### AUSTRALIAN COMMISSION ON SAFETY AND QUALITY IN HEALTH CARE



# VITAL SIGNS 2017: The State of Safety and Quality in Australian Health Care



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ISSN (print): 2002-7696 ISSN (online): 2206-9771

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## Introduction

Welcome to this fifth annual edition of *Vital Signs*, produced by the Australian Commission on Safety and Quality in Health Care (the Commission) to report on the state of safety and quality in health care in Australia.

The Commission's role is to lead and coordinate national improvements in safety and quality in health care. The Commission works in partnership with patients, carers, clinicians, the Australian, state and territory health systems, the private sector, managers and healthcare organisations to achieve a safe, high-quality and sustainable health system.

Key functions of the Commission include developing national safety and quality standards; developing clinical care standards to improve the implementation of evidence-based health care; coordinating work in specific areas to improve outcomes for patients; and providing information, publications and resources about safety and quality. The Commission works in four priority areas:

- Patient safety
- Partnering with patients, consumers and communities
- Quality, cost and value
- Supporting health professionals to provide care that is informed, supported and organised to deliver safe and high-quality care.

One of the Commission's core functions is to report on the state of safety and quality in the Australian health system. This is important because it can help us understand our health system, what the system is doing to improve safety and quality, and how successful these efforts are. It can also help to bring about change and improvements in experiences and outcomes for patients. This report, *Vital Signs* 2017, is structured around three important questions that members of the public ask about their health care:

- 1. Will my care be safe?
- 2. Will I get the right care?
- 3. Will I be a partner in my care?

Australia generally performs very well in international comparisons about health. For example, the Australian population has a relatively high life expectancy and a relatively low rate of avoidable death, while a high proportion of Australians report that they are in good health.<sup>1,2</sup>

However, measuring the safety and quality of care can be more challenging. While there is information about the numbers and types of surgical procedures performed, emergency department attendances and visits to general practitioners (GPs), there is less complete information about safety and quality. Vital Signs 2017 brings together information from a range of sources to provide a snapshot of safety and quality performance and activity on several important topics.

# **Case study:** Safety and quality through a patient's eyes

When we, as patients, need health care, what do we expect? What, for us, are the vital signs of a safe, high-quality health service?

This first case study brings together some of the information that is reported in later chapters, and views it through a patient's eyes. When we do this, it becomes clear that there can never be just one measure, one piece of information, that can tell us whether our health services are safe or whether they offer high-quality care. A key part of the role of clinicians is assessing how to best help a sick patient by looking at their physical vital signs, such as their pulse, blood pressure and breathing rate. In the same way, policymakers, managers, clinicians and patients need access to a wide range of vital signs of safety and quality to make decisions, diagnose problems and identify opportunities for improvement. So, what are some of the vital signs of our health system in Australia? Importantly, how can we view these vital signs together to get a fuller picture? Here, many of the signs that are examined in more depth later in the report are brought together to get a holistic view of the safety and quality of a patient's journey through the health system. This journey also highlights data that inform us about the safety and quality of the health system, as well as resources that have been developed to support improvements in safety and quality.



### **Mrs Elliott's story**

We will follow the sequence of encounters with clinicians and services that might be experienced by just one of the millions of Australians requiring health care on any given day.

This is the story of 77-year-old Mrs Elliott and her family. We will accompany Mrs Elliott during her healthcare journey – from the time she has a sudden heart attack, through to her admission to hospital for treatment, and then through the process of going home and resuming her life.

During each of these three phases – before hospital, during the hospital stay and after hospital – we will highlight what is already known about the safety and quality of the healthcare journey of people like Mrs Elliott, focusing on many of the vital signs presented later in the report.

#### **Before admission to hospital**





Mrs Elliott lives on a small property, 10 kilometres from the nearest regional town. She lives with her 79-year-old husband, who was diagnosed with dementia two years ago. Their grown-up daughter, Anita, lives with her family on the next property. Mrs Elliott and Anita jointly manage the increasingly demanding care needs of Mr Elliott.

Having been in good health all her life, Mrs Elliott regularly rides her bicycle. While out riding one day, she feels a sudden tightness in her chest and starts to find it difficult to breathe. She stops and sits down to call her daughter, who drives her straight to the hospital emergency department in town. When they arrive, a nurse immediately calls Mrs Elliott in to be assessed. After listening to their story about what happened on the bicycle ride, the nurse pages the emergency specialist doctor on shift that day, Dr Moore. While they are waiting, the nurse attaches leads to Mrs Elliott's chest.

Dr Moore arrives and explains that the leads on Mrs Elliott's chest are taking a reading of her heartbeat, and that this will help to tell whether she has had, or is about to have, a heart attack. After looking closely at the print-out from the heart monitoring machine, Dr Moore says that it looks likely that Mrs Elliott has had a heart attack and will need to be admitted to the hospital.

She is one of 32,000 people who will be admitted to hospital with a heart attack in any given year in Australia.<sup>3</sup>



#### Data check: heart attack in Australia

Cardiovascular conditions are the leading cause of death in Australia, and were responsible for 13% of all hospitalisations in 2012–13.<sup>4</sup>

Coronary heart disease (ischaemic heart disease) is the most common form of cardiovascular disease. It is the leading cause of death in Australia, accounting for 20,173 deaths in 2014.<sup>5</sup> Coronary heart disease can lead to an acute myocardial infarction (AMI), more commonly known as a heart attack, or to angina – in which the patient experiences chest pain because of a temporary shortage of blood supply to the heart muscle.

The rate of AMI is higher among men than women. In 2012, 63% of AMIs and unstable angina among Australians aged over 25 occurred in men. The rate increases rapidly with age: the rate for people aged 85 and over is six times as high as the rate among people aged 55 to 64.<sup>6</sup>

The good news is that in the five-year period from 2007 to 2012, the rate of AMI decreased by 24% in Australia.<sup>5.7</sup> The death rate following AMI in Australia has declined steadily since 2000, and is now one of the lowest when compared with rates in other Organisation for Economic Co-operation and Development (OECD) countries (Figures 1 and 2).<sup>7</sup>

#### Figure 1: Total\* number of deaths from acute myocardial infarction, 2005–2014



All deaths – population and in-hospital

Sources: Australian Bureau of Statistics, 3303.0 – Causes of Death, Australia, 2014: www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/3303.02014?OpenDocument

> Australian Bureau of Statistics, 3101.0 – Australian Demographic Statistics, Jun 2015: www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/3101.0Jun%202015?OpenDocument#Time



When Mrs Elliott hears this news, she starts to cry, saying, 'My father and aunt both died of heart attacks when they were about my age. I suppose this will happen to me now.'

Dr Moore comforts Mrs Elliott, saying that as treatment and management of heart attacks are improving, and as fewer people now smoke, outcomes for patients are much better than they would have been when her father and aunt were treated. She continues, 'We know that far fewer people die in hospital with a heart attack these days. It is really a fairly common problem that we know how to treat.' **Figure 2:** Deaths in hospital per 100 admissions from acute myocardial infarction for people aged 45 years and over, by sex, Australia, 2009–10 to 2013–14



**Source:** Australian Institute of Health and Welfare 2016. OECD health-care quality indicators for Australia 2015. Cat. no. PHE 209. Canberra: AIHW.



#### Data check: in-hospital mortality

In 2013, Australia's AMI in-hospital death rate for people aged 45 and over was 4.1 per 100 admissions, compared with the OECD average of 8.0 (Figure 2).<sup>7</sup> Australia had the lowest rate among the 33 countries that reported AMI in-hospital mortality rates.



After Mrs Elliott is admitted to the cardiology ward, her daughter Anita goes home to get her some clothes and to pick up Mr Elliott. She doesn't want to leave him alone for too long. Since he started taking some new medication, Mr Elliott falls asleep easily and is disoriented when he wakes up, causing him a lot of distress.

Anita drives her father to the hospital, where they find Mrs Elliott being examined by the cardiologist, Dr Birch. Dr Birch is explaining to Mrs Elliott what the options are now that her heart attack has been diagnosed. He explains that first there will be a short period of treatment in hospital, saying, 'On average, patients with a heart attack spend five days in hospital and then many people need a period of cardiac rehabilitation, either in hospital or at home. Luckily for you, women tend to spend a shorter time in hospital than men.'



When Dr Birch sees Anita arriving, he shows her a booklet and says, 'This shows the standard of treatment and care a person should receive when they have a heart attack. Please take a look at it with your mum because it will give you both an idea of what to expect. In the meantime, we urgently need to do what is called a PCI – a percutaneous coronary intervention. That's where we inflate a small balloon in the artery that is blocked in your mum's heart. This helps the blood to flow properly again. We are able to do this because it is less than 90 minutes since your mum's heart attack, so we'll begin preparing her for that right now.'



#### Data check: length of stay in hospital

The average length of a hospital stay after a heart attack is 4.9 days for 77-year-old women and 5.4 days for 77-year-old men.

#### Resources check: clinical care standard for acute coronary syndromes

In 2014, the Commission released a clinical care standard for acute coronary syndromes, including heart attacks and suspected heart attacks. The clinical care standard includes six quality statements that describe the standard of treatment and care that a patient should be offered. The Commission has also developed clinical care standards on heavy menstrual bleeding, osteoarthritis of the knee, acute stroke, hip fracture care, delirium and antimicrobial stewardship. Each clinical care standard has an accompanying consumer and clinician fact sheet, and indicator set to support local monitoring by health services.

The Commission is currently developing a new clinical care standard for the prevention of venous thromboembolism.



Anita notices that the Australian Commission on Safety and Quality in Health Care published the booklet Dr Birch gave her. She looks up the Commission's website on her tablet, and notices that the Commission is working to reduce 'hospital-acquired complications', which she gathers are problems that happen as a result of the processes of treatment or care, like healthcare-associated infections.

On the home page of the same website, Anita sees that the Commission has published an interactive <u>Second Australian Atlas of Healthcare</u> <u>Variation</u> (the second Atlas). She's not sure what this is about, but she wonders if it has anything to do with what the local paper is always saying about people in regional areas not getting the same care as their big-city counterparts. She clicks around the site and notices that there are some big differences in the prescription rates for antipsychotic medications in different areas. She thinks this is the type of medicine her father was recently prescribed – the one making him so sleepy.



#### Figure 3: Number of acute and sub-acute admissions with at least one hospital-acquired complication, 2014–15

Source: Internal Australian Commission on Safety and Quality in Health Care analysis of National Hospital Morbidity Database

#### Data check: complications

We know that 17 out of every 100 patients (17%) who are hospitalised following a heart attack will experience a complication, with the most common being an arrhythmia (irregular heartbeat), followed by infection (5% of patients) and delirium (3% of patients).

The Commission has published a list of hospital-acquired complications to provide a uniform definition of these events in Australia, and is working to ensure that hospital-acquired complications are documented consistently. Figure 3 shows the number of hospital-acquired complications for all public hospitals in 2014–15.



## Data check: antipsychotic dispensing for people 65 years and over

The first *Australian Atlas of Healthcare Variation* (the Atlas) showed that the number of prescriptions for antipsychotics in people aged 65 and over is 7.1 times higher in the area with the highest rate than the area with the lowest rate. Even when the very highest and lowest results are excluded, there remains a 2.4-fold difference – which shows that the variation observed is not confined to one or two 'outliers'.

The Commission is working to reduce the inappropriate prescribing of antipsychotics to treat the behavioural symptoms of delirium and dementia. This work is featured on **page 70**.



Putting her tablet away, Anita starts to look around the bay where her mother's bed is. Three other patients are in the bay, and nurses are coming and going to their beds. One nurse is standing next to a big trolley at a young woman's bedside. She is typing into a computer on the trolley between checking the patient's temperature and blood pressure.

The nurse notices Anita watching her and says that she uses the computer to enter information into the hospital's electronic medical record system. It has replaced paper notes and charts, she explains. Anita hadn't seen this before in a hospital, and wonders whether it is related to the My Health Record she signed up for on the Medicare website a few months ago. She thought this would enable her health record to follow her between health services, but the nurse says she's not sure if this is happening yet.



Anita also sees that the nurse rubs her hands with alcohol-based hand gel from a dispenser that is attached to her belt. She wonders why she seems to do it at particular times when interacting with each patient – before and after touching them, as well as when she has been touching the computer keyboard. The nurse explains that everyone working in the hospital – doctors, nurses and allied health professionals – must comply with hand hygiene rules about when to clean their hands, as this helps limit the spread of infections.

#### Data check: My Health Record uptake

As of April 2017, almost 5 million Australians had signed up for a My Health Record.

The Commission is working with the Australian Digital Health Agency to develop, refine and extend the reach of the My Health Record system. This work is featured on **page 38**.

#### Data check: hand hygiene

Hospitals are audited periodically to ensure they comply with World Health Organization hand hygiene recommendations. Each health professional must clean their hands at five points – known as the 'five moments for hand hygiene' – during their work in clinical areas:

- Before touching a patient
- Before clean or aseptic procedures
- After a procedure or body fluid exposure or risk
- After touching a patient
- After touching a patient's surroundings.

The average national hand hygiene compliance rate published in June 2017 was 84.3%. However, this rate varied by moment (91.1% compliance after a procedure or body fluid exposure risk, and 78.9% after touching a patient's surroundings) and by health professional (87.7% compliance for nurses and 71.7% for doctors).

Hand hygiene compliance data for each participating hospital can be found on the <u>MyHospitals</u> website. Information about national rates of hand hygiene compliance is also available from <u>Hand Hygiene Australia</u>.

The Commission funds the National Hand Hygiene Initiative. More information about hand hygiene and healthcare-associated infections in Australia can be found on **page 24**.

#### After the hospital stay



Mrs Elliott recovers well from her procedure and is ready to go home from hospital a few days later. On the third day of her stay, as part of the daily ward round, her healthcare team start to plan with her what she will need after being discharged. Anita is also invited to these discussions. A pharmacist comes to talk about what medications she will need to take now and in the longer term, and why each one needs to be taken. A social worker meets with Mr and Mrs Elliott to discuss what help Mrs Elliott will need to look after her husband in the future, and a physiotherapist makes an outpatient rehabilitation appointment for Mrs Elliott to help her gradually increase her level of exercise.

On the scheduled day of discharge, the cardiologist, Dr Birch, visits Mrs Elliott in the morning. He gives her a questionnaire to fill out when she gets home about how she is feeling. It includes questions about her breathing, chest pain, mood and ability to walk up stairs. He says that when she has a check-up in three months, he will ask her to fill out the same questions to see how her heart attack and treatment have affected her functioning and quality of life.



Later, while she is waiting for Anita to pick her up, Mrs Elliott is approached by a volunteer carrying an electronic tablet device. The volunteer asks her whether she would mind completing a survey about her experience while in hospital. The questions cover areas such as how well staff responded to her needs, whether she felt she was treated with respect, and whether she experienced any unexpected distress or harm. Mrs Elliott tells the volunteer that overall her experience has been very positive and that she will recommend the hospital to others.



# Resources check: patient-reported quality-of-life outcomes

Clinical quality registries offer a mechanism through which to collect both treatment and outcome information about each patient, making it is possible to assess the effectiveness and appropriateness of care.

An early example of such work, which links a patient's quality-oflife outcome to the treatments they have received, can be found in South Australia. A data collection called CADOSA (the Coronary Angiogram Database of South Australia), a cardiac outcomes registry, has recently begun collecting self-reported outcomes information from people who have had an angiogram (with or without percutaneous coronary intervention) in hospital, along with the more commonly collected outcomes reported by a doctor. These patient-reported outcomes are collected one month and 12 months following discharge. Patients are asked to rate their:

- Symptom severity (such as angina)
- Physical functioning (such as the ability to climb stairs)
- Emotional wellbeing (such as depression or anxiety)
- Social functioning and ability to perform activities of daily living.

The Commission is developing a national approach to measuring patientreported outcomes to ensure that services are organised according to whether they make a difference to a person's quality of life.

#### Data check: patient experience surveys

Most people in Australia have a positive experience when they receive health care. About 90% of people report that their clinicians listen carefully, show respect and spend enough time with them.

In late 2017, the Commission will launch a new national question set that will allow patient experiences to be assessed consistently across the private and public sectors in all states and territories. More information about patient experiences is available on **page 93**.

#### Conclusion

Through a patient's eyes, the quality and safety of health services is not just about what happens during a surgical procedure, nor is it just about what happens during the consultation with their GP. Whatever a person's condition, illness or injury, they interact with multiple professionals and services. This is true whether someone cuts their thumb and visits the emergency department for stitches, or suffers from a lifelong chronic health condition. All patients interact with multiple professionals and receive multiple services, treatments or procedures. They also experience the connections and potential communication gaps between each of these.

In other words, quality and safety has to be sustained over time for each and every patient. Through the patient's eyes, quality and safety can never be assessed by measuring one thing. It is the totality of a person's encounters with services and professionals that must be assessed for safety and quality.

# 1. Will my care be safe?

The Australian health system provides safe and high-quality care in the majority of cases. Unfortunately, not all people receive the care that is recommended for their condition or clinical situation, and adverse events occur. Doctors, nurses and everyone involved in the healthcare system work very hard to ensure that people receive the best possible care and are protected from harm. But health care is a complex process that requires much planning and coordination – and sometimes things do go wrong. To minimise the risk that patients may be harmed, it is essential to ensure that good processes are in place. Health services should have systems to ensure patient safety, and people working in health services should be aware of those systems and use them properly. This is one of the most important roles of the Commission – to ensure, through collaboration with its partners, that good systems are in place to protect patients. The Commission has worked with the Australian Government, state and territory governments, the private sector, clinical groups, and patients, carers and consumers to develop rigorous national safety and quality standards, against which all hospitals and day procedure services in Australia must be assessed.



