

# Key findings and recommendations

When variation in healthcare use reflects differences in the clinical needs or preferences of the people receiving care, it is warranted and means that the healthcare system is appropriately responding to population need. But some of the patterns of care in this Atlas, and the high rates of use of some treatments, suggest that greater attention needs to be paid to matching health care to people's needs to ensure appropriate care.

This Fourth Australian Atlas of Healthcare Variation shows that there is an opportunity to improve healthcare delivery to ensure that the best care is available to everybody, regardless of where they live. The Atlas also shows that we need to do better with data availability so that we can gain a comprehensive picture of the patterns of healthcare use in Australia and improve the value obtained from our healthcare system. This section presents the key findings from the Atlas, and the Australian Commission on Safety and Quality in Health Care (the Commission)'s recommendations for action. The Commission consulted widely, but is solely responsible for making the recommendations; as such, the recommendations may not reflect the views of all contributors to the Atlas.

# Key findings and recommendations

## 1. Early planned births

Planned birth by caesarean section or induction (a medical treatment to start labour) is an important intervention in maternity care. However, the timing of birth should be carefully considered to ensure the best outcome for the mother and her baby.

When planning for birth by caesarean section or induction of labour, waiting until at least 39 weeks gestation results in better short- and long-term outcomes for the baby, unless there are medical or obstetric reasons for earlier birth. Short-term risks, such as respiratory problems and admission to neonatal intensive care, are higher for babies born at early term (by caesarean section or induction of labour) rather than full term.<sup>1-4</sup> There is also some evidence of longer-term risks in children born before 39 weeks gestation (either vaginally or by caesarean section) compared with those born at full term, such as cognitive deficits and a higher risk of attention deficit hyperactivity disorder (ADHD).<sup>5</sup>

Despite a number of data limitations (see page 49), the estimates presented in this chapter suggest that the percentage of caesarean sections performed before 39 weeks without a medical or obstetric indication may be substantial, and action is needed to reduce these rates.

Strategies to reduce rates of early planned birth without a medical or obstetric indication before 39 weeks gestation include:

- Changing policies of state and territory governments, hospitals and insurers to stop booking of early planned births without a medical or obstetric indication
- Giving parents information about the risks and benefits of early planned birth, and support for shared decision making
- Giving clinicians information about the risks and benefits of early planned birth
- Collecting data on the reason for early planned birth.

Gestational age	Range of state and territory rates* for caesarean sections without a medical or obstetric indication, as a percentage of all caesarean sections at these gestational ages, 2017
<37 weeks	13.3–19.3%
<38 weeks	24.8–32.7%
<39 weeks	42.8–56.1%

\* Excludes Northern Territory

Gestational age	Range of state and territory rates* for induction of labour without a medical or obstetric indication, as a percentage of all inductions at this gestational age
<39 weeks	0.2–6.0%

\* Excludes New South Wales and the Northern Territory

## Recommendations

- 1a. It is recommended that pregnancies continue until at least 39 weeks gestation unless there is a medical or obstetric reason justifying earlier intervention.

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- 1b. Health service organisations with maternity services, and clinicians, to implement systems to obtain informed patient consent that includes the provision of comparative information for prospective parents on the short- and long-term risks of early planned birth without a medical or obstetric indication.

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- 1c. Health service organisations with maternity services to establish policies to cease booking planned births without a medical or obstetric indication before 39 weeks from July 2022 and to review adherence to these policies.

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- 1d. Medicare Benefits Schedule payment for planned births before 39 weeks without a medical or obstetric indication to cease from July 2022.

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- 1e. Health service organisations with maternity services, and clinicians, to ensure that care is consistent with The Whole Nine Months<sup>6</sup> campaign.

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- 1f. The Australian Institute of Health and Welfare (AIHW) to prioritise the development of the indicator on early caesarean section without a medical or obstetric indication in the National Core Maternity Indicators, including the need for a data element on the reason for early birth.

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- 1g. All state and territory health departments to ensure consistent, routine collection and reporting of data on gestational age for planned births without a medical or obstetric indication to improve the quality of data collections. This should include reporting of gestational age in days to allow more in-depth understanding of the distribution of births occurring before 39 weeks.

