varied more than any other item examined in the Atlas series, with 75-fold variation between the lowest and highest rates in Australia.[5] (Figure 6.3). These data prompted research into the underlying reasons for variation, led by Professor Harriet Hiscock, Director, Health Services Research Unit, Royal Children's Hospital, Melbourne, and researcher at the Centre for Community Child Health, Murdoch Children's Research Institute.

Professor Hiscock studied the mismatch between estimated rates of ADHD and prescriptions for ADHD medicines. She concluded that some children were missing out and some may have been over-treated. In 2018 and 2019, Professor Hiscock and her team are analysing variation in the number of ADHD medicines prescriptions, dosages and costs across states. Through a grant from the National Health and Medical Research Council, the team is looking at factors associated with a lack of Medicare Benefits Schedule (MBS)-related care for children with high levels of behavioural and emotional problems – that is, identifying which groups of children are missing out on general practitioner, allied health, psychology, paediatrician or psychiatry care. The project is also investigating whether variation in care is associated with poorer quality of life for children, and what can be done from a clinician and patient perspective to improve access to care. According to Professor Hiscock, the Atlas contributed to securing funding in this area and encouraged a multidisciplinary research approach, bringing together paediatricians, psychiatrists, psychologists, health economists and qualitative researchers.

Figure 6.3: PBS dispensing of medicines for attention deficit hyperactivity disorder in Australia, people aged 17 years and under, 2013–14



Source: First *Australian Atlas of Healthcare Variation*[5]

Response to the Atlas series

Case study: Falling rates of knee arthroscopy in people aged 55 years and over

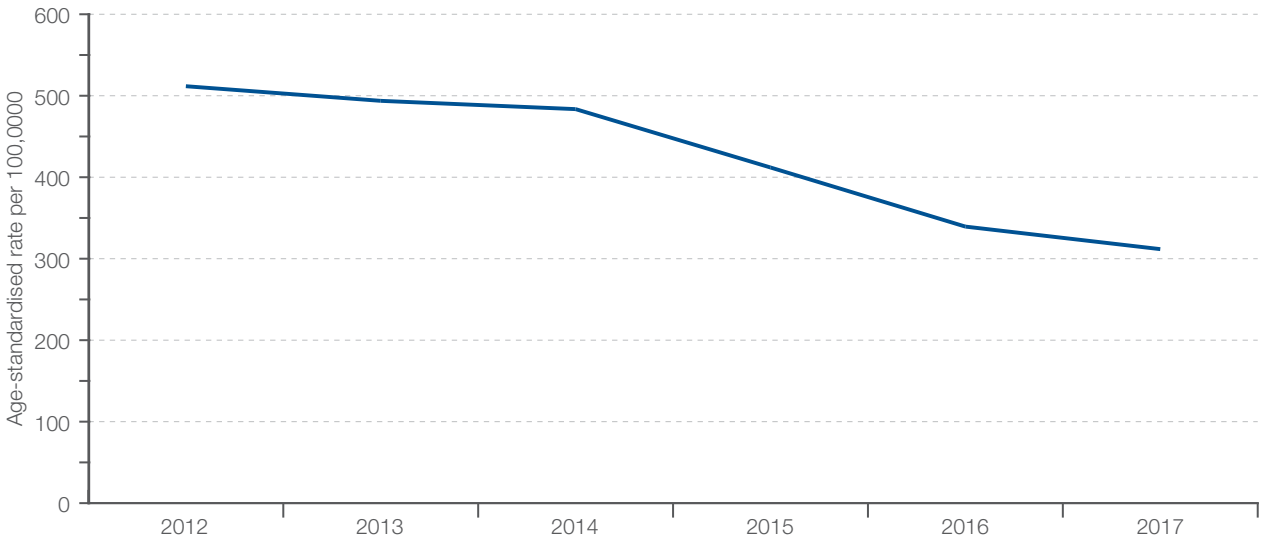
Knee arthroscopy is a surgical procedure for examining the inside of the knee joint and, if necessary, repairing it. Arthroscopic procedures are not effective for treating knee osteoarthritis.[6,7] In older patients with knee pain caused by osteoarthritis or degenerative meniscal changes, arthroscopic procedures provide only minor pain relief, which is offset by an increased risk of harm, when compared with conservative management.[8] Exercise therapy is more effective than knee arthroscopy for reducing osteoarthritic knee pain.[9]