This section provides information about how health services are performing against these standards. It also provides more detail about some specific safety and quality issues, and some of the ways the health system is looking to improve the safety of care. The five sections are:

**Safety and quality standards:** There are standards for safety and quality that are improving my care.

**Hand hygiene:** Clinicians in the emergency department clean their hands so I don't get an infection.

**Clostridium difficile infection:** My care is safe because the health system is preventing and managing infections.

**A positive complaints culture:** Speaking up when things go wrong leads to safer care for everyone.

**My Health Record:** Sharing my health information makes my care safer.

The NSQHS Standards have 44 developmental actions



By the second assessment:

of public hospitals were able to meet all 44 actions

# **Safety and quality standards:** There are standards for safety and quality that are improving my care

The National Safety and Quality Health Service (NSQHS) Standards aim to protect the public from harm and to improve the quality of care provided to patients.<sup>9</sup> The NSQHS Standards cover areas where patients experience higher levels of harm, and where evidence shows how to provide safer and better care.

For the last five years, the NSQHS Standards have been used in hospitals and day procedure services to assess whether the safety and quality systems that can protect patients from harm are in place.

The NSQHS Standards have generated widespread engagement and support among health service organisations, and this has contributed to improvements in the safety and quality of health care, and better health outcomes for patients. Health departments have also used the NSQHS Standards to improve safety and quality. For example, they have updated educational materials, put in place new or revised policies, and improved their processes for learning from adverse events.

#### All health services have now been assessed to the NSQHS Standards

All Australian hospitals and day procedure services have completed at least one assessment to the NSQHS Standards, and 208 have completed two cycles – mostly smaller private day procedure services (Figure 4).

There has been a clear improvement in the number of core actions met by these health service organisations over the two cycles. When they were first assessed, just over half (56%) had all the recommended safety and quality systems in place. By the second assessment, this figure had increased significantly, to 80% (Figure 5).

Importantly, the health service organisations that did not have the required safety and quality systems in place worked to implement improvements over a three-month period and were subsequently awarded accreditation.

#### The NSQHS Standards have 44 developmental actions. These actions are ambitious, and to meet them requires planning, resources and action. When organisations were assessed to the NSQHS Standards for the first time, only 38% of private hospitals, 20% of private day procedure services and 12% of public hospitals were able to meet all developmental actions (Figure 6). At the second accreditation cycle, three or four years later, there was a significant improvement; public hospitals displayed the greatest improvement, with 69% achieving these aspirational actions.

The Commission collects information on the assessment results of each health service organisation. This information is used to identify areas where organisations may be having difficulty meeting a particular action.

For private hospitals, improving the techniques clinicians used to prevent infections caused by microorganisms on hands, surfaces and equipment was an area of difficulty. Day procedure services did not routinely audit their hand hygiene compliance rates; instead, they adopted other methods to check that all staff members were routinely washing their hands. In public hospitals, the area of greatest concern was analysis and reporting on adverse events that resulted in harm to patients.



**Figure 4:** Number of health service organisations that have had two organisation-wide assessments against the NSQHS Standards, by type of organisation (n=208), 2013–2016

Source: Australian Commission on Safety and Quality in Health Care, 2017.

# The Commission is improving the NSQHS Standards

A second edition of the NSQHS Standards has been developed to ensure they remain up to date and consistent with best practice.<sup>10</sup>

The second edition of the NSQHS Standards has been developed with the input of clinicians, consumers, carers, managers and policymakers, and was piloted nationally in hospitals, day procedure services and community settings. The second edition of the NSQHS Standards aims to address safety and quality gaps, update the evidence base and resolve many of the problems organisations identified when they used the first edition of the NSQHS Standards.

The second edition also reduces duplication that existed in the first edition. The number of standards in the second edition has been reduced from 10 to eight, and the number of actions that health service organisations must implement has decreased from 256 to 148. Approximately 65% of the content of the second edition is from the first edition, while 35% is new content.



Figure 5: Percentage of health service organisations meeting all core actions, by type of organisation

Source: Australian Commission on Safety and Quality in Health Care, 2017.

The eight standards in the second edition of the NSQHS Standards are:

- Clinical Governance
- Partnering with Consumers
- Preventing and Controlling Healthcare-Associated Infection
- Medication Safety
- Comprehensive Care
- Communicating for Safety
- Blood Management
- Recognising and Responding to Acute Deterioration.

Three standards from the first edition are no longer separate standards: Patient Identification and Procedure Matching, Preventing and Managing Pressure Injuries, and Preventing Falls and Harm from Falls. Key actions from these three standards have been incorporated into the eight standards that make up the second edition. One new standard, Comprehensive Care, has been added.



### **Figure 6:** Percentage of health service organisations meeting all developmental actions in the NSQHS Standards, by type of organisation

Source: Australian Commission on Safety and Quality in Health Care, 2017.

#### The second edition of the NSQHS Standards covers new safety and quality issues

The second edition of the NSQHS Standards includes new actions that respond to new and emerging safety and quality issues that were identified from projects and consultations conducted by the Commission. The new actions seek to address the needs of people who are especially vulnerable. The second edition sets out requirements for providing comprehensive care to all patients. It will also include actions about health literacy, end-of-life care, care for Aboriginal and Torres Strait Islander people, and care for people with lived experience of mental illness and cognitive impairment.

#### Health literacy

Health literacy refers to how people understand information about health and health care, as well as how they apply that information to their lives, use it to make decisions and act on it. This includes how they read, understand and act on health messages, healthcare plans and medication instructions; how they make informed decisions about their health and health care; and how they navigate the healthcare system.<sup>11</sup>

Health literacy is a significant issue in Australia. Health information and systems have become increasingly complex and harder to understand. Almost 60% of Australians have low health literacy, which means they may not be able to exercise their choice effectively when making healthcare decisions.<sup>12</sup>

The second edition of the NSQHS Standards addresses these issues by requiring clinicians and organisations to communicate in ways that support effective partnerships with patients and consumers. These include tailoring communication processes to the diversity of consumers who use the health service, involving patients and consumers in the development of patient information material, and providing information to patients and consumers that is easy to understand and use.

#### End-of-life care

The health care that people receive in the last years, months and weeks of their lives can help to minimise the distress and grief associated with death and dying for the individual, and for their family, friends and carers.

Hospitals provide end-of-life care to the majority of people who die in Australia, and as the proportion of older Australians increases, the number of people requiring end-of-life care will rise.<sup>13</sup> Towards the end of life, people often experience repeated hospitalisations and exposure to multiple clinicians. These frequent encounters provide opportunities for discussions about patient choices and preferences at the end of life. Unfortunately, issues such as fragmentation, the processes of providing care in hospitals, and poor communication can affect the quality of end-of-life care.

The Commission has included new actions about end-of-life care in the second edition of the NSQHS Standards to address these issues. These actions include recognising patients who are at the end of life, ensuring access to specialist palliative care advice, and receiving and documenting advance-care plans. The second edition of the NSQHS Standards also has a greater focus on partnering with consumers and comprehensive care, which will help to improve care for people at the end of their lives.

#### Aboriginal and Torres Strait Islander health

Despite some improvements, Aboriginal and Torres Strait Islander people still have poorer health outcomes than non-Indigenous Australians. They are more likely to die at a younger age, experience disability and report their health as fair or poor.<sup>14</sup> Aboriginal and Torres Strait Islander people are 2.5 times more likely to experience disease than non-Indigenous Australians.<sup>15</sup>

Aboriginal and Torres Strait Islander people do not always seek the treatment they need in mainstream health services, because these services are not set up to recognise or support their cultural beliefs and practices.<sup>16</sup> They are also more likely than non-Indigenous people to leave before treatment is conducted or completed.<sup>17</sup> In addition, Aboriginal and Torres Strait Islander people have fewer opportunities to partner in their own care and share decision-making because of language difficulties, and a lack of cultural awareness within health services and among the health workforce. These factors contribute to poor health outcomes for Aboriginal and Torres Strait Islander people.

The inclusion of specific actions in the second edition of the NSQHS Standards that focus on the needs of Aboriginal and Torres Strait Islander people has the potential to improve the care provided to Aboriginal and Torres Strait Islander people across all health services.

#### Mental health

In Australia, mental and behavioural disorders are the second-most-common non-fatal burden of disease affecting the community, accounting for 13% of the total burden of disease.<sup>18</sup> Twenty per cent of Australian adults (3.2 million people) have experienced a mental disorder in the previous 12 months.<sup>14</sup>

The Commission conducted a study of national standards in mental health services to better understand the safety and quality gaps in health services provided to people with experience of mental health issues.<sup>19</sup> Information from this study was used to create new actions in the second edition of the NSQHS Standards. These include actions to support shared decision making in treatment planning, early recognition and responses to deterioration in a person's mental state, and strategies to minimise the use of restrictive practices.

#### Cognitive impairment

Cognitive impairment (such as delirium or dementia) is commonly experienced by people being treated in hospitals. It is often undetected, or is overlooked or misdiagnosed. People who experience cognitive impairment while in hospital have a greater risk of harm from falls and pressure injuries. They may also experience a longer stay in hospital, enter residential care at a younger age and have an overall increased risk of dying. It is possible to improve the prevention and management of these risks. This starts with better identifying people with cognitive impairment through routine screening. This can lead to tailored actions to help reduce the distress they may experience when accessing care, improve their safety, prevent delirium from developing and ultimately reduce complications. Screening, assessment and coordinated early care planning for people with cognitive impairment is included the new Comprehensive Care Standard.

#### Work is also under way to make the process of assessment more effective

In Australia, 1,440 hospitals and day procedure services use the NSQHS Standards for improvement, and they are routinely assessed to ensure they comply with them. The assessments are conducted by independent accrediting agencies, approved by the Commission as part of the Australian Health Service Safety and Quality Accreditation (AHSSQA) Scheme.

Some stakeholders, including state and territory health departments and health service organisations, have expressed concern that the assessment process does not reliably verify that an organisation's safety and quality systems are operational and effective. There is also concern that the AHSSQA Scheme and the NSQHS Standards are open to interpretation by assessors. Because of these concerns, the Commission reviewed the AHSSQA Scheme in 2016–17. Stakeholders agreed the AHSSQA Scheme must be reformed to ensure it remains effective. The Commission has generated six strategies to improve the accreditation process:

- Improve the methods of assessment
- Improve the effectiveness and expertise of assessors
- Use safety and quality data to better inform the assessment process
- Review the regulation of the AHSSQA Scheme by states and territories
- Improve communication with consumers about the assessment process and the outcomes of assessments
- Develop resources for health service organisations to prepare for assessments.

#### Timeline for the revision of the Australian Health Service Safety and Quality Accreditation (AHSSQA) Scheme



#### Where to next?

Once the second edition of the NSQHS Standards is released in November 2017, the Commission's focus will be on informing health service organisations about the changes that have occurred and supporting them to start implementing changes. This will involve publishing a number of resources, including:

- A guide and an accreditation workbook for hospitals
- A guide for day procedure services
- A guide for multi-purpose services and small rural hospitals
- An Aboriginal and Torres Strait Islander health guide
- A guide for health service organisations caring for children
- A guide for governing bodies
- Information for consumers.

The AHSSQA Scheme reform will begin in 2018. This will involve developing training tools, describing new ways of undertaking assessments, developing templates for assessors to follow, and training expert assessors in areas such as clinical governance. Work will also commence on training the approximately 350 assessors who are involved in accrediting health service organisations to ensure they understand the intent of the second edition of the NSQHS Standards.

Health service organisations will be assessed to the second edition of the NSQHS Standards from 1 January 2019.

#### What the Commission will do

The Commission will:

- Inform and support health service organisations implementing the NSQHS Standards, including by releasing supporting resources
- Provide education and training for assessors on the second edition of the NSQHS Standards
- Introduce reforms to the AHSSQA Scheme.



# 21% increase

in the overall hand hygiene compliance rate in Australian hospitals from 2008 to 2017 (63% to 84%)

# Hand hygiene: Clinicians in the emergency department clean their hands so I don't get an infection

Every year, thousands of Australians pick up an infection in hospital. These healthcareassociated infections can lengthen the time people spend in hospital, delay recovery times and put very sick people at risk of further complications. Hand hygiene – using an alcoholbased rub or washing your hands thoroughly with soap and water – is one of the most effective ways to reduce and prevent these infections.

For people in hospital, clinicians' hands are one of the most common sources of preventable infections. Clinicians and other members of the workforce should clean their hands before, during and after every contact with a patient. However, we know this does not always happen.

#### National Hand Hygiene Initiative

In 2008, the Commission established the National Hand Hygiene Initiative (NHHI) to educate people about hand hygiene in Australia and promote change in hand hygiene practices in Australia. The NHHI is delivered by Hand Hygiene Australia and is based on a program developed by the World Health Organization that specifies five moments when hand hygiene should be used (Figure 7).

Through the NHHI, the Commission supports the provision of resources, training, and an audit and reporting process for hospitals to measure how they are performing. Since the NHHI commenced in 2008, the overall hand hygiene compliance rate in Australian hospitals has increased from 63% to 84% (Figure 8). During this time, compliance rates have increased among all groups of clinicians and across all clinical areas.

# Hand hygiene in emergency departments

Although there have been improvements over time across all clinical areas, hand hygiene compliance rates vary between hospital wards and units. The highest rates (over 87%) are found among clinicians working in neonatal, mental health and renal wards. The lowest rates have been regularly observed in emergency departments (Figure 9). This is despite compliance rates in emergency departments increasing from 60% in 2011 to 77% in 2017. Figure 7: Five moments for hand hygiene, adapted

#### Figure 8: National hand hygiene compliance rates, 2009–2017



Source: Hand Hygiene Australia, 2017



Source: Hand Hygiene Australia, 2017

#### Will my care be safe?

The Commission has several existing initiatives and resources in place to reinforce the need for good hand hygiene practices during patient care in all healthcare environments, including emergency departments. These include:

- The NSQHS Standards, particularly the Preventing and Controlling Healthcare-Associated Infections Standard<sup>9</sup>
- Nationally agreed guidelines for preventing and controlling infections in health care<sup>20</sup>
- Ongoing support of the NHHI and Hand Hygiene Australia<sup>21</sup>
- Education modules for health professionals and students about the importance of infection control in preventing disease.

It is also important to learn more about the factors that might impede effective hand hygiene behaviour in emergency departments, and use this information to develop improvement strategies that target these factors. The Commission is working with Hand Hygiene Australia to understand the reasons for lower rates of hand hygiene compliance in emergency departments. As part of this work, a small pilot study was undertaken in 2016 in the emergency departments of five hospitals across three different health services. The study examined what was happening in emergency departments when clinicians performed or did not perform hand hygiene, and was useful in identifying the behavioural, cultural, environmental and organisational factors that lead to good hand hygiene practice.





**Source:** Hand Hygiene Australia, 2017

#### Where to next?

The outcomes from the 2016 pilot study will provide strategies that can be implemented in emergency departments in 2017–18. The pilot study provided three initial recommendations for further action that can be applied nationally:

- Educate clinicians working in emergency departments on when to perform hand hygiene and how to identify which work practices need to be modified to enable good hand hygiene
- Use clinical leadership and audit and performance feedback techniques to institute cultural and behavioural changes in emergency departments
- Consider targeted interventions for consulting clinicians who visit the emergency department to provide patient care.

The Commission and Hand Hygiene Australia have alerted the Australasian College for Emergency Medicine and College of Emergency Nursing Australasia to the current rates of hand hygiene in emergency departments. Both colleges have been encouraged to provide leadership in improving hand hygiene among clinicians working in emergency departments. They were also invited to help develop a self-assessment tool for emergency departments. This tool will enable emergency departments to assess the current state of hand hygiene practice, education and promotion in the department; identify specific areas for improvement; and develop an action plan to fix any identified gaps. It is expected that this new resource will be released in late 2017.

The Commission is also raising the national hand hygiene benchmark in 2017 from 70% to 80%. It is expected that this change will encourage all clinicians, including those working in emergency departments, to actively participate in improving hand hygiene, and will meet public expectations of high levels of hand hygiene compliance.

#### What the Commission will do

The Commission will:

- Provide resources for health service organisations to help them implement the NSQHS Standards
- Provide resources about hand hygiene and infection control
- Monitor hand hygiene compliance rates at the hospital and clinical unit levels.







of patients with Clostridium difficile infections acquired the infection during their

# Clostridium difficile infection: My care is safe because the health system is preventing and managing infections

Clostridium difficile infection (CDI) is a gastrointestinal infection that commonly affects hospitalised patients and people in the community. The transmission, prevention and control of CDI is complex because it can be exacerbated by treatment with antibiotics, and can spread between patients as a result of poor infection control and contaminated hospital surfaces and medical equipment. Internationally, the incidence of CDI has increased significantly over the past 10 years, with severe outbreaks causing hospitals to close areas and to institute improved cleaning regimes.<sup>22-26</sup>

#### What do we know about CDI?

The Commission has recently uncovered new information about the size of the CDI problem in Australia, and the burden it places on our public hospitals. The Commission's internal analysis of patient hospital admissions data collected between 2011 and 2016 indicates that:

- 1. The number of hospital patients with CDI peaked in late 2011. This increase coincided with the emergence of several new strains and a change in laboratory testing practices.<sup>27</sup> Although the number of affected patients fell slightly in 2013 and remained relatively unchanged until late 2015, the number of patients with CDI has again begun to increase slightly (Figure 10).
- 2. Only 30% of affected patients were admitted to hospital with a diagnosis of CDI gastroenteritis. The remaining 70% of patients with CDI acquired the infection during their hospital stay.
- 3. Each year, approximately 1 in 800 patients in Australian public hospitals is affected by CDI gastroenteritis. This places an extra burden on hospitals as these patients stay in hospital at least twice as long as the average patient. Patients who develop CDI during a hospital stay are likely to stay more than six times longer than the average patient.

#### What is the impact of CDI?

Some people infected with CDI may not have any apparent symptoms and may not need any treatment, while others may suffer from fever, diarrhoea, vomiting and abdominal pain. Infection is most common in people who are elderly, chronically unwell or who have poor immunity. In severe cases, the large intestine may become so inflamed that surgery is needed to prevent it from rupturing, or the patient may die.