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- 1h. Health service organisations with maternity services to:

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  - i. Report early planned births without a medical or obstetric indication as part of mandatory reporting of National Core Maternity Indicators

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  - ii. Conduct audits of records documenting the communication of information to prospective parents about the risks of early planned births without a medical or obstetric indication, and provide the results back to clinicians to act upon, in line with Action 1.28 of the National Safety and Quality Health Service Standards

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  - iii. Incorporate individual clinicians audit data as part of re-credentialing processes

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  - iv. Report on agreed key performance indicators, trends and adverse events on early planned births without a medical or obstetric indication to the governing body.

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- 1i. Short- and long-term risks arising from early planned birth without a medical or obstetric indication are avoidable. The Commission to include early caesarean section without a medical or obstetric indication in the national list of hospital-acquired complications.

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# Key findings and recommendations

## 2. Chronic disease and infection: potentially preventable hospitalisations

Potentially preventable hospitalisations are an indicator in the National Healthcare Agreement, and include hospitalisations that may have been prevented by appropriate management earlier in the disease. The rate of potentially preventable hospitalisations in a local area is likely to reflect sociodemographic factors as well as the quality of early disease management.<sup>7</sup>

More than 330,000 potentially preventable hospitalisations in Australia in 2017–18 were due to the five conditions examined in this chapter: chronic obstructive pulmonary disease (COPD), kidney infections and urinary tract infections (UTIs), heart failure, cellulitis, and diabetes complications.<sup>8</sup> After standardising to remove age and sex differences between populations, substantial variation was observed between local areas (Statistical Area Level 3 – SA3) in the rates of hospitalisation for each condition. Variation was greatest for COPD (the highest rate was about 18 times higher than the lowest), cellulitis (about 16 times) and diabetes complications (about 12 times). For all the conditions examined, hospitalisation rates were higher among Aboriginal and Torres Strait Islander people, people living in areas of socioeconomic disadvantage, and those living in remote areas.

The high hospitalisation rates and substantial variation reported in this chapter show that recommended care is not always provided for people with chronic conditions. Even with the significant funding provided through Medicare to better coordinate primary care for people with chronic diseases, fragmented health care contributes to suboptimal management.

Likely contributors to variation include a higher proportion in some areas of patients with the most complex chronic disease, for whom hospitalisation may be inevitable. Poor access to health services in the community is also related to higher rates of potentially preventable hospitalisations. Ability to access health services is determined not only by clinician supply, but also by costs, transport and sufficient health literacy to know when to seek care.

Healthcare investment must be redirected to create a better-integrated primary care system to reduce potentially preventable hospitalisations. Critically, health systems also need to become better at reducing the progression of chronic disease and improving patients' quality of life.

Data item	Range across local areas* per 100,000	Times difference	Times difference excluding top and bottom 10%	Number during 2017–18
2.1 Chronic obstructive pulmonary disease (COPD)	56 – 1,013	18.1	3.3	77,754
2.2 Heart failure	91 – 531	5.8	2.0	62,554
2.3 Diabetes complications	64 – 782	12.2	2.9	50,273
2.4 Kidney infections and urinary tract infections	141 – 893	6.3	2.3	76,854
2.5 Cellulitis	90 – 1,393	15.5	2.9	68,663

\* Statistical Area Level 3

## Recommendations

2a. Consistent with the commitments made under the National Health Reform Agreement and building on the activities set out in the 2017 Bilateral Agreement on Coordinated Care, Local Hospital Networks, Primary Health Networks and the Aboriginal Community Controlled Health Service sector to implement the following principles in developing chronic disease management programs consistent with the National Strategic Framework for Chronic Conditions:

- i. Patients, families and carers as partners in care, where patients are activated to maximise their knowledge, skills and confidence to manage their health, aided by technology and with the support of a healthcare team
- ii. A risk stratification approach that supports identification of patients with high coordination and multiple provider needs, to ensure personalisation of service provision
- iii. Flexible service delivery and team-based care that supports integrated patient care across the continuum of the health system through shared information and care planning
- iv. A commitment to care that is of high quality and safe, including care planning and clinical decisions that are guided by evidence-based patient healthcare pathways, appropriate to the patient's needs
- v. Data collection and sharing by patients and their healthcare teams to measure patient health outcomes and improve performance.