In 2015, the first Atlas reported that there were more than 33,000 admissions for knee arthroscopy in people aged 55 years and over in Australia in 2012–13.[5] The rate of admissions was seven times higher in the area with the highest rate compared with the area with the lowest rate.[5]

In light of the Atlas findings, the Commission released a clinical care standard for osteoarthritis of the knee[2] and commissioned a documentary about appropriate care for knee pain. The Commission also referred the findings to the MBS Review Taskforce, which subsequently recommended removal of funding for knee arthroscopy for degenerative changes.

The rate of knee arthroscopy in people aged 55 years and over in Australia fell from 412 per 100,000 in 2015 to 312 per 100,000 in 2017 – a 24% drop (Figure 6.4).[10] Many drivers are likely to have contributed to this reduction, in addition to the Atlas – for example, research and guidelines highlighting the lack of benefit of knee arthroscopy for osteoarthritis, and the MBS Review Taskforce review.[8,11]

Figure 6.4: Rate of knee arthroscopy in people aged 55 years and over, Australia, 2012–2017



Source: Australian Commission on Safety and Quality in Health Care analysis of MBS data, 2018, item codes 49566, 49563, 49561, 49560, 49559, 49558, 49557[10]

References

1. Australian Commission on Safety and Quality in Health Care. National Safety and Quality Health Service Standards (second edition). Sydney: ACSQHC; 2017.
2. Australian Commission on Safety and Quality in Health Care. Osteoarthritis of the Knee Clinical Care Standard. Sydney: ACSQHC; 2017.
3. Queensland Clinical Senate. Dare to compare: reducing unwarranted variation for potentially preventable hospitalisations. Brisbane: Queensland Health; 2018.
4. Australian Commission on Safety and Quality in Health Care. Heavy Menstrual Bleeding Clinical Care Standard. Sydney: ACSQHC; 2017.
5. Australian Commission on Safety and Quality in Health Care. Australian atlas of healthcare variation. Sydney: ACSQHC; 2015.
6. National Institute for Health and Care Excellence. Osteoarthritis: care and management in adults. Clinical Management Guideline 177. London: NICE; 2014.
7. Moseley JB, O'Malley K, Petersen NJ, Menke TJ, Brody BA, Kuykendall DH, et al. A controlled trial of arthroscopic surgery for osteoarthritis of the knee. N Engl J Med 2002;347(2):81–8.
8. Thorlund JB, Juhl CB, Roos EM, Lohmander LS. Arthroscopic surgery for degenerative knee: systematic review and meta-analysis of benefits and harms. BMJ 2015;350:h2747.
9. Ackerman IN, Osborne RH. Obesity and increased burden of hip and knee joint disease in Australia: results from a national survey. BMC Musculoskelet Disord 2012;13:254.
10. Australian Government Department of Human Services. Medicare items 49566, 49563, 49561, 49560, 49559, 49558, 49557 processed from January 2012 to December 2017, per capita [Internet]. Canberra: Medicare Australia; 2018 [cited 2017 6 Dec]. Available from: http://medicarestatistics.humanservices.gov.au/statistics/mbs_item.jsp
11. Australian Knee Society, Australian Orthopaedic Association. Position statement from the Australian Knee Society on arthroscopic surgery of the knee, including reference to the presence of osteoarthritis or degenerative joint disease. Australian Knee Society; 2016. www.kneesociety.org.au