Based on data collected in Victorian public hospitals, the Commission estimates that seven in every 1,000 patients affected by CDI may die; however, these data were not adjusted for risks related to age and other medical conditions, and do not factor in that older patients and those with complex medical conditions are potentially at a greater risk of dying compared to other patients.<sup>28</sup> The rate of death due to CDI is low in Australia compared to many other countries, where cases of severe CDI have become widespread. In the United States, for example, six in every 100 cases of CDI result in death.<sup>29</sup> The mortality rate is even higher in the United Kingdom, where it is estimated that 14 out of every 100 cases of CDI result in death.<sup>30</sup>

# What is being done to control CDI?

Some people are infected by CDI because of prior long-term antibiotic use, which can disrupt the normal bacteria that live in the gut and protect the body from infection. This change allows the *Clostridium difficile* bacteria to take over and grow in the gut. One way to prevent CDI is to make sure doctors regularly review patients who use antibiotics on an ongoing basis to ensure that the need for ongoing therapy is still present.

Other people may get infected by touching surfaces that have been contaminated with the Clostridium *difficile* bacteria. Contaminated surfaces are more common in hospital environments because patients with CDI often contaminate their immediate environment with bacterial spores, particularly if they are vomiting or have diarrhoea. Clinicians and other people in a hospital may touch these contaminated surfaces and subsequently spread the bacteria to other patients in the hospital.<sup>31</sup> To prevent the spread of CDI in the hospital environment, health service organisations and their clinicians use a number of precautions. These include separating patients who have symptoms of CDI from other patients, using gowns and masks and dedicated equipment to care for symptomatic patients, practising regular hand hygiene and cleaning rooms more frequently. The strict adherence to these basic infection control precautions in Australian hospitals, together

with the circulation of less severe strains of CDI in Australia, is likely to prevent the higher rates of infection and mortality seen internationally.

Ongoing antimicrobial stewardship and infection control efforts are needed at both the national and local levels to maintain Australia's low rate of CDI and prevent future outbreaks. The Commission has several existing initiatives and resources in place to support hospitals in preventing and controlling the spread of all healthcare-associated infections, including CDI. These include:

- The NSQHS Standards, particularly the Preventing and Controlling Healthcare-Associated Infections Standard<sup>9</sup>
- Nationally agreed guidelines for preventing and controlling infection in health care<sup>20</sup>
- A national initiative that supports good hand hygiene practices in all Australian hospitals (page 24)<sup>21</sup>
- Nationally agreed guidelines and initiatives to support the appropriate use of antibiotics<sup>32</sup>
- Education modules for health professionals and students about the importance of infection control in preventing disease.

The Commission, in collaboration with SA Health and the National Centre from Antimicrobial Stewardship, also monitors antibiotics usage and appropriateness at a national level as part of the Antimicrobial Use and Resistance in Australia project **(page 60)**.<sup>33</sup>

#### Will my care be safe?



#### Figure 10: The burden of Clostridium difficile infection in Australian public hospitals, 2011–2016

Source: Admitted Patient Care National Minimum Data Set (2011–12, 2012–13, 2013–14, 2014–15, 2015–16) Data Quality Statement: http://meteor.aihw.gov.au/content/index.phtml/itemId/611030

#### Where to next?

The prevention and control of CDI is complex and it requires a good understanding of how CDI is spread in both healthcare and community settings. A key purpose of improving the understanding of CDI in Australia is to have high-quality data that can act as an effective monitoring and alert system, and to provide an opportunity to design and evaluate strategies to reduce the incidence of CDI. So far, our understanding of CDI in Australia has been limited to hospital settings. We will need more information about the incidence of CDI in the community if we are to better control this infection. Currently, the Commission is exploring ways to better monitor the burden of CDI in all healthcare settings across Australia. Data analysis is also being undertaken to better understand why patients are becoming infected with CDI in the community before bringing the infection into hospitals. This information could be used to enable the early identification of people with infection and trigger quicker use of targeted infection control precautions. Further information will inform interventions and strategies to reduce the incidence of CDI, create new knowledge and understanding for hospital executives and clinicians, and complement surveillance-related activities to improve the management and prevention of CDI and outcomes for Australian patients.

#### What the Commission will do

The Commission will:

- Provide resources to help health service organisations implement the NSQHS Standards
- Provide resources about hand hygiene, infection control and antibiotic stewardship
- Monitor the burden and impact of CDI across the health system.



Effective complaint resolution can create positive results for the individuals, families and carers who are dissatisfied with their healthcare experience

# A positive complaints culture: Speaking up when something goes wrong can lead to safer care for everyone

In 2014, the Commission asked people what made them feel safe or unsafe when they were receiving care in mental health inpatient units.<sup>19</sup> People reported that being treated with respect and as a whole person made them feel safe. They acknowledged that the environment could be unpredictable, but that when staff were available, visible, experienced and calm, this contributed to a sense of safety. They also identified the experience of feeling listened to by staff as a key factor.

Recovery-oriented mental health services respond to information from consumers and carers about what they value in a service.<sup>34</sup> One way in which services gather feedback is through complaints. Culturally, complaints have a negative connotation, which can inhibit people from making them and engender defensive responses from service providers. In addition, people have reported feeling unable to complain about their health care for fear of retribution.

Effective complaint resolution can create positive results for the individuals, families and carers who are dissatisfied with their healthcare experience; for services that use the information to make improvements; and for future users of health services. Information can also be taken up at a broader level, and incorporated into policy to improve the safety and quality of health services. State and territory governments have established healthcare complaints commissions to fulfil this role. In 2014, Victoria became the first state to set up a specialist mental health complaints body. This provides an opportunity to learn more about the problems people experience when accessing these services, and to take actions to address them.


#### Figure 11: Main issues included in complaints raised with Victoria's Mental Health Complaints Commissioner, 2015–16

Percentage of total complaints

Source: Victoria's Mental Health Complaints Commissioner, Annual Report, 2015–16.

#### The Mental Health Complaints Commissioner

The Mental Health Complaints Commissioner (MHCC) opened in Victoria on 1 July 2014. It was created as part of the implementation of the Mental Health Act 2014 (Vic) as a specialist independent mental health complaints body.35 The MHCC was established to provide accessible, tailored and responsive complaints processes to address issues consumers and their families and carers experienced when accessing public mental health services.<sup>36</sup> As part of its legislated role, the MHCC publishes an annual report, which outlines the issues and outcomes of the complaints and enquiries it has received over the previous 12 months, the service improvement actions taken in response, and its associated education and engagement initiatives.

In 2015–16, the MHCC received 1,729 complaints and enquiries. The MHCC's unique profile and specific focus on mental health services provides opportunities for mental health consumers and their families and carers to raise their concerns about their experiences of treatment and care.

#### What issues do people raise?

Most complaints involved more than one issue; however, the MHCC uses existing categories that have been developed for reporting complaints at the local health service level (Figure 11). These broad categories enable local, state and territory, and national benchmarking.

Treatment issues generated the greatest number of complaints. These included concerns about decisions to treat people in ways contrary to their expressed preferences, and about the quality of information provided to people about their rights. Treatment concerns also related to the use of medications and the monitoring of side effects. These issues closely aligned with issues reported about communication, consultation and information. The MHCC observed that:

Communication concerns are often an underlying issue in complaints. They represent the need for services to dedicate time and attention to new types of conversation with consumers and carers.<sup>36</sup>

Of significance are the negative experiences consumers and their families and carers reported when being discharged. People also reported that the environment in which mental health care is delivered can make them feel unsafe. This relates to both the built environment and the interactions they have or witness. While the complaints about the built environment made up a small proportion of total complaints, they were assessed as having a significant impact on consumers. This is consistent with information consumers have previously provided to the Commission.<sup>19</sup>

The safety and quality issues identified in complaints are often implicit. A complaint about the unchecked side effects of antipsychotic treatment may be categorised as being related to treatment, but not expressed explicitly in terms of medication safety. When poor communication occurs, this can be reflected in both the communication and staff relationships categories. The complexity of the issues requires equivalent complexity in response, not just in the immediate and local actions taken, but in creating the systemic conditions to enable effective responses.

#### What is being done?

In responding to concerns raised by consumers and their families and carers, the MHCC acts to safeguard rights, resolve complaints and improve services.

The MHCC encourages people to discuss their concerns or raise their complaints directly with the health service wherever possible. This often leads to a prompt resolution of the issue between the people directly affected. The MHCC provides advice on the most effective approaches for resolving complaints, and works with services on the Four As of complaint resolution: acknowledgement, answers, action and apology. This builds health workers' knowledge, skills and confidence in responding to the four most common things people are looking for when they make a complaint.

Complaints about specific treatments can, in some instances, be addressed locally with the mental health service, whereas complaints about involuntary treatment are referred to the Mental Health Tribunal. Where complaints raise issues about the actions of an individual clinician, the MHCC makes notifications and referrals to the Australian Health Practitioner Regulation Agency.

In addition to recommendations about improvements to the physical structure of mental health units, the MHCC identifies how environments can be modified through improvements to nursing observation, and increases in staffing levels at times of high acuity. Through the resolution of individual complaints, the MHCC identified 126 service improvement actions that occurred as outcomes of complaints in 2015–16. Seventy-three of these improvements were initiated by health services themselves, while a further 53 resulted from MHCC recommendations. Areas of improvement related to delivering staff training, reviewing policies and procedures, providing information to people accessing services, and implementing practice changes in discharge planning.

The processes that the MHCC uses to evaluate its own performance and improve the way it operates are consistent with the processes it asks health services to undertake. The MHCC seeks to develop a positive complaints culture – an environment in which people feel confident and supported to raise their concerns about the services they receive, and where complaints are seen as opportunities to improve services for everyone. For this process to work, people have to be able to see that real change does occur. The MHCC has observed that:

Increasing people's awareness of the range of service improvement actions taken by services as a consequence of complaints will play an important role in building the confidence of consumers, families and carers to raise concerns directly with their service.<sup>36</sup> People who access services, together with their families and carers, still express fears that if they make a complaint, they or their loved ones will face negative experiences of care. These fears must be recognised as genuine, even when a health service believes they are misplaced. A positive complaints culture needs to acknowledge these fears and respond to them directly. The MHCC proactively addresses these fears through education and engagement, which includes training clinicians and staff to respond to complaints effectively.

An integral part of fostering a positive complaints culture is building confidence within the workforce, and ensuring that the focus is on improving the safety and quality of the health care that is delivered. Rather than focusing on assigning individual blame when something has gone wrong, the process should concentrate on identifying both the systemic issues and the additional organisational supports that can be put in place to enable clinicians to deliver optimal care.

Healthcare complaints commissions undertake this role, and provide information that other agencies, such as the Commission, can use in developing national policy.

#### Where to next?

The primary aims of the NSQHS Standards are to protect the public from harm and improve the quality of health care.9 As noted earlier (page 18), the second of edition of the NSQHS Standards has been developed. The eight NSQHS Standards in the second edition have been developed to be implemented interdependently. They contain guidance to help health service organisations implement actions that directly address issues raised through complaints as well as issues reported by the MHCC. While complaints management was included in the first edition of the NSQHS Standards, the second edition significantly expands this action and explicitly calls for consumers to be involved in reporting and reviewing complaints. Following is the relevant action from the new Clinical Governance Standard (1.14).

The health service organisation has an organisationwide complaints management system and:

- a. Encourages and supports patients, carers and families, and the workforce to report complaints
- b. Involves the workforce and consumers in the review of complaints
- c. Resolves complaints in a timely way
- d. Provides timely feedback to the governing body, the workforce and consumers on the analysis of complaints and actions taken
- e. Uses information from the analysis of complaints to inform improvements in safety and quality systems
- f. Records the risks identified from the analysis of complaints in the risk management system
- g. Regularly reviews and takes action to improve the effectiveness of the complaints management system.

The Clinical Governance Standard also includes actions regarding the organisational supports required to deliver effective, evidencebased treatment. Specific treatment issues are addressed in the Comprehensive Care Standard, while the principles of shared decision making around treatment are covered in the Partnering with Consumers Standard.

The use of design principles and regular maintenance to maximise the safety of the physical healthcare environment is included in actions in the Clinical Governance Standard. This is complemented by actions in the Comprehensive Care Standard that require members of the workforce to identify locations and situations that can potentially lead to distress and conflict, and to use risk mitigation strategies.

The Communicating for Safety Standard outlines processes for communicating critical information, and for ensuring structured communication when care is being transferred or discharge planned. This aligns with actions in the Partnering with Consumers Standard related to communications to support effective partnerships between the person, their families and members of the workforce. The Commission has also developed the National Consensus Statement: Essential elements for recognising and responding to deterioration in a person's mental state (the Consensus Statement).<sup>37</sup> This is an adaptation of an approach that has been successful in reducing preventable adverse events in people's physical health in hospital. The Consensus Statement is designed to support collaborative therapeutic practice to ensure that changes in a person's mental state are recognised at an early stage and effective responses are developed in partnership with the person and their support network. Intervening early and engaging in shared decision making with the person experiencing deterioration in their mental state addresses the two greatest sources of complaints reported by the MHCC.

#### What the Commission will do

The Commission will:

- Provide support to health service organisations to review and, where necessary, improve their complaints management systems
- Provide guidance about safe and effective healthcare delivery through the NSQHS Standards
- Support services to recognise deterioration in a person's mental state early, and engage in shared decision making with the person and their family and carers.

The most common areas of complaint relate to treatment and communication.

Intervening early and engaging in shared decision making can address these issues.







# My Health Record: Sharing my health information makes my care safer

Information about people's health care is typically distributed across a wide range of locations, including general practices, hospitals, imaging centres, specialist practices and allied health practices. The records of any one clinician are rarely shared with the patient or with other clinicians.

## Sharing information is important for safety

The lack of capacity to share healthcare information can be a problem when people need to see more than one clinician. In Australia, about one in six people over the age of 14 need to see three or more clinicians for the same condition (Figure 12).<sup>38</sup> This is more common for women, for people who have a long-term health condition and for older people.

When people see more than one clinician for the same condition, it is important that providers have relevant information and that it is available from one healthcare event to another.<sup>39</sup> Patients move between healthcare clinicians at all points on these journeys.<sup>40,41</sup> Among people who saw three or more clinicians for the same condition, 13% reported that there were issues caused by a lack of communication between clinicians.<sup>38</sup> These issues were more common among people with a long-term health condition and those living in regional and remote areas.

#### My Health Record supports sharing information between healthcare providers

A patient's My Health Record is a digital summary of their health information. With the introduction of the My Health Record system, health services and clinicians will have secure and faster access to a patient's health information. This is intended to create a more efficient system, improving the safety and quality of care, supporting decisions about treatment, and making it easier to care for people across multiple clinicians and settings. All Australians can register for a My Health Record, and have access to a summary of their personal health information whenever they need it.



#### Figure 12: Percentage of people who see three or more clinicians for the same condition, 2015–16

Source: Australian Bureau of Statistics, Patient experiences in Australia: Summary of findings, 2015–16, 2016.

Several different documents can be uploaded, entered, downloaded and viewed in the My Health Record. These include:

- The Shared Health Summary, which is a summary of a person's health status at a certain point in time
- Event summaries, which capture information about a significant healthcare event that is relevant to a person's ongoing care
- Discharge summaries, which are provided when a person leaves hospital
- Medication records
- Electronic referrals (eReferrals) from GPs to specialists
- Letters from specialists to GPs.

A patient's doctor and other healthcare providers connected to the My Health Record system and involved in the patient's health care will see the patient's My Health Record unless they have set access controls. A patient can limit who can see their My Health Record or grant restricted access to doctors, specialists or hospitals. The My Health Record system has bank-strength security features, including strong encryption, firewalls, secure login and authentication mechanisms, and audit logging.



Figure 13: Number of people registered with My Health Record over five years

**Source:** Australian Digital Health Agency, 2017; Department of Health Annual Report 2014–15, 2015; My Health Record System Operator Annual Report 2015–16, 2016.

#### Ensuring the safety of My Health Record

Patient safety and improving clinical quality are priorities for the My Health Record system. The Australian Digital Health Agency is responsible for maintaining the My Health Record system. In partnership with the Agency, the Commission undertakes a digital health safety program to identify barriers and enablers that affect the function and use of the My Health Record system. The aim is to enhance the utility and uptake of the My Health Record system while optimising patient safety.

As part of this program, the Commission has conducted a series of clinical safety reviews that provide independent quality assurance for the My Health Record system in areas such as:

- Maintaining systems for ensuring the clinical safety of the My Health Record system
- Ensuring the quality and integrity of clinical information recorded in the My Health Record system

- Establishing and maintaining the correct identity of patients, clinicians and organisations
- Using My Health Record in emergency departments
- Optimising the way in which information about medications and clinical documents is presented on computer screens
- Ensuring the clinical safety of My Health Record when the system is down
- Understanding the factors that affect how people use the My Health Record system, and the way in which it ensures safety
- Using agreed clinical terms and definitions across the My Health Record system.

#### **Use of the My Health Record**

In June 2017, 4,888,722 people had registered for a My Health Record – about 20% of the Australian population.<sup>42</sup> Of the people who registered, 54% were female and 46% were male. The majority of people who registered were aged 20 or younger. Figure 13 shows the number of people who have registered with the My Health Record system since its inception in 2012.<sup>42–44</sup>

Clinicians, laboratories and pharmacists can use the My Health Record system to send and view nine types of documents. In June 2017, 12,434,552 of these documents were available to participating healthcare providers whose patients had a My Health Record.<sup>42</sup>

People registered with the My Health Record system can enter health information and documents into the system. In June 2017, 122,269 such documents were available in the system, and 14,489 documents relating to advance-care preparations had been uploaded.<sup>42</sup> They can also view information maintained by Medicare, such as immunisations.



#### **Figure 14:** Number of organisations registered in My Health Record system, by type

#### Where to next?

My Health Record (and its predecessor, the Personally Controlled Electronic Health Record) has been available since July 2012. However, work is ongoing so that the My Health Record is a fundamental tool to support the safety and quality of health care for people in Australia. Of particular importance are the following initiatives.