2b. The Commission, the Independent Hospital Pricing Authority and the Administrator of the National Health Funding Pool to identify and develop alternative approaches to funding for chronic disease and infection that could be applied to the National Health Reform Agreement Pricing and Funding model so that pricing and funding are aligned with best-practice guidelines.

The alternative models could include bundled payments, capitation payments or regionally coordinated service responses.

### COPD

2c. Local Hospital Networks, Primary Health Networks and the Aboriginal Community Controlled Health Service sector to implement appropriate care for the management of people with chronic obstructive pulmonary disease (COPD) using the *COPD-X Plan: Australian and New Zealand guidelines for the management of chronic obstructive pulmonary disease 2020*<sup>9</sup> as the routine model of care.

### Heart failure

2d. Local Hospital Networks, Primary Health Networks and the Aboriginal Community Controlled Health Service sector to implement process improvement for the effective management of people with heart failure, including:

- i. Multidisciplinary care across the acute and primary care sectors
- ii. A combination of strategies, including non-pharmacological approaches such as physical activity programs and fluid or dietary management, and pharmacotherapy.

### Diabetes

2e. Local Hospital Networks, Primary Health Networks and the Aboriginal Community Controlled Health Service sector to promote appropriate care for the management of people with diabetes aligned with:

- i. *The Management of Type 2 Diabetes: A handbook for general practice* (2020)
- ii. The Australian National Diabetes Strategy 2016–2020.

# Key findings and recommendations

## 3. Ear, nose and throat surgery for children and young people

### Tonsillectomy

Tonsillectomy is used to treat recurrent throat infections (tonsillitis) and obstructive sleep apnoea (OSA), but there are uncertainties about its benefits. It is one of the most common surgical procedures performed in children in Australia – at a rate higher than in New Zealand or the United Kingdom.

After standardising to remove age and sex differences between populations, the Atlas found that, in 2017–18, the rate of hospitalisation for tonsillectomy in children and young people was six times higher in the local area with the highest rate than in the area with the lowest. It also found that the rate of tonsillectomy hospitalisations increased by 3% between 2012–13 and 2017–18.

There is a need for more information to ensure evidence-based care is provided to children with recurrent tonsillitis or OSA. Further developing the Australian Society of Otolaryngology Head and Neck Surgery Ear, Nose and Throat data registry could add to the knowledge base about outcomes for specific patient groups and provide information for effective peer review of tonsillectomy.

### Myringotomy

Myringotomy is another common surgical procedure performed in young children. It is used to treat otitis media, an infection of the middle ear that can cause hearing loss.

Myringotomy (with insertion of grommets) is recommended for children who have otitis media with effusion (fluid) and documented hearing loss in both ears for more than three months.

Otitis media is the key cause of hearing loss in Aboriginal and Torres Strait Islander children, who are at risk of earlier, more severe and longer-lasting middle ear disease than other children. The Atlas examined rates in Aboriginal and Torres Strait Islander children for the first time.

The Atlas found that, in 2017–18, the rate of hospitalisation for myringotomy in children and young people was about eight times higher in the local area with the highest rate than in the area with the lowest. Although the rate for Aboriginal and Torres Strait Islander children was 6% higher than the rate for other children, it was lower than would be expected if surgery rates matched the prevalence of otitis media in Aboriginal and Torres Strait Islander children.

A comprehensive approach combining prevention, early treatment and coordinated management is urgently required to reduce rates of otitis media in Aboriginal and Torres Strait Islander children.

Data item	Range across local areas* per 100,000	Times difference	Times difference excluding top and bottom 10%	Number during 2017–18
3.1 Tonsillectomy hospitalisations, 17 years and under	305 – 1,836	6.0	2.2	42,509
3.2 Myringotomy hospitalisations, 17 years and under	198 – 1,607	8.1	2.3	34,755

\* Statistical Area Level 3

## Recommendations

### Tonsillectomy

3a. The Australian and New Zealand Society of Paediatric Otorhinolaryngology to work with relevant clinical colleges to develop clinical guidelines on tonsillectomy in children, and subsequent to this the Commission to develop a clinical care standard with safety and quality indicators.

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3b. Health service organisations to:

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- i. Conduct audits of indications for tonsillectomy and tonsillectomy rates to monitor variation and provide the results back to clinicians to act upon in line with Action 1.28 of the National Safety and Quality Health Service (NSQHS) Standards

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  - ii. Incorporate individual clinician's audit data as part of recredentialing processes.
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### Myringotomy

3c. State and territory health departments and health service organisations to set benchmarks for access to paediatric audiology services.

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3d. The Australian Government Department of Health to develop and implement two national ear and hearing health performance indicators for Aboriginal and Torres Strait Islander children consistent with the recommendations of the National Aboriginal and Torres Strait Islander Hearing Health Advisory Panel:

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- i. Measure the proportion of Aboriginal and Torres Strait Islander children who received an annual ear and hearing health check and the proportion of these who were found to have ear and/or hearing health conditions

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  - ii. Measure the proportion of Aboriginal and Torres Strait Islander children who received audiology services and the proportion of those diagnosed with hearing loss.
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3e. The Australian Government Department of Health, as part of the Roadmap for Hearing Health, to publish data on progress against the integrated national approach to undertaking ear health checks of children aged 0–6, with the goal of every Aboriginal and Torres Strait Islander child having regular ear health checks.

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3f. Health service organisations to:

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- i. Conduct audits of myringotomy and myringotomy rates to monitor variation and provide the results back to clinicians to act upon in line with Action 1.28 of the NSQHS Standards

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  - ii. Incorporate individual clinician's audit data as part of recredentialing processes.
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# Key findings and recommendations

## 4. Lumbar spinal surgery

Lumbar spinal surgery refers to surgery in the lumbar spine or lower back. It is sometimes used to treat degenerative spinal disorders, which is the focus of this chapter. Two common lumbar spinal procedures are fusion and decompression. The Atlas excludes use of spinal surgery for treating infection, tumours or injury.

Degenerative spinal disorders are a diverse group of conditions that can cause chronic low back pain, leg pain and disability. Lumbar spinal surgery is generally only considered for certain degenerative spinal disorders if non-surgical options have not worked. There are limited data on patient outcomes, due in part to difficulties in conducting high-quality randomised controlled trials of these types of surgery.

### Spinal fusion

Spinal fusion surgery involves joining two or more vertebrae using a bone graft. It has a role in treating a small minority of people who have degenerative spinal disorders that include nerve-related problems. Most people with chronic low back pain related to degenerative disorders do not have nerve-related symptoms. The role of spinal fusion in these circumstances is limited and controversial.

After standardising to remove age and sex differences between populations, the Atlas found that, in 2015–2018, the rate of hospitalisation for lumbar spinal fusion was about 12 times higher in the local area with the highest rate than in the area with the lowest. There was a 4% fall in the national rate of lumbar spinal fusion, and a 25% fall in the rate of lumbar spinal fusion excluding decompression, between 2012–2015 and 2015–2018.

### Spinal decompression

Spinal decompression aims to increase the amount of the space in the spinal canal to relieve pressure on nerves and blood vessels. After standardising to remove age and sex differences between populations, the Atlas found that in, 2015–2018, the rate of hospitalisation for lumbar spinal decompression was about eight times higher in the local area with the highest rate than in the area with the lowest. The national rate of lumbar spinal decompression fell by 6% between 2012–2015 and 2015–2018.

### Addressing variation

Priority should be given to examining and improving access to services that provide multidisciplinary review and non-surgical treatments for chronic low back pain. The Australian Spine Registry should be developed to support data collection on all patient outcomes. Surgeons should contribute data on all consenting patients, and regularly audit and review patient outcome data with their peers.