### Diagnostic imaging and pathology reports in My Health Record

The My Health Record system will now present diagnostic imaging (such as X-ray and ultrasound) and pathology reports (such as blood tests) in a single location accessible to patients and clinicians. NSW Health Pathology loaded the first pathology reports to the My Health Record system in April 2017. Having these reports in the My Health Record will enhance clinical management by reducing the time clinicians spend locating results and the number of unnecessarily repeated diagnostic tests.

Note: For public and private hospital organisations there may be more than one health service within an organisation.

Source: Australian Digital Health Agency, 2017.

#### Enhanced medicines view

The way in which information about medicines is presented in the My Health Record system is being improved. From June 2017, information about a patient's current and past medicines will be presented more clearly and consistently, with more detail about clinical information that is important for safety and quality. This will enable clinicians to use the My Health Record system to understand all the medicines their patients are taking, and support accurate communication of medicines information between clinicians.

#### My Health Record opt-out trials

Although the My Health Record system has been to date an opt-in system, where people can choose whether or not to have a My Health Record, this is changing. In June 2016, two opt-out trials began in the Nepean Blue Mountains region of New South Wales and in northern Queensland. More than 1 million people had a digital health record automatically created for them, unless they chose not to have one. A report evaluating these trials was released in May 2017, recording very low opt-out rates of between 1.8% and 1.9%.<sup>45</sup>

#### National expansion of the My Health Record system

The Australian Government announced in May 2017 that the My Health Record system will be used nationally in 2018, meaning that every Australian will receive a My Health Record unless they choose not to have one. The government's investment in expanding the My Health Record system and shifting to an optout approach by the end of 2018 will accelerate its benefits for clinicians and patients.

#### What the Commission will do

#### The Commission will:

- Continue to work with the Australian Digital Health Agency to assure the clinical safety of the My Health Record system
- Undertake reviews of clinical safety incidents associated with the My Health Record system
- Work with the Australian Digital Health Agency, state and territory governments and local health services to develop and pilot a national safety and quality program to establish routine use of the My Health Record in emergency departments.

# **Case study:** Using safety and quality information for improvement

Comparing rates of healthcare use in different parts of Australia is an invaluable tool for highlighting gaps in care. The Commission has produced two Australian atlases of healthcare variation that map the rates of many different types of healthcare interventions, including medication dispensing, and hospitalisations for chronic conditions and surgical procedures.<sup>3,46</sup> Variation itself is not necessarily bad, and it can be good if it reflects health services responding to differences in patient preferences or underlying needs. When a difference in the use of health services does not reflect these factors, it is unwarranted variation and represents an opportunity for the health system to improve.



There is substantial variation in healthcare treatment rates, both internationally and within Australia.

The weight of evidence in Australia and internationally suggests that much of the variation identified by the Commission in its first and second *Australian Atlas of Healthcare Variation* is likely to be unwarranted.

It reflects differences in clinician practices, the organisation of health care, and in people's access to services. It may also reflect poor-quality care that is not in accordance with evidence-based practice.

#### Supporting best practice in mental health – responses to Atlas data

Among the findings of the first Atlas were concerning levels of variation in the use of medications for several mental illnesses, including attention deficit hyperactivity disorder (ADHD), depression, anxiety and psychosis.<sup>46</sup> This data, which related to 2013–14, prompted action from a range of groups, including state and territory governments, clinical colleges and the Commission itself.

#### State response: Tasmania

Primary Health Tasmania was surprised to see several areas of Tasmania among the highest users of anxiety and depression medications in Australia in the first Atlas.

The top five highest rates of antidepressants dispensed for people aged 18–64 in Australia were all in Tasmania **(Figure 15).** The highest rate in Australia was in Hobart–North West, with a rate of 175,380 per 100,000 people, compared to the national rate of 101,239 per 100,000 people.

Four of the top 10 areas with the highest rates of anxiety medications dispensed for people aged 18–64 were in Tasmania. The highest rate in Australia was in Hobart–North West, with a rate of 41,473 per 100,000 people, compared to the national rate of 17,201 per 100,000 people.





Source: Australian Commission on Safety and Quality in Health Care, Australian Atlas of Healthcare Variation, 2015.

Four of the top 11 areas with the highest rates of anxiety medications dispensed for people aged 65 and over were in Tasmania. The highest rate in Australia was in Hobart–North West, with a rate of 80,445 per 100,000 people, compared to the national rate of 37,695 per 100,000 people.

Differences in the rates of anxiety and depression at the population level did not account for these high rates in Tasmania. A lack of awareness of, and access to, non-medication 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 first Atlas's 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, such as the Chief Psychiatrist and the Chief Pharmacist, to look more closely at the treatment of mental illnesses in different parts of Tasmania.

Primary Health Tasmania, together with the Tasmanian Health Service and Department of Health and Human Services, took a multipronged approach to improving the quality of clinical care. Quality improvement initiatives included:

• Completing an audit of practice data within affected geographical areas to identify which patients used anxiety and depression medications

- Speaking with clinicians working in target geographical areas and providing clinicians with peer support to improve practice
- Developing deprescribing resources and training clinicians to use these resources
- Expanding and promoting Tasmanian HealthPathways for mental health. This webbased information portal helps primary care clinicians plan patient care through primary, community and secondary healthcare systems in Tasmania.

Primary Health Tasmania assessed the availability of mental health services in different areas of Tasmania, and increased access where gaps were found. This included implementing face-to-face social work and psychology supports, increasing the use of GP mental health care plans and promoting consumer self-management tools for depression and anxiety, including the MindSpot Clinic (a free, Australian Government–funded telephone and online service) and Mood Gym (a free, interactive self-help program).

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

#### Specialist college response: The Royal Australian and New Zealand College of Psychiatrists

The need to provide prescribers with guidance about medications for mental illnesses was already known by the Royal Australian and New Zealand College of Psychiatrists (RANZCP), but large variations in dispensing rates noted in the first Atlas underscored the need for action. For example, between the local area with the lowest PBS prescription dispensing rate and the local area with the highest PBS prescription dispensing rate, there was:

- A 38-fold difference for anxiety medications to people aged 18–64
- A 23-fold difference for antipsychotic medications to people aged under 18
- A 75-fold difference for ADHD medications to people aged under 18 (Figure 16).

Differences in the illness rates were unlikely to explain all of this variation in medication use; it was more likely that much of the variation resulted from differences in the prescribing practices of doctors in different states and territories, and potentially from differences in the prescribing practices of individual primary health providers and specialists. These could include different thresholds for prescribing medication for mental illness symptoms; limited access to non-pharmacological therapies in some areas may also have been a problem. The RANZCP wanted to provide a collaborative and constructive response to these findings, which was coordinated by the Community Collaboration Committee. Specialist committees within the RANZCP reviewed the Atlas's findings, and produced updated clinical guidelines on the management of mood disorders and schizophrenia to create greater clarity about treatment options and when medication is appropriate. The RANZCP is working with the Royal Australian College of General Practitioners and the Royal Australasian College of Physicians to update their co-badged guidelines on the use of antidepressant medications in children and adolescents.

Trainee psychiatrists are also benefiting from the Atlas's findings, as the data on the use of medications for mental illnesses has also been used for teaching purposes. Trainees are shown how to explore the data in their own areas, which are contrasted with their personal experience, prompting discussion about influences on choice of treatment.

Future analyses by the RANZCP Committee for Therapeutic Interventions and Evidence-Based Practice to explore the Atlas data may help address questions such as:

- How does limited access to mental health services in regional locations influence medication use?
- How can the RANZCP best target actions when developing policies, guidelines and/or training modules?



### **Figure 16:** Number of PBS prescriptions dispensed for ADHD medicines per 100,000 people aged 17 years and under, age standardised, by Statistical Area Level 3 (SA3), 2013–14

Source: Australian Commission on Safety and Quality in Health Care, Australian Atlas of Healthcare Variation, 2015.

### **Figure 17:** Number of PBS prescriptions dispensed for antipsychotic medicines per 100,000 people aged 65 years and over, age standardised, by Statistical Area Level 3 (SA3), 2013–14



# Commission response: Reducing the use of antipsychotic medication in people aged 65 and over

The first Atlas found that in 2013–14, more than 900,000 PBS prescriptions for antipsychotic medicine were dispensed for people aged 65 and over.<sup>46</sup> The number of prescriptions dispensed was seven times higher in the area with the highest rate compared to the area with the lowest rate (**Figure 17**).

Concerns have been raised about prescribing antipsychotic medicines outside guideline recommendations – such as for behavioural disturbances related to dementia or delirium – before secondary causes have been excluded and non-pharmacological measures have been tried.<sup>47,48</sup> For example, antipsychotics are overused as the first-line response to agitation and aggression.<sup>47</sup> They only have a modest benefit, and increase the risk of adverse events such as death, stroke, falls and further cognitive decline.<sup>49–51</sup>

Behavioural disturbance can be mistakenly thought to be part of a patient's dementia when the patient may have an underlying physical condition, be in pain or be expressing an unmet need.<sup>52</sup> It is possible to prevent behavioural issues from escalating by assessing and treating the underlying cause.

Source: Australian Commission on Safety and Quality in Health Care, Australian Atlas of Healthcare Variation, 2015.

The Commission is currently conducting the Caring for Cognitive Impairment campaign, which brings together and builds on several key initiatives from 2013 to increase awareness of cognitive impairment as a quality and safety issue, including the appropriate use of antipsychotics. Initiatives include:

- Releasing 'A better way to care' resources for clinicians, health service managers and consumers  $^{53-55}$
- Releasing in 2016 the Delirium Clinical Care Standard, which emphasises the importance of minimising the use of antipsychotics<sup>56</sup>
- Incorporating actions about cognitive impairment into the second edition of the NSQHS Standards, which require the use of antipsychotics and other psychoactive medicines to follow best practice and legislation.<sup>10</sup>

The Commission has also hosted two roundtable discussions with stakeholders – such as clinicians in primary care, hospitals and aged care facilities – to discuss strategies to reduce the inappropriate use of antipsychotic medications in older people. See **page 69** for more information.





#### The Second Australian Atlas of Healthcare Variation

The second Atlas was released in 2017 and examines variation in 18 clinical items.<sup>3</sup> It paints a picture of variation in the use of a number of interventions not covered in the first Atlas, such as hospitalisations for chronic diseases and caesarean section in younger women. Some interventions are investigated in the second Atlas to build on the findings from the first Atlas – for example, examining hysterectomy and endometrial ablation separately.

#### Hospitalisations for chronic diseases

Variation in hospitalisation rates<sup>1</sup> for chronic diseases across Australia in 2014–15 was found for:

- Chronic obstructive pulmonary disease (COPD), where there was a 16-fold difference between the lowest rate (63 per 100,000 people) and the highest rate (990 per 100,000 people) (Figure 18)
- Diabetes complications, where there was a 12-fold difference between the lowest rate (52 per 100,000 people) and the highest rate (601 per 100,000 people)
- Heart failure, where there was a seven-fold difference between the lowest rate (90 per 100,000 people) and the highest rate (632 per 100,000 people).

Timely and adequate health care in the community will prevent some conditions worsening to the point where hospitalisation is necessary, or prevent the condition occurring in the first place. For example, if diabetes is not well managed, patients risk developing diabetic foot disease. In the most severe cases, this can lead to hospitalisation and amputation of the affected toes, foot or lower leg.

The high hospitalisation rates and substantial variation reported for the chronic diseases in the second Atlas show that recommended care is not always provided to people with these conditions. Well-integrated and coordinated primary healthcare services for patients with chronic and complex conditions can achieve better outcomes for these patients and ensure a sustainable health system.<sup>57</sup> The implementation of a healthcare home model, starting late 2017, will greatly improve the appropriateness and coordination of care for patients with multiple chronic and complex conditions.<sup>58</sup>

Poor access to health services in the community is also related to higher rates of potentially preventable hospitalisations.<sup>59</sup> The ability to access health services is determined not only by clinician supply, but also by costs, available transport and patients having sufficient health literacy to know when to consult health providers.<sup>59</sup> For COPD, heart failure and diabetes complications, hospitalisation rates were higher among Aboriginal and Torres Strait Islander people, socioeconomically disadvantaged people and those living in remote areas.

Multiple strategies are needed to reduce the rates of hospitalisation for chronic diseases among Aboriginal and Torres Strait Islander people. Services to manage chronic diseases need to be affordable, physically accessible and culturally safe. Long-term investment and actions on many levels are also needed to reduce risk factors for chronic disease among Aboriginal and Torres Strait Islander people. For example, continuous efforts and longterm investments are needed to reduce the high smoking rate among Aboriginal and Torres Strait Islander people. See **page 98** for more information about Aboriginal and Torres Strait Islander health.

<sup>\*</sup> Variation between rates in the lowest and highest Statistical Area Level 3 (SA3).

### **Figure 19:** Number of hospitalisations for knee replacement per 100,000 people aged 18 years and over, age and sex standardised, by Statistical Area Level 3 (SA3), 2014–15



A lack of community-based health services and the difficulty of accessing services due to distance contribute to the high admission rates for patients from remote and some regional areas.<sup>60</sup> Services need to be redesigned to increase the availability of health care close to home for people living in non-metropolitan areas.

Socioeconomic disadvantage may contribute to hospitalisations in a range of ways, such as greater disease severity, multiple comorbidities and poor health literacy.<sup>61</sup> Health literacy has two components. Individual health literacy is about a person's skills and abilities, and how these are applied to health and health care. The health literacy environment includes the infrastructure, policies, processes, materials, people, relationships, and cultural and linguistic competence of the health system.<sup>11</sup> Improving individual health literacy and the health literacy environment are vital components of any strategy to reduce potentially preventable hospitalisations due to chronic diseases.

Source: Australian Commission on Safety and Quality in Health Care, Australian Atlas of Healthcare Variation, 2015.

#### Surgical interventions

A four-fold difference in hospitalisation rates across Australia in 2014–15 was found for\*:

- Knee replacement (the lowest rate was 128 per 100,000 people and the highest rate was 507 per 100,000 people) (Figure 19)
- Cataract surgery (the lowest rate was 835 per 100,00 people and the highest rate was 3,279 per 100,000 people).

Between 2003 and 2014, the number of knee replacement procedures undertaken in Australia per year increased by 88%.<sup>62</sup> The increase was partly due to population ageing but also to the growing use of this intervention for people at earlier ages as a result of rising levels of obesity, which have increased the need for knee replacements. In 2011, Australia had the highest rate of knee replacement among selected countries in the OECD.<sup>63</sup>

For people with knee osteoarthritis, guidelines recommend the use of a range of pharmacological and non-pharmacological approaches before surgery, including weight loss, physiotherapy, and the use of medicines to relieve pain and inflammation.<sup>64,65</sup> These strategies are effective for some people. For example, even a 5% reduction in weight can improve symptoms for overweight people with symptomatic osteoarthritis of the knee.<sup>66</sup> However, guidelines relating to

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osteoarthritis have not been fully implemented in Australia and conservative treatments remain underused.<sup>67</sup> Patients, therefore, need to be well informed about the range of treatment options, the likelihood of risks and benefits associated with each, and the range of possible outcomes. The Commission has produced a clinical care standard on osteoarthritis of the knee that emphasises seven areas of care to manage symptoms, including patient education and self-management, weight loss, exercise and medications.<sup>65</sup>

Cataract surgery is the most common elective surgical procedure in Australia.<sup>68</sup> It involves replacing the lens with a clear, permanent, artificial lens. Vision loss from untreated cataract is 12 times more common among Aboriginal and Torres Strait Islander people than among non-Indigenous people.<sup>69</sup> The rate of cataract surgery for Aboriginal and Torres Strait Islander people is only 80% that of non-Indigenous people, highlighting the inequity of access to appropriate care.<sup>3</sup>

A major barrier to cataract surgery for Aboriginal and Torres Strait Islander people is limited public ophthalmology services.<sup>70</sup> Other barriers include poor coordination between hospital, other healthcare and eye care services. Case management to help patients navigate the referral process and hospital system may go some way towards addressing these issues.<sup>71</sup> Improving eye health literacy may also assist in increasing the number of Aboriginal and Torres Strait Islander people who seek help for cataract before it causes blindness.<sup>72</sup>

Increasing the availability of eye services that are tailored to Aboriginal and Torres Strait Islander people and the cultural competence of mainstream services is paramount for improving rates of cataract surgery among Aboriginal and Torres Strait Islander people.<sup>71,73</sup>

#### Women's health and maternity

For women who gave birth vaginally from 2012 to 2014, the rate of perineal tears was 12 times as high in the area with the highest rate (71 per 1,000 vaginal births) compared to the area with the lowest rate (6 per 1,000 vaginal births).

The rate of selected women\* who had a caesarean section from 2012 to 2014 was three times as high in the area with the highest rate (438 per 1,000 selected women) compared to the area with the lowest rate (147 per 1,000 selected women).

Perineal tears are tears of the skin and other tissues (the perineum) that separate the vagina from the anus. They occur mainly during childbirth. Of the women who gave birth vaginally in Australia in 2014, 3% had a third- or fourth-degree tear.<sup>6</sup>

Variation between rates in the lowest and highest Statistical Area Level 3 (SA3).

A third-degree tear is an injury to the perineum involving the anal sphincter (the muscle controlling the anus), and a fourthdegree tear involves the anal sphincter and the lining of the anus or rectum. These injuries, if not recognised and repaired at the time, can have serious long-term consequences.

Although severe tears cannot be prevented in all cases, a number of clinical practices are associated with a reduced risk.<sup>74</sup> Initiatives that combine these practices with education and training can be effective in reducing incidence.<sup>75–77</sup> Improvements to training in instrument-assisted vaginal births, including initiatives to ensure skills are maintained, are likely to help reduce the risk of tears due to instruments.<sup>74,78</sup> Developing an agreed national standard of care to minimise the risk of perineal trauma in childbirth is a priority.

Caesarean birth, without prior labour, is associated with an increased risk of neonatal breathing difficulties, which increases the likelihood of admission to neonatal intensive care.<sup>79-81</sup>

\* 'Selected women' refers to women aged 20–34 who met all of these criteria: gave birth for the first time, singleton pregnancy (carried one baby), baby's head positioned at the cervix (vertex presentation), and baby of gestational age 37–41 completed weeks at birth.