Data item	Range across local areas* per 100,000	Times difference	Times difference excluding top and bottom 10%	Number during 2015–18
4.1 Lumbar spinal fusion, 18 years and over	7 – 87	12.4	2.7	14,608
4.2 Lumbar spinal decompression excluding fusion, 18 years and over	27 – 209	7.7	2.1	43,185

\* Statistical Area Level 3

## Recommendations

- 4a. Health service organisations and Primary Health Networks to implement evidence-based pathways for the management of low back pain consistent with the care described in the Low Back Pain Clinical Care Standard (planned for publication in late 2021).
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- 4b. Health service organisations where lumbar spinal surgery is conducted to implement evidence-based guidelines; for example, the National Institute for Health and Care Excellence guidelines: *Low Back Pain and Sciatica in Over 16s: Assessment and management*.
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- 4c. The Royal Australasian College of Surgeons to require surgeons performing lumbar spinal surgery to participate in the Australian Spine Registry as part of mandatory continuing professional development requirements.
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- 4d. The Commission to work with relevant specialist organisations to develop a list of key safety and quality indicators for the management of specified spinal conditions, which can be used by members for audit of their practice.
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- 4e. Health service organisations to:
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- i. Develop and implement scope of clinical practice models for surgeons undertaking spinal surgery
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- ii. Audit spinal surgery and provide the results back to clinicians to act upon in line with Action 1.28 of the National Safety and Quality Health Service (NSQHS) Standards
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- iii. Incorporate individual spinal surgeons' audit data as part of re-credentialing processes
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- iv. Report key performance indicators, trends and adverse events in spinal surgery to their governing body, consistent with the NSQHS Standards.
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- 4f. Primary Health Networks to implement a nationally agreed health pathway for management of low back pain, including imaging and referral indications, based on the Commission's Low Back Pain Clinical Care Standard (planned for publication in late 2021).
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# Key findings and recommendations

## 5. Gastrointestinal investigations

### Gastroscopy 18-54 years

Gastroscopy is used to investigate, treat or monitor conditions of the upper part of the gastrointestinal (GI) tract. Most conditions that affect the upper GI tract and require gastroscopy are uncommon in people aged under 55 years.

After standardising to remove age and sex differences between populations, the Atlas found that, in 2018–19, the rate of Medicare Benefits Schedule (MBS)–subsidised services for gastroscopy for people aged 18–54 years was almost 11 times higher in the local area with the highest rate than in the area with the lowest. Rates were markedly higher in major cities than elsewhere. Almost two-thirds of gastroscopy services were performed on the same day as a colonoscopy for the same person.

### Repeat gastroscopy, all ages

Few people who have an initial gastroscopy require another within three years. Repeat gastroscopy is used mainly to monitor conditions that can increase the risk of upper GI cancer or bleeding in high-risk groups.

The Atlas found that, in 2018–19, the rate of MBS–subsidised services for repeat gastroscopy performed within two years and 10 months of an earlier gastroscopy was almost 15 times higher in the local area with the highest rate than in the area with the lowest. Rates were markedly higher in major cities and also increased in with socioeconomic advantage.

Development and application of national guidance on the appropriate use of gastroscopy is needed. These should include guidance on when it is appropriate to repeat the procedure. Interventions to educate clinicians and consumers that the risk of upper GI cancer is low for most people, especially those aged under 55 years, are required.

### Repeat colonoscopy, all ages

Repeat colonoscopy is used mainly to monitor for bowel cancer in people at increased risk of developing it. The timing of repeat colonoscopy is based on bowel cancer risk. A limited number of people who have an initial colonoscopy require another within three years.

After standardising to remove age and sex differences between populations, the Atlas found that, in 2018–19, the rate of MBS–subsidised services for repeat colonoscopy performed within two years and 10 months of an earlier colonoscopy was almost 20 times higher in the local area with the highest rate than in the area with the lowest. Rates were markedly higher in major cities and increased with socioeconomic advantage.

A concerted focus by clinicians, medical colleges and health service organisations to drive implementation of the national surveillance guidelines and the *Colonoscopy Clinical Care Standard* could reduce the frequency of inappropriate repeat colonoscopies.