### **Figure 20:** Number of hospitalisations for endometrial ablation per 100,000 women aged 15 years and over, age standardised, by Statistical Area Level 3 (SA3), 2012–13 to 2014–15

While the second Atlas found a relatively low level of geographical variation of caesarean section in selected women across Australia, other sources have shown that the overall rate of caesarean section in Australia is higher than the OECD average: 32% of live births were by caesarean section in Australia in 2013, compared with 28% in the OECD). The Australian rate has nearly doubled since 1991, when it was 18%.<sup>2,82</sup>

To support women to make informed choices about their maternity care and to ensure the appropriate use of caesarean section, information on birth options, including risks and benefits, should be provided to all women. This is particularly important for young women with an uncomplicated pregnancy who are having their first child, as the method of birth for the first child often sets the pattern for future births.

# Learning from the first and second Atlas: Hysterectomy and endometrial ablation

Hysterectomy is an operation to remove the uterus. The clear majority of hysterectomies are done for non-cancer gynaecological conditions.<sup>83</sup> Of these, heavy menstrual bleeding is the most common. The first Atlas reported a five-fold variation in the rates of hysterectomy and endometrial ablation, using combined data for the two procedures. Women in regional areas were more likely to undergo hysterectomy or endometrial ablation than were women in major cities. To explore these findings further, hysterectomy and endometrial ablation in women aged 15 and over were examined separately in the second Atlas.

Variation is greatest for endometrial ablation, with a 21-fold difference – the highest variation observed in this Atlas – recorded between the lowest rate (19 per 100,000 women) and the highest rate (390 per 100,000 women).

The variation for hysterectomy is also marked, with an almost seven-fold difference between the lowest rate (115 per 100,000 women) and the highest rate (763 per 100,000 women).

For both endometrial ablation and hysterectomy, rates in inner and outer regional areas are substantially higher than in major cities, as shown in the first Atlas (Figure 20).

Hysterectomy rates have fallen worldwide since the 1980s, including in Australia.<sup>84-86</sup> The introduction of less invasive treatment options for heavy menstrual bleeding, such as effective oral hormone treatments, the levonorgestrel intrauterine system and endometrial ablation, is likely to account for some of this decline.<sup>86</sup> Despite the fall in rates since the 1980, there is concern that hysterectomy may be overused in Australia for the treatment of non-cancer conditions.<sup>85,86</sup> The hysterectomy rate is higher in Australia than in most other comparable OECD countries.<sup>87</sup>

The variation seen in the use of endometrial ablation and hysterectomy may be due partly to differences in access to, or awareness of, different options for treating heavy menstrual bleeding. Providing patient information on heavy menstrual bleeding that supports shared decision making, such as decision tools and option grids, and promoting shared decision making to clinicians will help ensure women are aware of all their treatment options.

The Commission prepared a clinical care standard on heavy menstrual bleeding in 2017 after extensive consultation with clinical experts.<sup>88</sup> The clinical care standard, due for the release in the final quarter of 2017, emphasises the importance of informing women of all treatment options, promoting shared decision making and prioritising less invasive treatments over hysterectomy if the woman chooses it.

# 2. Will I get the right care?

Even if health care is safe, other important questions need to be asked.

Sometimes different people who have the same health conditions, concerns or problems do not receive the same health care. Depending on where they live, or which health service or clinician they consult, people may be managed differently. This is referred to as healthcare variation and it occurs around the world.<sup>63</sup> There are many reasons why this variation occurs. The population is not all the same and people have different needs. Sometimes variation is related to the preferences of individual patients or groups and the choices they make. Sometimes it reflects clinicians' efforts to innovate and improve practice. However, it might also result in some people undergoing unnecessary and potentially harmful tests or treatments, while others miss out on necessary interventions. Sometimes there is good agreement about what care people should receive, but this care is not always provided.<sup>89</sup> There are many reasons for this gap between the care supported by evidence and what happens in practice.

The Commission is working to make sure that everyone gets the care that they should.



This section provides information about the extent of healthcare variation in Australia, and what is being done to address it. It also focuses on supporting appropriate care in a number of specific areas, as well as solutions to support the delivery of appropriate care.

**Antibiotic prescribing:** I get the right care because the health system is tracking how antibiotics are prescribed.

**Cognitive impairment:** If I have behavioural and psychological symptoms of dementia I will get the right care.

**Patient blood management:** I will get the right care to ensure I am fit for surgery.

**Comprehensive care:** I will get the right care because all my care needs are known and addressed.

# Australia's antibiotic prescribing rate is



# double

that of countries that have the lowest prescribing rates of antibiotics

### Antibiotic prescribing: I get the right care because the health system is tracking how antibiotics are prescribed

Antimicrobials are medicines that are used to treat infections, especially those caused by bacteria and fungi. The most common types of antimicrobials are antibiotics, which are used to treat bacterial infections.

Inappropriate prescribing of antibiotics has the potential to increase resistance to antimicrobials and reduce the number and effectiveness of treatments available to patients with serious infections.

Antimicrobial resistance occurs when a microorganism develops resistance to an antibiotic that was previously an effective treatment. As a result, infections caused by the resistant organism may need to be treated with other antibiotics that can have more severe side effects, are more expensive or take longer to work. In some severe cases, resistant organisms may not be able to be treated by any currently available antibiotics. Antimicrobial resistance contributes to patient illness and death. It means that a patient may take longer to treat and recover from an illness or procedure, more antibiotics may need to be used, and there is an increased risk of complications. If antibiotics become ineffective, some important treatments and healthcare services, such as surgery and chemotherapy for cancer, may no longer be able to be provided safely.

A significant proportion of the prescriptions for antibiotics in Australia can be considered to be inappropriate. Examples of inappropriate care include:

- Prescribing antibiotics for viral infections such as colds and influenza, against which they are ineffective
- Prescribing antibiotics for longer than necessary after surgery, as a preventative (prophylactic) measure against infection
- Prescribing broad-spectrum antibiotics that affect a wide range of bacteria when a more specific, narrow-spectrum antibiotic would be as effective.





#### Notes:

1. JOI is the WHO Anatomical Therapeutic Classification code for antibacterials for systemic use.

2. Data relating to the number of prescriptions dispensed before April 2012 include estimates for under co-payment and private dispensing. Data relating to the number of prescriptions dispensed after April 2012 include actual under co-payment data, but no estimate for private dispensing. The data on DDD/1,000 inhabitants/day exclude some items for which there is no DDD.

Source: Drug Utilisation Sub Committee database, 2017

# Monitoring antimicrobial resistance and the use of antibiotics

Slowing the rate of increase in resistance, preparing for and responding to new and emerging threats, and ensuring that antibiotics are used appropriately are all important for ensuring the safety and quality of health care in Australia. To inform strategies to prevent and contain antimicrobial resistance, the Commission established the Antimicrobial Use and Resistance in Australia (AURA) Surveillance System. The AURA Surveillance System is providing a comprehensive picture of patterns and trends in antibiotic use that was not previously available. It does this by coordinating, integrating and analysing data on antimicrobial resistance, antibiotic use and appropriateness from a broad range of sources, including:

 The National Antimicrobial Utilisation Surveillance Program (NAUSP)\*, which collects data on the volume of antibiotic usage – specifically antibacterials – from adult public and private hospitals nationally

- The National Antimicrobial Prescribing Survey (NAPS)<sup>#</sup>, which collects data on the appropriateness of antibiotic prescribing – antibacterials, antifungals and antivirals – from public and private hospitals and aged care homes nationally
- Pharmaceutical Benefits Schedule (PBS) and Repatriation PBS (RPS) data on the volume of antibiotics dispensed nationally
- NPS MedicineWise MedicineInsight, which collects data on the appropriateness of antimicrobial prescribing from general practices nationally.

Public and private hospitals, aged care homes and general practices contribute data voluntarily to NAUSP, NAPS and NPS MedicineWise MedicineInsight. The most recently available data for all programs are for the calendar year 2015.

## What is happening in the community?

Antibiotic use in the community setting (in general practice, specialist outpatients and dental clinics) in Australia is very high. The data from 2015 indicates that slightly over 30 million antibiotic prescriptions were dispensed in Australia.

Antibiotic use in the community is measured in defined daily doses (DDDs) per 1,000 inhabitants per day. This is equivalent to the number of people out of 1,000 in any one day taking standard doses of antibiotics. In 2015, 45% of Australians were dispensed at least one systemic antibiotic under the PBS or RPBS, with an overall rate of 25.4 DDDs per 1,000 inhabitants per day.<sup>90</sup> Australia's antibiotic prescribing rate is the eighth highest in the OECD, and is more than double that of countries that have the lowest prescribing rates of antibiotics.<sup>2</sup>

The number of antibiotic prescriptions in Australia peaked in 2008 at 25.5 DDDs per 1,000 inhabitants per day, which is similar to the rate for 2015. Since 2008 there has been no change in the overall rates of prescriptions dispensed from year to year (Figure 21).

There are geographical and demographical variations in prescribing. The reasons for the variations are not clear.

\* SA Health is funded by the Commission for the operation of the NAUSP.

# Melbourne Health is funded by the Commission for coordination of NAPS by the National Centre for Antimicrobial Stewardship.

There was a small reduction in prescribing in the five years to 2015 by GPs of antibiotics for patients who were seen for upper respiratory infections. The prescribing rate for the fiveyear period from April 2006 to March 2011 was 32%, compared to 30% for April 2010 to March 2015. Nonetheless, high volumes of antibiotics continue to be prescribed unnecessarily for respiratory infections. In this period, of patients who saw a GP for a cold or other upper respiratory tract infection, 60% had an antibiotic prescribed where no reason was recorded.

There was also inappropriate use of some antibiotics for the treatment of colds and influenza. This was common in children aged o to 9 years where the rate of prescriptions for one antibiotic (amoxicillin) was twice that of other age groups.

Inappropriate use of antibiotics can also be seen in the use of repeat prescriptions. Repeat prescriptions were frequently ordered for commonly prescribed antibiotics, such as amoxicillin and cephalexin, when a repeat prescription is not actually needed to complete a treatment course.<sup>90</sup> In addition, 10% to 20% of repeat prescriptions were dispensed many months after the date of prescribing, which was unlikely to be for the same course of treatment.

### **Figure 22:** Aggregate antibiotic use (defined daily dose per 1,000 occupied bed days) in hospitals contributing to NAUSP, 2006–15



Source: National Antimicrobial Utilisation Surveillance Program (NAUSP), 2015



Figure 23: Antibacterial class<sup>\*</sup> usage rates (defined daily dose per 1,000 occupied bed days) in hospitals contributing to NAUSP, and hospitals in Denmark, the Netherlands and Sweden, most recent available data<sup>#</sup>

Notes: 'Other' comprises lipopeptides, monobactams, methenamine, nitrofurans, oxazolidinones, polymyxins, rifamycins, short-acting sulfonamides, streptogramins, steroids, sulfonamide/trimethoprim combinations and trimethoprim.

Source: National Antimicrobial Utilisation Surveillance Program (NAUSP), 2015

- \* There are a number of different antibiotics in each of these antibacterial classes. The names of the classes relate to the way they act against bacteria (cephalosporins, beta-lactams and penicillins target the bacterial cell wall, while macrolides reduce the capacity of the bacteria to make protein), and the range of bacteria that they are effective against (a broad-spectrum antibiotic is effective against several types of bacteria, while a narrow-spectrum antibiotic is effective against a specific family of bacteria an example of a commonly used broad-spectrum antibiotic is ampicillin).
- # Includes Australian data from NAUSP for January to December 2015 (159 hospitals), NethMap 2016 rates for the Netherlands (from 2014), SWEDRES 2015 rates for Sweden (denominator data from 2014) and DANMAP rates for Denmark (data from 2014).



### Figure 24: Annual total-hospital aggregate usage rates (defined daily dose per 1,000 occupied bed days) for the five most commonly used antibacterial classes\* in hospitals contributing to NAUSP, 2006–15

Source: National Antimicrobial Utilisation Surveillance Program (NAUSP), 2015

\*

There are a number of different antibiotics in each of these antibacterial classes. The names of the classes relate to the way they act against bacteria (cephalosporins, beta-lactams and penicillins target the bacterial cell wall, while macrolides reduce the capacity of the bacteria to make protein), and the range of bacteria that they are effective against (a broad-spectrum antibiotic is effective against several types of bacteria, while a narrow-spectrum antibiotic is effective against a specific family of bacteria – an example of a commonly used broad-spectrum antibiotic is ampicillin).

#### Will I get the right care?



#### Figure 25: The five most common reasons for prescribing antimicrobials in public and private hospitals, 2013–15

Source: National Antimicrobial Prescribing Survey, 2016

### What is happening in aged care homes?

International and Australian data have also shown high levels of unnecessary antibiotic prescribing and inappropriate antibiotic use in aged care homes.<sup>91</sup>

The Commission is supporting a survey of antibiotic use and infections in aged care homes in conjunction with the National Centre for Antimicrobial Stewardship, with a pilot in 2015. The pilot found that while only 5% of aged care home residents had signs and symptoms of infection, 11% were prescribed one or more antibiotics.<sup>92</sup>

Topical antibiotics (ointments and drops) were frequently prescribed (37% of all antibiotics). The five most common reasons for antibiotic prescribing were unspecified skin, soft tissue or mucosal infections (18%); urinary tract infections (17%); lower respiratory tract infections (12%); tinea (8%); and conjunctivitis (5%). Areas for improving antibiotic prescribing in aged care homes include:

- Documentation of reason for prescribing and the duration of treatment (32% of prescriptions did not document a reason for their use and 65% of prescriptions did not have a review or stop date)
- Use of antibiotics for unspecified infections (18% of antibiotics were being used for unspecified skin infections)
- Prolonged duration of prescriptions (31% of prescriptions were for longer than six months; of these, only 51% documented a reason and only 2% had a review or stop date).





were prescribed one or more antibiotics

# What is happening in hospitals?

Antibiotic use in hospitals is measured in DDDs per 1,000 occupied bed days. This is a measure of the number of times antibiotics are administered in the hospital, considering the number of patients in the hospital. Australian hospitals are continuing to improve their use of antibiotics, which reduces the risk of antimicrobial resistance. **Figure 22** shows that antibiotic use in Australian hospitals has decreased gradually since the peak usage rate in 2010. In 2011, total antibiotic use was 992.4 DDDs per 1,000 occupied bed days. In 2015, it was 916 DDDs per 1,000 occupied bed days – a reduction of 7.6 percentage points (0.76%).<sup>93</sup>

Factors that are likely to have contributed to reduced use of antibiotics include the implementation of the NSQHS Standards, particularly the Preventing and Controlling Healthcare-Associated Infection Standard.<sup>94</sup> With the implementation of the NSQHS Standards, local, state and territory, and national antimicrobial stewardship programs have increased capacity to optimise the use of antibiotics, changes in clinical practice and the adoption of recommendations about the use of antibiotics, particularly those included in *Therapeutic Guidelines: Antibiotic.*<sup>95</sup>

Australian antibiotic usage rates in hospitals continue to be higher than in the Netherlands and Sweden (which are among the lowest prescribers of antibiotics in Europe), but are now lower than in Denmark (**Figure 23**).<sup>96–98</sup> Other international comparisons are not generally possible because of differences in the way data are collected between countries.

The five most commonly used antibacterial classes from 2006–15 are shown in **Figure 24**. These classes represent more than 60% of antibiotics used in hospitals in 2015.

The five most common reasons for prescribing antibiotics in public and private hospitals from 2013–15 are shown in **Figure 25**. In 2015, they were surgical prophylaxis – the use of antibiotics around the time of surgery to reduce the risk of a postoperative infection (16%); community-acquired pneumonia (11%); and medical prophylaxis – the use of antibiotics to prevent infections in patients at high risk, for example, during chemotherapy (8%), sepsis (6%) and urinary tract infection (5%).

Overall in 2015, 22% of antibiotic prescriptions were inappropriate. The most common reasons for inappropriate prescribing were that the spectrum was too broad, an antibiotic was not required for that patient's health condition, or the incorrect dose was prescribed.

Inappropriate prescribing of antibiotics was very common for some respiratory infections (in particular, infective exacerbations of COPD, asthma and bronchitis). Cephalosporins, a class of antibiotics that particularly drive the development of antimicrobial resistance, were the most commonly prescribed antibiotic class in 2015, accounting for more than 25% of prescriptions. There are, however, few situations where cephalosporins are recommended as the first choice for antibiotic treatment for a patient with an infection, indicating that this prescribing may be inappropriate. The appropriateness of prescribing of oral cefalexin – the sixth most commonly prescribed antibiotic – is of particular concern because about 40% of these prescriptions were inappropriate.

In 2013–15, the level of inappropriate prescribing of antibiotics for surgical prophylaxis stayed high, at approximately 40%. In this time, however, there has been a reduction in the proportion of prescriptions prescribed for longer than 24 hours. This is a positive change, as it shows improved appropriateness of prescribing over the period.

Despite these encouraging results, much more improvement is needed to reach the best-practice target of 5% or less inappropriate prescribing. The reasons for the ongoing high level of inappropriateness are not well understood, but the Commission is consulting with experts on the issues.

#### Where to next?

Data from the AURA Surveillance System support health services to demonstrate compliance with the NSQHS Standard on preventing and controlling healthcare-associated infections, which requires health services to monitor patterns of antimicrobial use, and use this information to guide antimicrobial stewardship practices and meet infection control requirements.<sup>94,99</sup>

AURA data support informs clinical decisions regarding antibiotic therapy and stewardship programs, and improvements to the care of patients with infections. The data also inform interventions to prevent and control the spread of resistant organisms.

In 2014, the Commission released a clinical care standard about antimicrobial stewardship. Based on best available evidence, this standard continues to guide clinicians and health service managers in prescribing antibiotics appropriately. The Antimicrobial Stewardship Clinical Care Standard will be promoted in primary care and aged care homes to strengthen antimicrobial stewardship in those settings. The Commission will continue to ensure that AURA data are relevant to the needs of clinicians, and health and aged care service providers by working with experts on strategic priorities for surveillance and analysis of antimicrobial resistance and antibiotic use. Analyses of AURA data will be provided regularly to state and territory health departments, aged care service providers and clinicians.

In response to the high levels of inappropriate surgical prophylaxis, the Commission will issue an advisory in 2017 requiring the inclusion of surgical prophylaxis as a component of the antimicrobial stewardship plans that are required under the NSQHS Standards. The advisory was developed in consultation with the Royal Australasian College of Surgeons, and states and territories. The Commission and the college will also work together on opportunities to improve prescribing and target education for surgical prophylaxis.

#### What the Commission will do

The Commission will:

- Continue to coordinate and improve the AURA Surveillance System, and provide data and reports to inform strategies to prevent and contain antimicrobial resistance
- Use information from the AURA Surveillance System to drive improvements in safety and quality
- Work with the Royal Australasian College of Surgeons to improve prescribing for surgical prophylaxis
- Promote the Antimicrobial Stewardship Clinical Care Standard in primary care and residential aged care.

The Commission was funded by the Australian Government Department of Health to establish and maintain the AURA Surveillance System.

# For every **100 people**

with dementia given an antipsychotic,

![](_page_71_Picture_3.jpeg)

![](_page_71_Picture_4.jpeg)

### **Cognitive impairment:** If I have behavioural and psychological symptoms of dementia I will get the right care

Dementia is a common form of cognitive impairment in older people, affecting memory, judgement, language and the ability to perform everyday tasks. Symptoms can prevent people with dementia from being able to participate in normal social or working life.

In 2005, 342,800 Australians were estimated to have dementia. That figure is projected to increase to 400,000 by 2020, and around 900,000 by 2050.<sup>100</sup> Twenty per cent of patients in hospital who are aged over 70 have dementia.<sup>101</sup>

The behavioural and psychological symptoms of dementia (BPSD) are experienced by people with dementia to varying degrees of severity throughout their illness. These symptoms can include aggression, agitation, wandering, verbal outbursts, apathy, anxiety and psychotic symptoms such as delusions and hallucinations. Severe BPSD symptoms have a significant impact on the quality of life of patients and their loved ones and carers.

#### **Treatment for BPSD**

People with BPSD should be offered a comprehensive assessment by a professional who is skilled in symptom assessment and management. They should be treated in the first instance using approaches that do not include medication. Treatments should be tailored to the person's preferences, skills and abilities, and involve participation in activities that are enjoyable for the person, together with individualised support. Examples of commonly recommended interventions include:<sup>102</sup>

- Therapeutic use of music and dancing
- Support and counselling
- Management of specific behaviours
- Discussion of past activities and events in structured way.

For some people, symptoms are so severe that these types of interventions are not effective, and medication is needed. Use of medication in this context is not straightforward, however, and there can be safety and quality implications.
### **Antipsychotic medications**

People with severe BPSD are often treated with antipsychotic medications that are used to treat schizophrenia and bipolar disorder. This type of medication is considered when a person is severely distressed or there is a significant risk of harm to the patient or others.

In Australia, one of these drugs, risperidone, is the only oral medication approved for use with BPSD. There is good evidence that risperidone is effective for treating agitation and aggression<sup>102</sup>, but antipsychotics are not effective for treating other behavioural and psychological symptoms of dementia, such as disinhibition, wandering and repetitive behaviours.<sup>103</sup> The guidelines for use of risperidone state that it should be only used for psychotic symptoms and aggression in patients with Alzheimer's, and not other forms of dementia. Risperidone should also only be used for patients who are unresponsive to other treatments, and should be limited to a maximum duration of 12 weeks.<sup>104</sup>

Antipsychotics are an important treatment option for people with BPSD, particularly for those with accompanying mental health issues. However, concerns have been raised about prescribing antipsychotics outside guideline recommendations, such as for behavioural disturbances related to dementia or delirium, before secondary causes have been excluded and non-pharmacological measures have been tried.



Source: Australian Commission on Safety and Quality in Health Care, Australian Atlas of Healthcare Variation, 2015.



Antipsychotics have only limited positive effect in treating patients with dementia but can cause patients significant harm through side effects and even death.<sup>47,105</sup> As such, generally the risk of harm outweighs the benefits of their use. Using antipsychotics for patients with dementia is associated with increased risk of stroke and other cerebrovascular events, and death.<sup>47,49,50</sup> For every 100 people with dementia given an antipsychotic, only 20 will get some clinical benefit, but there will be one extra stroke and one extra death among that number.<sup>50</sup> Other potential side effects include accelerated cognitive decline, increased confusion, parkinsonism and urinary incontinence. In addition, pain, delirium, psychosocial and patients' other unmet needs can also be missed as a consequence of the use of antipsychotics in first-line treatment.52

Patients are often started on a higher dose of an antipsychotic than is recommended and continue taking the drug without monitoring or review.<sup>106</sup> This is problematic given the potential side effects, and that people can safely be taken off (or deprescribed) antipsychotics without behavioural symptoms re-emerging or getting worse.<sup>48,107</sup>

# Inappropriate prescribing of antipsychotics

Inappropriate prescribing of antipsychotics is a problem in all healthcare settings in Australia and internationally.

The first Australian Atlas of Healthcare Variation identified high and variable rates for the prescribing of antipsychotics in Australia for people aged 65 and over (Figure 26).<sup>46</sup>

In 2013–14, more than 900,000 prescriptions for antipsychotic medicines were dispensed for people aged 65 and over, or 27,043 prescriptions per 100,000 people in this age group. There was considerable variability in the way antipsychotics were prescribed across the country: the number of prescriptions ranged from a low of 8,043 per 100,000 people aged 65 and over to a high of 57,130 per 100,000 people aged 65 and over. Dispensing rates were higher in major cities than in regional and remote areas, and lower in areas with high socioeconomic status.

High rates of use of antipsychotics have been identified in all care settings, including residential aged care, the community and hospitals. In residential aged care settings, it is estimated that over half of the residents have a formal diagnosis of dementia. Studies have suggested up to one-third of residents are prescribed antipsychotics.<sup>48,52,108</sup> When people are prescribed antipsychotics in hospital the medication is often continued on discharge. For example, a point prevalence study of 197 patients aged 65 and over in a Sydney hospital found that 45% of patients were prescribed a psychotropic medicine, 11% of which were antipsychotics. Almost half (44%) of hospital-initiated psychotropic medicines were continued on discharge.<sup>109</sup>

The reasons for inappropriate prescribing of antipsychotics are complex and overlapping, and vary according to the setting in which the prescription occurs. They include a lack of knowledge of the risks and limited benefits of antipsychotics, and alternative treatment options; a lack of skills and time to implement interventions without medications; a lack of allied health staff available to meet the complex needs of affected patients; a lack of skills in assessment, including inadequate pain assessment; and guidelines not being promoted, or easily accessed or tailored.

#### Figure 27: Change in treatment with antipsychotics associated with Veterans' MATES program





#### Figure 28: PBS prescriptions for risperidone for people aged 65 years and over

Source: Analysis undertaken by the University of South Australia. Data: PBS 10% sample supplied by the Australian Government Department of Human Services.

### What is being done to address the overuse of antipsychotics for BPSD?

Concerns about the inappropriate use of antipsychotics in dementia are not new and there has been a variety of responses in Australia and internationally. These involve regulations, safety warnings, guidelines, licensing, the education of healthcare providers, the use of quality indicators, the review of tools, access to specialist expertise, and limiting and auditing use.

Nonetheless, the findings of the first Atlas and other studies indicate that there continues to be a high level of antipsychotic prescribing and that more work is needed to address it. In response to the findings of the first Atlas, the Commission convened two roundtable meetings of experts to provide advice on ways to reduce the incidence of inappropriate prescribing, explore key issues underpinning the problem, and set and prioritise strategies for community, residential aged care and acute hospital settings. These discussions suggested that initiatives based on a single premise or approach were not always effective, but there had been successes in approaches based on multiple, collaborative strategies across clinical disciplines.<sup>110</sup> Two examples of successful Australian initiatives are described in **boxes 2 and 3**.

### Box 2: The Veterans' MATES program

The Australian Government Department of Veterans' Affairs funds the Veterans' MATES program, which is delivered by the University of South Australia. The program aims to improve the health of the veteran community by encouraging better use of medicines and provides timely, targeted feedback supported by evidence-based information to the veteran, their GP and other allied healthcare providers.

A Veterans' MATES program was initiated to reduce the use of antipsychotics for treating BPSD. GPs were informed about the veterans they were treating who were receiving antipsychotics for BPSD. Information about the risks and benefits of antipsychotics was provided to GPs, pharmacists and residential aged care facilities.

Very positive results were found, with fewer patients being treated with risperidone. This improvement occurred without a shift in use to other antipsychotics or sedative medications (Figure 27). There were improvements in health outcomes, with an estimate that 216 hospital admissions for pneumonia, 70 hip fractures, 70 strokes and 41 deaths were avoided. In a more recent intervention, which is still being evaluated, GPs reported that they were more confident in ceasing antipsychotic medications for their patients with BPSD, and were more likely to help family members and carers to identify tips for providing reassuring and familiar care.

More information about the Veterans' MATES program is available from: www.veteransmates.net.au/home.

### Box 3: Therapeutic Goods Administration guideline changes

In 2015, the Therapeutic Goods Administration limited the indication of risperidone for psychological and behavioural symptoms of dementia to the Alzheimer's type only and for a maximum period of use of 12 weeks.

This change has affected practice. Twelve months after the intervention there has been a 22% relative decrease in the use of risperidone subsidised for dementia in the population aged 65 years and over (Figure 28).

### Where to next?

The second edition of the NSQHS Standards, which will be released in late 2017, includes new actions for preventing delirium and managing cognitive impairment, with specific reference to managing the use of antipsychotics and other psychoactive medicines. Other actions included in the latest standards that are also relevant for the management of patients with BPSD include the need to:

- Collaborate with patients and their carers and families to understand the specific needs of the patient
- Undertake relevant, integrated screening and assessment processes, and use this information to develop and implement individualised strategies that minimise any anxiety or distress
- Undertake medication reconciliation to ensure there is an understanding of the medicines the patient is taking
- Communicate with patients and their carers and families, and healthcare providers in hospitals and the community.

Many of the people affected by BPSD live in residential aged care facilities, which are subject to accreditation standards for residential aged care, not the NSQHS Standards. The accreditation standards are being reviewed in 2017, and the potential to strengthen requirements regarding the use of antipsychotics is being explored.

An important component of strategies to support the appropriate use of antipsychotics relates to the role of people with BPSD, and their families and carers. There is evidence that informed consent for the use of antipsychotics is often not obtained.<sup>107</sup> Because people with BPSD may lack capacity to make treatment decisions for themselves, their substitute decision-makers, such as family members or carers, should be consulted unless urgent treatment is required. It is important that in obtaining informed consent, clinicians explain to the patient, family or carer in an understandable manner the potential risks and benefits of taking antipsychotics, as well as the risk and benefits of alternative options or no treatment.

### What the Commission will do

The Commission will:

- Support health services to meet the requirements of the second edition of the NSQHS Standards regarding the management of cognitive impairment and reducing the use of antipsychotics
- Raise awareness among and educate stakeholders about BPSD and the use of antipsychotics through the Caring for Cognitive Impairment Campaign
- Develop, adapt and promote tools and resources to support patients and their carers and families to understand the risks associated with the use of antipsychotics and to be involved in decisions about care
- Work with the Australian Government Department of Health and the Australian Aged Care Quality Agency to examine the potential for making changes to the proposed new aged care quality standards.



about cognitive impairment and how to make a difference

providing high quality care for people with cognitive impairment

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Join the campaign to learn from others Go to: cognitivecare.gov.au #BetterWayToCare



# **Patient blood management:** I will get the right care to ensure I am fit for surgery

While blood and blood products are lifesaving, their administration may also carry risks for patients. These risks include allergies and other immunological complications, problems with the storage of the blood, infections, incorrect blood transfusions and other adverse outcomes. Research has indicated that a significant proportion of blood transfusions may be unnecessary or could have been avoided.

Patients who are anaemic or iron-deficient at the time of surgery may be more likely to need a blood transfusion. While blood transfusions are an important element of high-quality care, assessing patients beforehand, in line with the available evidence, is an important step in ensuring good outcomes and minimising risks.

### **Patient blood management**

Patient blood management (PBM) is the management and preservation of a patient's own blood by optimising the overall volume of blood and number of red cells, minimising blood loss, and increasing the patient's tolerance of anaemia. Research indicates that being well prepared for surgery and considering treatment options for anaemia and iron deficiency in advance of surgery, wherever possible, can reduce unnecessary transfusions.

PBM provides opportunities to improve patient outcomes and reduce unnecessary interventions in hospitals. The benefits of appropriate management through PBM include:

- Assessment and management of conditions that, without appropriate interventions, might lead to a blood transfusion (so that transfusions are done only when necessary)
- Improved patient outcomes, including fewer complications, faster recoveries and shorter hospital stays
- Reduced exposure for patients to the potential risks from receiving blood and blood products from another person.

#### Figure 29: Health services participating in the National Patient Blood Management Collaborative



Source: Australian Commission on Safety and Quality in Health Care, 2017

### Supporting PBM across Australia

To support the implementation of PBM in Australia, the Commission was funded by the Australian Government Department of Health to lead the National Patient Blood Management Collaborative (the Collaborative). The Collaborative was designed to implement change in small, manageable cycles and identify where a change leads to improvement. Through learning workshops and learning cycles, health services shared ideas for improvement, measured and benchmarked outcomes, and contributed to the future direction of best practice in PBM.

The aims of the Collaborative were to:

- Improve patient care
- Promote and support health services in the uptake of PBM Guidelines developed by the National Blood Authority
- Increase the number of patients who have their anaemia identified and managed prior to elective surgery.

The Collaborative supported best practice in PBM in public and private hospitals across Australia, and promoted the assessment and management of anaemia and iron deficiency before elective surgery to reduce unnecessary blood transfusions. Twelve health services from across Australia participated in the Collaborative and provided data to demonstrate the improvements achieved through these changes in practice (Figure 29).



### **Figure 30:** Percentage of patients receiving pre-operative assessment for anaemia and iron deficiency by month, May 2015 to March 2017

Source: Australian Commission on Safety and Quality in Health Care, 2017

# The Collaborative produced improvements in PBM and patient outcomes

The Collaborative resulted in a marked improvement in the management of iron deficiency and anaemia across the health services involved. Of the 12,648 patient records documented during the Collaborative, there was a steady rate of increase in assessment rates for iron deficiency (Figure 30). Assessment rates for iron deficiency more than doubled for each surgical specialty included in the collaborative (Figure 31).

Following are some of the key findings from the Collaborative:

- Improved assessment and management of anaemia and iron deficiency prior to surgery was achieved across participating health services
- Changing clinical practice and workflow at the participating sites was successful in achieving improvements in the overall management of elective patients

- Improved integration of care between primary and acute service systems provided better opportunities for continuity of care
- Clinical leadership by the health services, and in general practice, was vital to progress being made
- Reduced red cell transfusions were achieved for patients
- Collaborative sites have worked to embed PBMrelated activities within the usual work of the health services, with a view to ensuring longterm sustainability.

Critical success factors for the Collaborative were identified as health service executive buy-in and support; strong and effective clinical leadership; well-defined project support; and support for data collection, analysis and reporting to clinicians. The majority of patients received blood tests and iron studies, and were managed for these conditions where indicated. One of the findings of the Collaborative was the importance of improved communications between hospitals and primary carers to identify and manage patients prior to surgery. The teams wrote to patients advising them of the next steps in their treatment and encouraging them to discuss their surgery with their local GP. Letters were also sent to the patient's GP to notify them of the patient's diagnosis with anaemia and encourage treatment options to be discussed with the patient to ensure they are fit for surgery. **Box 4** highlights some of the initiatives and achievements of the Collaborative. Figure 31: Assessment rates of iron deficiency, by speciality



Source: Australian Commission on Safety and Quality in Health Care, 2017

### Box 4: Achievements of Collaborative teams

Through its partnerships, each Collaborative team was able to:

- Reduce transfusion rates
- Reduce the length of stay in hospital for selected elective surgical patients
- Establish a process that is sustainable and able to be transferred to other surgical procedures
- Embed pre-operative optimisation of a patient's blood into standard practice
- Improve processes and prepare new resources to enhance patient PBM
- Raise awareness among clinicians of the benefits of pre-surgical assessment for irondeficiency anaemia
- Update pre-admission screening forms to include iron studies for major surgery patients
- Develop flow charts to support clinicians in administering iron intravenously
- Improve information for patients to assist them in being fit for surgery

- Establish a telephone information line for patients having iron infusions, to promote greater preparedness for surgery
- Improve the management of iron-deficient patients
- Write articles for general practice, newsletters and communications, and liaise with primary health networks to promote the Collaborative work
- Improve communication between hospitals and general practice, focusing on evidencebased information on assessment and treatment for iron-deficiency anaemia.

### Where to next?

The Commission will build on the results of the Collaborative to provide support for health services to improve PBM. This will include webinars for health service teams, and leading discussions with state and territory health departments about how the successes of the Collaborative can be used as a platform for sustainable change. The Commission will continue to promote the importance of PBM across the health system as a way of ensuring patients get the right care when they need surgery.

### What the Commission will do

The Commission will:

- Examine whether anaemia and irondeficiency assessment and management in elective surgery may be the appropriate basis for developing a clinical care standard
- Continue to work with NPS MedicineWise and the National Blood Authority to improve the information available for patients, so they are fit for surgery
- Continue to promote the work of the Collaborative and the importance of PBM.

The Collaborative was funded by the Australian Government Department of Health.