Data item	Range across local areas* per 100,000	Times difference	Times difference excluding top and bottom 10%	Number during 2018–19
5.1 Gastroscopy MBS services, 18–54 years	218 – 2,348	10.8	2.9	154,338
5.2 Repeat colonoscopy MBS services, all ages	62 – 1,236	19.9	2.7	147,875
5.3 Repeat gastroscopy MBS services, all ages	61 – 908	14.9	3.1	87,933

\* Statistical Area Level 3

## Recommendations

- 5a. State and territory health departments to develop and implement evidence-based triage criteria for the prioritisation and allocation of patients to gastroscopy, colonoscopy, and gastroscopy performed with colonoscopy.
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- 5b. Health service organisations to:
- i. Audit clinicians performing endoscopy services and provide the results back to clinicians to act upon, in line with Action 1.28 of the National Safety and Quality Health Service (NSQHS) Standards

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  - ii. Incorporate individual clinicians' audit data as part of re-credentialing processes

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  - iii. Report key performance indicators, trends and adverse events in endoscopy to the governing body, consistent with the NSQHS Standards.
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- 5c. The Gastroenterological Society of Australia to develop a position statement on the appropriate use and timing of gastroscopy, and of gastroscopy performed with colonoscopy, for gastroenterologists and general practitioners.
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# Key findings and recommendations

## 6. Medicines use in older people

### Polypharmacy, 75 years and over

Polypharmacy is the concurrent use of multiple medicines. It is common in older people, because they are more likely to have chronic diseases that require management with medicines. Although polypharmacy may be appropriate for some older people, it can increase the risk of harm from medicines.

After standardising to remove age and sex differences between populations, the Atlas found that, in 2018–19, the rate of people aged 75 years and over dispensed five or more medicines was about six times higher in the local area with the highest rate than in the area with the lowest. Almost 40% of people aged 75 years and over were dispensed five or more medicines. Rates of polypharmacy were higher in major cities than elsewhere, and rates increased with socioeconomic disadvantage, except in remote areas.

### Medication management reviews, 75 years and over

Residential Medication Management Review (RMMR) and Home Medicines Review (HMR) are two types of medicine reviews available to people living in aged care facilities or at home. The reviews aim to help people to get the maximum benefit from their medicines and prevent medicines-related harm.

After standardising to remove age and sex differences between populations, the Atlas found that, in 2018–19, the rate of people aged 75 years and over who had at least one Medicare Benefits Schedule–subsidised service for an RMMR or HMR was almost 12 times higher in the local area with the highest rate than in the area with the lowest rate. About 5.4% of people had a review. Similar to the pattern with polypharmacy, rates were higher in major cities and increased with socioeconomic disadvantage.

Interventions for identifying people at risk of harm from polypharmacy, such as frail people and those with multiple morbidities, are needed. System changes are needed to improve access to RMMR and HMR services for these at-risk groups. Initiatives to improve uptake of pharmacist recommendations may improve the effectiveness of the review services.

### Proton pump inhibitor medicine dispensing, 75 years and over

Proton pump inhibitor (PPI) medicines are effective in managing gastro-oesophageal reflux disease. They are commonly used in older people, often at higher doses or long term, without reassessment of need. Older people may be especially susceptible to harms from long-term use.

After standardising to remove age and sex differences between populations, the Atlas found that, in 2018–19, the rate of dispensing of PPI medicines to people aged 75 years and over was about six times higher in the local area with the highest rate than in the area with the lowest. Almost half people aged 75 years and over had at least one prescription dispensed for a PPI medicine.

Targeted interventions that prompt clinicians to regularly review the need for PPI medicines in older people are needed.