The Collaborative improved assessment and management of anaemia and iron deficiency prior to surgery. To ensure safe and quality care, there needs to be

## communication



with patients and their carers and families, to involve them in decision-making about their care

# **Comprehensive care:** I will get the right care because all my care needs are known and addressed

The NSQHS Standards were developed to protect the public from harm and to improve the quality of health service provision. The first edition of the NSQHS Standards included actions that address well-known patient safety issues in areas such as healthcareassociated infections, medication safety, patient identification, clinical handover, the prevention and management of falls and pressure injuries, use of blood and blood products, and recognising and responding to clinical deterioration.

Since the development of the first edition, the Commission has learnt more about some of the underlying issues affecting safety and quality, and outcomes for patients, and this has contributed to the development of a new NSQHS Standard in the second edition: Comprehensive Care.

### Common themes underlie many safety and quality problems

Some common causative factors often underpin failures to provide safe and high-quality care. Inadequate risk assessment, goal setting or care planning can result in failure to deliver care that meets a person's needs and is consistent with their preferences. Failure to identify and manage specific risks also increases the potential for significant adverse events such as falls, delirium, hospitalacquired infections, and pressure injuries. These issues are relevant for everyone, but particularly for people who may be more vulnerable, such as Aboriginal and Torres Strait Islander people, those living with mental health issues or cognitive impairment, and those who are at the end of life. Across many safety and quality domains some core actions are necessary to ensure safe and high-quality care, including the need to:

- Adequately communicate with patients and their carers and families, and to involve them in decision-making about care
- Appropriately recognise and respond to associated clinical deterioration and suffering
- · Coordinate care and work collaboratively
- Identify and address the risks associated with a person's condition.

# There are already strategies in place to address these issues

These issues and gaps are not new, and a range of projects and programs have been put in place in Australia and internationally to address them. Key features of these initiatives include:

- Understanding the broad range of needs of the patient rather than just focusing on the treatment of a disease or a set of symptoms
- Providing care that is goal-directed and personcentred (that is, care that aligns with the goals, needs and preferences of the patient)
- Ensuring that care is always delivered with dignity and respect
- Supporting clinicians and managers to enable provision of the desired care
- Ensuring care is integrated across teams, professions and settings.

Despite these kinds of initiatives, information from sources such as patient-experience surveys, complaints, and safety and quality enquiries indicate that problems still occur and more work is needed to embed this kind of model of care. The second edition of the NSQHS Standards provides an opportunity to do this.

### **Comprehensive care in the NSQHS Standards**

Comprehensive care is the coordinated delivery of the total health care required or requested by a patient. This care is aligned with the patient's expressed goals of care and healthcare needs. It considers the impact of the patient's health issues on their life and wellbeing, and is clinically appropriate.

The Comprehensive Care Standard aims to address the cross-cutting issues underlying many adverse events and to optimise health care while considering how risk and harm can be minimised along each patient journey (Box 5). This requires a shift from focusing on specific errors and incidents to examining the origins of failures of care within the cultural conditions and systems of a health service organisation. These issues frequently relate to:

- Processes for working in partnership with the patient, and their carers and family to adequately identify, assess and manage the patient's clinical risks, and determine their preferences for care
- Communication and teamwork between members of the healthcare team
- Systems needed to support the provision of continuous and collaborative care.

### Box 5: Criteria in the Comprehensive Care Standard

- 1. Improving clinical governance and quality to support comprehensive care: Systems are in place to support clinicians to deliver comprehensive care.
- 2. Developing a comprehensive care plan: Integrated screening and assessment processes are used in collaboration with the patient, and their carers and family to develop a goal-directed comprehensive care plan.
- 3. Delivering comprehensive care: Safe care is delivered based on the comprehensive care plan, and in partnership with the patient, and their carers and family. Comprehensive care is delivered to a patient at the end of life.
- 4. Minimising patient harm: A patient at risk of specific harm is identified, and clinicians deliver targeted strategies to prevent and manage harm.

# What is needed to ensure comprehensive care?

While the actions in the Comprehensive Care Standard relate to basic processes of health care, this is the first time they have been brought together in a mandatory set of standards. All health services and organisations already provide care that meets many of the requirements of the Comprehensive Care Standard. The challenge now is to integrate these elements in a way that 'wraps around' the patient.

To better understand what is needed to ensure comprehensive care in a health service, the Commission conducted interviews and focus groups with clinicians and managers about what constitutes good comprehensive care, the factors that support this, and the problems they face in providing comprehensive care. Two key factors emerged: the importance of a supportive culture and the need for good systems. The culture of the organisation was considered to be essential to the provision of comprehensive care. Participants believed that when leaders promoted the values of the organisation, clinicians understood how to contribute to the team and provided comprehensive care to patients. When the team structures were disconnected, there was more confusion about the goals of care and planned interventions. When clinicians were working together, comprehensive care was more achievable.

Two factors that helped to develop a strong culture were identified:

- Leadership is integral to facilitating cultural conditions that support comprehensive care. Leadership for comprehensive care needs to be demonstrated at all levels: from the top by executives and managers, and by clinicians and others working closely with patients and their carers and family, to deliver comprehensive care on a day-to-day basis.
- Communication is fundamental for reliable and robust comprehensive care. Communication about comprehensive care needs to encompass the processes for sharing patient information and interactions between clinicians and patients and their carers and family.



The research identified systems, processes and structures to improve safety and contribute to comprehensive care. These included initiatives that improved service reliability, care planning and integrated service delivery. Aspects of comprehensive care that need to be embedded in systems include:

- Organising care so that teams work together effectively
- Screening and identifying risks
- Working with patients and their carers and families to identify and set goals for care
- Developing care plans with patients and their carers and families
- Delivering care following the care plan.

There are some things that need to be standardised, and the organisation needs to have the system ... So, each patient comes in and the care that we provide for them is individualised to each of their specific needs. There is involvement by all members of the multi-disciplinary team, and key things like that, which you've already identified are: What are their risks? Have we identified them?

I think the big thing is, yes, we ask the patient, "What do you want to do in this scenario? What is your goal?" Have that clearly stated, and we go from that

That entrenched culture has taken forever to change ... because I'm the nurse and I need to get this done and to have all my observations done, dressings done by morning tea time ... and it's, "Hang on, what have we done? We've just rushed a patient [to suit] us, not them" This is what we do. We provide care, we evaluate care, we adjust it according to that evaluation and then we do it again. If it's not working, we re-evaluate it and we try different processes

The hospital has very clear processes and structures in place that really enable the collaborative approach

I'd like to know if people walking out the door felt that they were adequately listened to and their goals were being met

### Where to next?

Hospitals and health services will need to be assessed against the second edition of the NSQHS Standards, including the new Comprehensive Care Standard, from January 2019. The Commission is examining ways to support health services to provide comprehensive care in line with the standards, and will develop resources and guidance for this purpose.

One of the initial areas of focus is likely to be screening and assessment. The Comprehensive Care Standard requires that health services have processes for integrated and timely screening and assessment. Screening and assessment is a core part of healthcare delivery. It helps identify patients who may be at higher risk of poorer outcomes or adverse events, and provides the basis for care planning and delivery. However, there have been growing concerns about the implementation of screening and assessment processes, the variety and quality of tools being used, and the burden placed on clinicians to screen patients repeatedly when there is little perceived benefit for the patient. The Commission is examining options for improving screening and assessment processes by focusing on:

- Reducing unnecessary screening and assessment by establishing systems and processes to identify the patient profiles of wards and health services
- Streamlining processes and systems within and across the health service to ensure the approach and tools are consistent
- Having clear governance and accountability at the organisational level so there is shared understanding and accountability for the processes and outcomes of screening
- Integrating screening processes and outcomes more effectively into care-planning processes, so that it positively influences patient outcomes and experiences.

### What the Commission will do

The Commission will:

- Include comprehensive care in the second edition of the NSQHS Standards
- Develop resources to help health service meet the requirements of the NSQHS Standard for comprehensive care
- Focus on improving processes for screening and assessment.

# 3. Will I be a partner in my care?

The Commission supports the right of people to be partners in their health care. People who are partners in their health care, who understand the health care they are given, who share decisions and who actively engage with the processes of care are more likely to have better experiences of care and get better results from it.<sup>111–113</sup> Establishing strong and effective partnerships is not always easy. Clinicians and managers may be concerned about the time needed. People may be uncertain about how they can effectively contribute to their own health care. Communication problems can lead to complaints and safety risks. There are now tools, strategies and approaches to support patients, consumers, clinicians, managers and policymakers in establishing effective partnerships. The Commission is working to make the health system easier to understand, so people are in a better position to form true partnerships.



This section looks at some of the experiences people have in the health system, and how partnerships have been supported by the NSQHS Standards. It also looks at issues for Aboriginal and Torres Strait Islander people, who have poorer health outcomes than non-Indigenous people, and where partnerships are particularly important to support sustainable change.

**Patient experience surveys:** My experiences in the health system are important.

**Partnering with consumers:** Health services are working with patients and consumers to improve care for everyone.

**Aboriginal and Torres Strait Islander health:** The health system is working to provide care that meets my unique needs as an Aboriginal or Torres Strait Islander person.

In a recent patient experience survey



the lowest ratings were for doctors and nurses in

### emergency departments



# Patient experience surveys: My experiences in the health system are important

Information from people about their experiences of care can help health services improve the way that they operate and help ensure that people get the best outcomes from their care.

Reviewing the experiences that people have when they receive healthcare services is important in ensuring safety and quality. This is not just about the clinical outcome – that is, whether someone's condition has been successfully treated or they received the care that they needed – it is also about what happened during this process. We know that people who rate their experience more highly have better long-term clinical outcomes and that such ratings are associated with better safety and quality of care, better adherence to treatment and less spending on diagnostic tests.<sup>114</sup>

An important way of finding out about people's experiences is to ask them. Patient-experience surveys are common tools, and the results can be used by local facilities to improve their services. These surveys not only give us an indication of how Australia's health system is faring overall, but also help to gauge how our health system compares against those of other countries.

# What do people think about the health system?

People in Australia report positive experiences of the health system. Most people who took part in a survey by the Australian Bureau of Statistics reported that their healthcare providers listened carefully, showed respect and spent enough time with them.<sup>37</sup> The highest ratings were for dentists, and the lowest for doctors and nurses in the emergency department (**Figure 32**). These results might reflect differences in the way care is provided in these settings – particularly in busy emergency departments. Using information like this, some hospitals are now putting in place initiatives to help improve the experiences of people receiving care in emergency departments.

In international comparisons, Australia performs well in ratings of people's experiences of interactions with healthcare providers. In 2016, the Commonwealth Fund, a not-for-profit organisation based in the United States, asked adults in 11 countries about their experiences.

### Figure 32: Patient experience in Australia, 2015–16, by type of clinician



Source: Australian Bureau of Statistics, Patient experiences in Australia, 2015–16, 2016

#### Figure 33: Patient experience, by country



#### Percentage of respondents reporting that this happened always or often

Doctor did not always or often spend enough time or explain things clearly

Had a problem with care coordination

Experienced a gap in discharge planning

**Source:** Osborn R, Squires D, Doty M, Sarnak D, Schneider E. In new survey of eleven countries, US adults still struggle with access to and affordability of health care. Health Affairs. 2016;35:12.

Overall, Australian participants reported fewer problems with care coordination compared to participants in many other countries, and were also more positive about the amount of time their doctor spent with them (Figure 33).<sup>115</sup>

# Some people have a worse experience than others

Despite these positive results, there are some groups of people in the Australian population whose experience of the health system is not as good as others. Nationally, people who rated their health better, and those who were less disadvantaged, tended to report better experiences with their healthcare provider.<sup>38</sup> Both in Australia and other countries, people with lower incomes report more problems with care coordination.<sup>115</sup> In New South Wales, the Bureau of Health Information examined the experiences of different groups of people in detail and found that people with poorer self-reported health and who spoke a language other than English at home reported less positive experiences (Figure 34).<sup>116</sup> These results align with other findings that people from lower socioeconomic groups have worse health outcomes<sup>117</sup>, and people from culturally and linguistically diverse backgrounds experience more adverse events in hospital.<sup>118,119</sup>



#### Figure 34: Rating of health care, by patient characteristic

Percentage of respondents who said that overall, the care they received was 'very good'

Source: Bureau of Health Information. Adult admitted patient survey results 2014, 2015.

### Where to next?

The second edition of the NSQHS Standards requires health services to seek regular feedback from patients and their carers and families about their experiences and outcomes of care, and to use this information to improve safety and quality. Surveys focusing on patient experiences have been conducted by state and territory governments and individual hospitals for many years. However, until recently, they have not been able to be grouped together to provide a national picture of the experiences of people in hospital.

The Commission has been working with consumers, carers, clinicians, health service organisations, and state and territory governments to develop a set of questions about patient experiences for national use – the Australian Hospital Patient Experience Question Set (**Box 6**). These questions will enable health service organisations and governments to understand patient perspectives in a consistent way across the country. For the first time, a set of questions has been developed from the experiences and perspectives of Australian consumers, healthcare providers and policymakers. It can provide information that will help to improve safety and quality at ward, organisation and regional levels.

### What the Commission will do

#### The Commission will:

- Make the Australian Hospital Patient Experience Question Set available to state and territory governments and health services to enable local collection and use of information about patient experiences to improve services
- Support health services to meet the requirements of the NSQHS Standards and use patient feedback to improve services
- Develop resources to help involve patients more in their own care and allow them to have better experiences in hospital; and also develop resources for different language groups.

### Box 6: The Australian Hospital Patient Experience Question Set

- 1. My views and concerns were listened to.
- 2. My individual needs were met.
- 3. When a need could not be met, staff explained why.
- 4. I felt cared for.
- 5. I was involved as much as I wanted to be in making decisions about my treatment and care.
- 6. I was kept informed as much as I wanted about my treatment and care.
- 7. As far as I could tell, the staff involved in my care communicated with each other about my treatment.
- 8. I received pain relief that met my needs.
- 9. When I was in hospital, I felt confident in the safety of my treatment and care.
- 10. I experienced unexpected harm or distress as a result of my treatment or care.
- 11. My harm or distress was discussed with me by staff.
- 12. Overall, the quality of the treatment and care I received was: very good / good / average / poor / very poor.

Consumer partnerships have a

# positive impact on



- service communications
- design
- planning and governance

# and support the delivery of patient-centred care

# **Partnering with consumers:** Health services are working with patients and consumers to improve care for everyone

The way health care is organised and delivered is important to individuals receiving care and citizens interested in maintaining the efficiency and effectiveness of the health system.

Over the last 40 years there has been an increasing focus on the participation of consumers, patients and carers in the planning, design, delivery and evaluation of health care, and an emergence of policies promoting the rights and responsibilities of consumers and carers in the healthcare system. There has been a slow but steady shift towards recognising that clinicians, healthcare organisations, consumers and carers are all partners in the healthcare system.

Involving consumers in service planning, delivery, monitoring and evaluation is more likely to result in services that are more accessible and appropriate for users.<sup>120,121</sup> An organisation cannot deliver care that fully meets everyone's needs without seeking out, listening to, understanding and responding to consumer and carer experiences and expectations regarding health care. It is critical that consumers and carers are involved in determining actions to improve healthcare safety and quality. They provide a 'reality check' that can help healthcare organisations understand how to make changes that are meaningful to consumers and carers.

### How can consumers participate in the design of healthcare systems?

There is no single approach health services can take to partnering with consumers. The type of partnership and level of engagement will reflect the different goals, audiences and purposes of establishing the partnership. For example, a partnership initiated to help disseminate information may involve a low level of engagement. Other partnerships may be more formal, with consumers, carers and the community helping to identify issues that need to be addressed and make key decisions about the solutions used.

#### Figure 35: Percentage of actions rated as met or met with merit for NSQHS Standard 2: Partnering with Consumers, by year

Consumers involved in governance Governance partnerships reflect diversity Consumers involved in strategic/business planning Consumers involved in safety and quality decision-making Orientation for consumers Consumers provide feedback on publications Action taken on consumer feedback Consumers participate in health service design Workforce access training on patient-centred care Consumers involved in training of workforce Consumers provided with information on performance Consumers participate in review of safety and quality performance Consumers participate in quality improvement processes Consumers participate in review of patient feedback data Consumers participate in activities to improve patient experience



Source: Australian Commission on Safety and Quality in Health Care, 2017.

Strategies that are commonly used for formal partnerships include involving consumers in key decision-making groups; establishing committees of consumers to provide advice to health services; conducting surveys, focus groups and interviews to gather information from consumers; involving consumers in the education of clinicians; and involving consumers in administrative processes such as recruitment.

### How are consumers involved in partnerships with health services in Australia?

Although consumer partnerships are becoming more embedded in the health system, there is not yet an agreed 'best practice' approach on how this should be done, and measurement and evaluation of partnerships has often been limited. Information about how consumers are involved in partnerships with health services in Australia is patchy, and there is little information about the impact of these partnerships.

One source of information comes from the NSQHS Standards, which include requirements for health services to partner with consumers in service planning, designing care, and measurement and evaluation. Most of the requirements for partnering with consumers have not been mandatory to date, so while health services need to demonstrate that they are taking action, they only need to meet four of the 15 actions in the Partnering with Consumers Standard. Although it is not mandatory, in the four years since the introduction of the first edition of the NSQHS Standards more health services are meeting all the requirements of Partnering with Consumers. This suggests partnerships are becoming more embedded in the health system (Figure 35).

These findings are supported by case studies on five Australian health services that have partnered with consumers. The case studies found that while health services were already engaging with consumers to various extents, the NSQHS Standards raised the profile of consumer partnerships, providing a sense of urgency for services and empowering staff members to act. Health services reported that they used a range of approaches to help form meaningful partnerships with consumers (**Box 7**).

Health services also reported that consumer partnerships had a positive impact on service communications, design, planning and governance, and supported the delivery of patient-centred care. Where consumer partnerships were working well, consumers acted as advocates for the health service and provided information to the local community on behalf of the service.

### **Box 7:** Approaches that have been used to partner with consumers

The Commission conducted in-depth case studies of five health services that have partnered with consumers. These include large and small health services in rural and metropolitan areas, and a mixture of public, private and specialist services. Examples of approaches these health services used to partner with consumers include:

- Allocating responsibility for partnering with consumers to specific executives, such as the Executive Director of Clinical Governance
- Establishing a consumer advisory group that was attended by the chair of the hospital board
- Developing innovative ways to collect feedback from patients, including the use of apps to collect feedback from children about their experience
- Establishing partnerships with a university, and having consumers provide input to university projects and training programs
- Engaging paid consumer consultants from an external health consumer organisation

Will I be a partner in my care?

- Developing a consumer-engagement strategy based on extensive consultation with consumers and health service staff members
- Holding joint meetings with consumers, clinicians, managers and executives to discuss strategies to partner with consumers, and priorities for the organisation
- Encouraging and supporting clinicians to work directly with their patients to form partnerships for improvement
- Exploring ways of identifying and supporting consumers from hard-to-reach groups to be involved in partnerships, such as people from culturally and linguistically diverse backgrounds, and young people
- Getting a good understanding of the experiences and interests of consumers so that they can be well matched with specific topics and committees
- Working with consumers and carers to develop an easy-to-read information pack for discharge that contains all the information needed by consumers, presented in a way that's easy to carry.

### Where to next?

The focus on consumer partnerships increases in the second edition of the NSQHS Standards. As with the first edition, it includes requirements for partnerships with consumers in healthcare governance, planning, design, measurement and evaluation. Requirements have also been added about the need to partner with patients in their own care, and to ensure that communication mechanisms support effective partnerships with patients and consumers. These requirements focus on processes such as shared decisionmaking and involving patients in care planning.

### What the Commission will do

#### The Commission will:

- Continue to support health services to meet the requirements of the NSQHS Standards
- Develop tools to support patients, carers and families to be involved in their own care
- Identify the attributes of health services that perform well in partnering with consumers, and use this information to make improvements across the health system.

In the four years since the introduction of the NSQHS Standards, more health services are meeting all the requirements of the Partnering with Consumers Standard. The rate of admission for

### chronic obstructive pulmonary disease

for Aboriginal and Torres Strait Islander people is



## five times as high

compared to non-Indigenous people

**Aboriginal and Torres Strait Islander health:** The health system is working to provide care that meets my unique needs as an Aboriginal or Torres Strait Islander person

While the health of Aboriginal and Torres Strait Islander people has improved overall, on every indicator they experience poorer health outcomes than other Australians. Aboriginal and Torres Strait Islander people continue to have lower life expectancy, higher rates of chronic and preventable illnesses, poorer selfreported health and a greater likelihood of being hospitalised than non-Indigenous Australians.<sup>14,17</sup>

The reasons for these disparities are complex and overlapping. They are related to the social determinants of health, such as housing and education; risk factors such as smoking and obesity; and difficulty accessing culturally appropriate health services.

The health disparities for Aboriginal and Torres Strait Islander people are also safety and quality issues. The risks they face in using mainstream health services are different to those for the non-Indigenous population. For example, Aboriginal and Torres Strait Islander people speak many different languages, and interpreter services are not always available. The geographical isolation of many of their communities means they must sometimes travel long distances to access care. Clinicians also have varying levels of cultural competency. Each of these factors may have a negative impact on the safety of health care.

In addition, there is variation in the health care Aboriginal and Torres Strait Islander people receive – which means they may not receive the same care as non-Indigenous people with the same health conditions, concerns or problems.

Addressing these issues to ensure everyone receives safe and high-quality care remains a significant challenge for health services. There is evidence, however, that engaging Indigenous people and delivering health services in partnership with local communities can better meet the unique needs of Aboriginal and Torres Strait Islander people.



### **Figure 36:** Number of potentially preventable hospitalisations for chronic obstructive pulmonary disease per 100,000, age and sex standardised, by state and territory and Indigenous status, 2014–15

Source: Australian Commission on Safety and Quality in Health Care, Second Australian Atlas of Healthcare Variation, 2017.



### **Figure 37:** Number of hospitalisations for cataract surgery per 100,000 aged 40 years and over, age and sex standardised, by state and territory and Indigenous status, 2014–15



### There is significant variation in health care for Aboriginal and Torres Strait Islander people

The second Atlas paints a detailed picture of the extra health challenges Aboriginal and Torres Strait Islander people face, including health risks and difficulties in accessing appropriate health care.<sup>3</sup>

Aboriginal and Torres Strait Islander people have much higher rates of hospitalisation that are potentially preventable for a number of chronic and acute conditions. For example, the rate of admissions for COPD across states and territories is five times as high for Aboriginal and Torres Strait Islander people compared to non-Indigenous people (Figure 36), and the rates of diabetes complications four times as high. In both cases, rates are higher for Aboriginal and Torres Strait Islander people in all states and territories. These findings point to poor access to appropriate care in the community for Aboriginal and Torres Strait Islander people, as well as a higher burden of the factors causing chronic diseases, such as social disadvantage, smoking and obesity.

There are much lower rates of treatment for Aboriginal and Torres Strait Islander people for some procedures. For example, the rate of cataract surgery for Aboriginal and Torres Strait Islander people is only 80% that of non-Indigenous people (Figure 37), even though vision loss from cataract is 12 times as high in Aboriginal and Torres Strait Islander populations. These findings suggest inadequate service delivery that is not tailored to the population's needs.

### What Aboriginal and Torres Strait Islander people tell us

As well as information from the second Atlas, we also have information about the safety and quality of health care directly from Aboriginal and Torres Strait Islander people. Many Aboriginal and Torres Strait Islander people do not feel safe in hospitals, experience feelings of 'shame' in not understanding healthcare information or being able to ask questions, and face difficulties in having to travel far from home to access health care.<sup>122</sup>

The Commission arranged for focus groups to be conducted with Aboriginal and Torres Strait Islander people from urban and regional communities, as well as in-depth interviews with Aboriginal and Torres Strait Islander health workers from remote communities in New South Wales, Victoria and Queensland. This research found that while most participants were satisfied overall with the quality of health care provided in hospitals, many reported bad experiences. There were mixed views from participants when it came to how safe they felt when receiving health care. Those who did feel safe said it was because of a good relationship with their health professionals, GPs or local Aboriginal Medical Service. Others felt uncertain, fearful and isolated in hospitals because of a lack of cultural safety.

Some participants reported feelings of uncertainty or trepidation about accessing the healthcare system or when being given medical advice. In many cases, it was because they found information to be too technical or difficult to understand. Literacy and language barriers were noted. Some people reported that this meant they were left unsure about their condition and the medication they were taking.

Most participants preferred to talk to someone face to face about their health care, and there was a call for more Aboriginal liaison officers in hospitals and continued commitment to cultural awareness programs. Some participants thought cultural awareness programs should be compulsory for all staff members as an ongoing education program.

There was a view that people in more remote communities 'seem to be getting a rougher deal' when it came to health care. Remote area healthcare practitioners echoed this point. For people living in these communities, getting access to services was often problematic due to the need to travel long distances. The majority of participants said they would like to be more involved in the decisions about their health care. While most understood where to go to access information, they faced challenges in being able to understand the information and being confident enough to ask questions.

'When I am at the Aboriginal Medical Service, staff explain things to me. They are good and tell me what's going on. At the hospital, if they tell me something, I don't understand it (they use medical terms and jargon) and I felt shamed to ask, as they say it once but I don't want to ask again because they think I'm dumb. So, I say "yes" when they ask me if I know what they said.'

'It's like a lucky door prize if you get a good doctor and nursing staff who understand, respect your cultural background, explain things thoroughly and just respect you as a human being.'

### Improving the safety and quality of health care for Aboriginal and Torres Strait Islander people

There has been significant investment in a wide range of programs to improve the health of Aboriginal and Torres Strait Islander people, with some gains (see **Box 8** for an example of a successful initiative). However, progress has been slow.<sup>14,17</sup> There remains considerable work to be done to improve the safety and quality of care provided to Aboriginal and Torres Strait Islander people, taking their unique needs into account. For the Commission, there are opportunities to do this building on existing programs and approaches.

The NSQHS Standards (2nd edition) will require health service organisations to address six actions to specifically meet the needs of Aboriginal and Torres Strait Islander people. Research by the Commission with Aboriginal and Torres Strait Islander people and health service representatives suggested that these actions cover areas that are key to improving the quality of care and health outcomes for Aboriginal and Torres Strait Islander people. The new actions in the NSQHS Standards require health service organisations to demonstrate they:

- Are working in partnership with Aboriginal and Torres Strait Islander communities to meet their healthcare needs
- Are taking steps to ensure that the organisation's safety and quality priorities address the specific health needs of Aboriginal and Torres Strait Islander people
- Are implementing and monitoring targeted strategies to meet the organisation's safety and quality priorities for Aboriginal and Torres Strait Islander people
- Have strategies to improve the cultural awareness and cultural competency of the workforce to meet the needs of its Aboriginal and Torres Strait Islander patients
- Provide a welcoming environment that recognises the importance of the cultural beliefs and practices of Aboriginal and Torres Strait Islander people
- Have routine processes in place to ask patients if they identify as being of Aboriginal or Torres Strait Islander origin, and to record this information in administrative and clinical information systems.

In addition, the second Atlas makes a series of recommendations aimed at addressing unwarranted variation in health care provided to Aboriginal and Torres Strait Islander people. These recommendations particularly relate to the development of innovative and appropriate models of care and focus on health literacy (**Box 8**). Box 8: The Koorliny Moort out-of-hospital health care program for Aboriginal and Torres Strait Islander children in Western Australia

The Koorliny Moort out-of-hospital health care program for Aboriginal and Torres Strait Islander children in Western Australia led to significant decreases in hospitalisations and emergency department presentations, and improved attendance at out-of-hospital appointments among Aboriginal children.

The program focused on three key interventions involving partnering with community-based primary-care providers, nurse-led care coordination, and providing outreach care closer to home.

Nurse-led care coordination involved assisting patients to combine and coordinate appointments to minimise travel and disruption, providing choices for appointments closer to family homes, assisting in locating medical records and results, planning hospital discharge, telehealth services and providing health advice and social, cultural and family support.

The findings suggest that it is possible to positively influence the health-seeking behaviour and health outcomes of Aboriginal and Torres Strait Islander children by engaging Aboriginal and Torres Strait Islander families in their health care, facilitating effective communication between health service providers, and delivering a coordinated program of care by Aboriginal and Torres Strait Islander service providers.

These conclusions are especially important given that Aboriginal and Torres Strait Islander children are among the most difficult to reach and the most disadvantaged children in Western Australia. This was reflected in extremely high nonattendance rates at appointments before the introduction of the program.

#### Box 9: Recommendations in the second Atlas

### Chronic disease and infection: Potentially preventable hospitalisations

- 1a. Local Hospital Networks, Primary Health Networks and the Aboriginal Community Controlled Health Service sector to follow the following principles in developing chronic disease management programs, as described in the report of the Primary Health Care Advisory Group Better Outcomes for People with Chronic and Complex Health Conditions and consistent with the National Strategic Framework for Chronic Conditions:
  - i. voluntary patient enrolment with a practice or healthcare provider to provide a clinical 'home base' for coordination of, management of, and ongoing support for, the patient's care
  - ii. 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

- a risk stratification approach that supports identification of patients with high coordination and multiple provider needs, to ensure personalisation of service provision
- iv. enhanced access by patients to care provided by their healthcare home; this may include in-hours support by telephone, email or videoconferencing, and effective access to after-hours advice or care
- v. nomination by patients of a preferred clinician, who is aware of their problems, priorities and wishes, and is responsible for their care coordination
- vi. 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
- vii. 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
- viii. data collection and sharing by patients and their healthcare teams to measure patient health outcomes and improve performance.

### Chronic obstructive pulmonary disease

- 1b. Local Hospital Networks, Primary Health Networks and the Aboriginal Community Controlled Health Service sector to promote appropriate care for the management of people with chronic obstructive pulmonary disease (COPD) using:
  - i. the COPD-X Plan: Australian and New Zealand Guidelines for the Management of Chronic Obstructive Pulmonary Disease 2016 as the routine model of care
  - targeted anti-smoking programs in populations with high smoking rates, including areas with a high proportion of the population who are Aboriginal and Torres Strait Islander people, rural and remote areas, and areas of socioeconomic disadvantage.
- 1c. State and territory health departments to develop culturally appropriate pulmonary rehabilitation programs for Aboriginal and Torres Strait Islander people with COPD.

### Heart failure

1d. 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

- 1e. 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 using:
  - i. General Practice Management of Type 2 Diabetes 2016–18 guidelines as the routine model of care
  - ii. the Australian National Diabetes Strategy 2016–2020 to ensure the provision of integrated models of care
  - iii. performance management frameworks to assess compliance of care with relevant diabetes treatment guidelines.

### All conditions associated with potentially preventable hospitalisations

1f. The Commission, in collaboration with Aboriginal and Torres Strait Islander people and relevant organisations, to produce resources for addressing health literacy.
1g. State and territory health departments, in collaboration with Aboriginal and Torres Strait Islander people, and Australian Government health agencies, to continue to invest in whole-of-government approaches for addressing the social determinants of health for Aboriginal and Torres Strait Islander people, people in areas of socioeconomic disadvantage, and people living in outer regional and remote areas.

#### Cataract surgery

4l. State and territory health departments to work with the Aboriginal Community Controlled Health Service sector to ensure culturally appropriate, ongoing and consistent services for cataract assessment and cataract surgery in areas where these are needed.

### Driving appropriateness of care

5e. Professional colleges and societies to work in partnership with relevant organisations within the Aboriginal and Torres Strait Islander health sector to provide cultural safety competency training to their members as part of continuing professional development.

## Where to next?

From 2019, health service organisations will have to implement six new actions from the NSQHS Standards (2nd ed.) to address the unique healthcare needs of Aboriginal and Torres Strait Islander people.<sup>10</sup>

New resources, such as patient perspectives, research data and fresh information in the second Atlas represent invaluable sources of information and insights for understanding how to provide safe and high-quality healthcare for Aboriginal and Torres Strait Islander people.

The Commission continues its work in improving the quality and safety of health care through health literacy, as well as promoting patient-centred health care and partnering with consumers.

### What the Commission will do

The Commission will:

- Introduce six specific actions to address the unique healthcare needs of Aboriginal and Torres Strait Islander people in the NSQHS Standards (2nd edition)
- Work with stakeholders to support implementation of the recommendations from the second Atlas that aim to improve the delivery of appropriate care for Aboriginal and Torres Strait Islander people.

# Conclusion

Ensuring that people receiving health care in Australia are safe, and that they receive highquality care, is a complex task involving many people and organisations. This means no single source of data can provide comprehensive information about the safety and quality of the Australian healthcare system.

*Vital Signs 2017* provides information about 14 safety and quality topics that draw on data from a wide range of sources. Combined, this information paints a picture of the work being done in Australia to improve safety and quality in health care, as well as the success of these efforts and the work that remains.

Since the first edition of Vital Signs, in 2013, we have made significant progress in developing and implementing systems to support safe, high-quality health care nationally. The NSQHS Standards are now well embedded in the Australian health system, and more and more health services are meeting all the actions, including those that are developmental. This means that more health services have the necessary systems in place to ensure patient safety. Other national systems are also becoming more embedded and starting to demonstrate their potential for improving safety and quality in health care. The AURA Surveillance System provides a comprehensive picture of patterns and trends in antimicrobial resistance and antibiotic usage not previously available in Australia. This information can be used in many ways, from informing local decisions about the care of individual patients to making policy decisions about interventions to prevent and control the spread of resistant organisms. The My Health Record system will enable secure and fast access to patients' health information, supporting safety and quality in clinical decisionmaking, and making it easier to care for people across multiple clinicians and settings. The opportunities to improve safety and quality will only increase now that the My Health Record system is being expanded into an opt-out program.

With the consolidation of systems such as these, there are opportunities to use information about safety and quality to improve the standard of health care. *Vital Signs 2017* includes several examples of how this has been done. Information about healthcare variation from the first Atlas has driven work by the Commission, clinical colleges, state and territory health services, and other organisations to improve the appropriateness of care in areas such as the prescribing of medications for anxiety, depression, and the behavioural and psychological symptoms of dementia. The findings and recommendations in the second Atlas will support improvements in other areas. We are building on what we know about the risks associated with blood transfusions – including the importance of patient blood management and the potential to improve patient outcomes – to support better practices in this area nationally. The use of information about patient experiences continues to drive improvement at local, regional and national levels.

As these systems become more embedded, it is also clear that an integrated approach to improving safety and quality in health care is essential. It is not sufficient to only tackle specific safety issues without being aware of the broader context in which they occur. For example, understanding why rates of hand hygiene compliance in emergency departments are lower than in other parts of hospitals is essential to developing effective strategies for improvement. The second edition of the NSQHS Standards takes a more integrated approach to safety and quality. Health services will be required to demonstrate how they are integrating clinical governance and quality improvement, and partnering with consumers to help meet each of the NSQHS Standards. Supporting this integrated approach is the introduction of a new standard, Comprehensive Care, which focuses on many of the underlying issues affecting safety and quality, such as effective teamwork, goal setting and communication.

Integration across sectors and settings within the health system is also necessary to ensure safety and quality. Health services such as hospitals sit within intricate webs of different types of services across tertiary, secondary and primary sectors. Patients and consumers move between these services and sectors, and there are safety and quality risks at intersecting points on these journeys. While there has tended to be a greater focus on safety and quality in the acute sector in the past, the unique nature of primary care and the importance of this sector to the community mean that it is also important to understand the particular safety and quality issues relevant to this environment, and develop solutions to address them. Because of the complexity of the health system in Australia, and the breadth of the task of ensuring safety and quality, it is important to maintain a focus on the ultimate purpose of this work: ensuring that everyone receives safe, high-quality health care wherever they are. The Commission works with its partners – including patients, families, carers, consumer groups, clinicians, managers, executives and policymakers – to improve the care, experiences and outcomes of people using the Australian healthcare system. It is only through such partnerships that sustainable change and better care can be achieved.

Since 2013, there has been significant progress in developing and implementing systems to support safe, highquality care nationally.

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