Data item	Range across local areas* per 100,000	Times difference	Times difference excluding top and bottom 10%	Number during 2018–19
6.1 Polypharmacy, 75 years and over	11,206 – 72,059	6.4	1.4	690,516
6.2 Medication management reviews, 75 years and over	1,618 – 19,006	11.7	2.0	96,533
6.3 Proton pump inhibitor medicines dispensing, 75 years and over	131,393 – 777,098	5.9	1.4	7,114,281

\* Statistical Area Level 3

## Recommendations

6a. The Commission, in collaboration with the Australian Government Department of Health, the Aged Care Quality and Safety Commission, NPS MedicineWise and relevant groups, to develop nationally consistent:

i. Guidance for people taking multiple medicines

ii. Guidance about the communication of reports to medical practitioners from Residential Medication Management Reviews and Home Medicines Reviews

iii. Measures for aged care homes to compare the percentage of residents who have received Residential Medication Management Reviews and the percentage of pharmacists' recommendations, in line with the Commonwealth's development of the National Aged Care Mandatory Quality Indicator Program

iv. Guidance for the establishment, governance, composition and operation of Medication Advisory Committees within aged care homes.

6b. The Australian Government Department of Health to investigate ways of collecting patient-level data on the supply of Pharmaceutical Benefits Scheme medicines through the S100 Remote Area Aboriginal Health Services Program to gather accurate information about the use of medicines in rural and remote Aboriginal communities.

# Key findings and recommendations

## General recommendations

### Responsibilities of governing bodies

7a. Governing bodies to prioritise review of audit data, consistent with Action 1.28 of the National Safety and Quality Health Service (NSQHS) Standards for the following topics:

- i. Early birth
- ii. Tonsillectomy and myringotomy
- iii. Lumbar spinal surgery
- iv. Gastroscopy and colonoscopy.

### Diagnosis and appropriateness of care

7b. Health service organisations to promote documentation in the healthcare record of a patient's diagnosis, or provisional diagnosis, in relation to their investigation and management. This can be used to improve the appropriateness of care, and should be communicated to the patient to increase their understanding of their care.

### Clinical quality and appropriateness indicators

7c. The Commission to identify priority areas for development of nationally agreed, specialty-specific clinical quality and appropriateness indicators, and work with clinical colleges, professional societies and jurisdictions to develop these.

### Clinical audit

7d. Clinical colleges and professional societies to mandate clinical audit, using agreed specialty-specific indicators where these exist, as a requirement of continuing professional development.

### Registries

7e. Clinical quality registries:

- i. As part of their governance framework, all clinical quality registries to include sets of indicators for quality and appropriateness of care, to be used for clinical audits at a health service organisation and clinician level
- ii. To provide health service organisations and clinicians with regular reports showing their data for these indicators and how their data compares with data from other services
- iii. To develop and publish their indicator sets in METeOR (National Metadata Online Registry).

7f. Health service organisations to:

- i. Require clinicians to participate in data collection and quality improvement activities of relevant clinical quality registries, with the aim of improving patient outcomes
- ii. Ensure that data and analyses from clinical quality registries are used efficiently in clinical peer review meetings; that records are kept of these meetings, including the clinicians who have attended them and any actions that are being taken to improve care as a result of the discussions; and that the results are reported to and reviewed by the organisation's governing body as part of the clinical governance framework.

### Health pathways

7g. The Australian Government Department of Health to develop guidance for Primary Health Networks about the development of nationally consistent Health Pathways, aligned with the Commission's clinical care standards.

## Health workforce

7h. The Australian Government Department of Health's health workforce unit to:

- i. Map the specialist medical workforce by geographical area
- ii. Quantify the supply of newly trained specialists entering the workforce, by geographical area
- iii. Work with clinical colleges to understand projected specialty workforces
- iv. Map the current workforce by clinical specialty (including nursing, midwifery and allied health) relevant to priority clinical conditions to identify where there are areas of over and undersupply. Mapping the workforce for non-surgical management of back pain (e.g. physiotherapy, chronic pain management) should be a priority
- v. Develop strategies to prevent oversupply in particular geographical areas, with the objective of building capacity in rural and remote areas (rather than fly-in-fly-out arrangements) and reducing the personal and financial cost of population exposure to low value care driven by oversupply.

## Patient Reported Outcome Measures

7i. The Commission to recommend validated Patient reported outcome measures (PROMs) for:

- i. Pregnancy and childbirth
- ii. Low back pain.

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