

AUSTRALIAN SAFETY AND QUALITY GOALS FOR HEALTH CARE

Consultation Paper

9 November 2011

This consultation paper has been prepared to encourage comment and discussion in the interests of gaining productive feedback about the Australian Safety and Quality Goals for Health Care. Thank you for your time in reviewing the document and providing a response. Please refer to Section 5 on page 29 for details of the specific questions to which the Commission is seeking responses.

The Commission will be accepting written submissions up to **10 February 2012**. Submissions marked 'Australian Safety and Quality Goals for Health Care' should be either:

Sent to: GPO Box 5480, Sydney NSW 2001

Emailed to: goals@safetyandquality.gov.au

Submitted via an online survey at:

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Please be aware that in order to ensure transparency and promote a robust discussion, all submissions will be published on the Commission's website, including the names of individuals and/or organisations making the submission. The Commission will consider requests to withhold the contents of any submissions made, in whole or part.

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1. Introduction

The landscape of the health system in Australia is changing with current health reforms. The National Health Reform Agreement aims to improve health outcomes and ensure the sustainability of the Australian health system.¹ It is intended that the reforms included in this agreement will improve access to care, improve efficiency, increase public information about health service performance and ensure more transparent funding of public hospitals.

Safety and quality is central to the delivery of health care, and considerations about safety and quality are embedded in the health reforms. One of the elements of the National Health Reform Agreement is the establishment of the Australian Commission on Safety and Quality in Health Care (the Commission) as a permanent independent body from July 2011. The Commission will operate with the other structures being established as part of the health reforms, particularly the National Health Performance Authority, Independent Hospital Pricing Authority, National Lead Clinicians Group, Local Hospital Networks and Medicare Locals.

In this context there is currently an opportunity to build on the wide range of work that has been carried out over the last five to ten years to improve safety and quality in Australia. There is an opportunity to agree on the key safety and quality challenges that could form the basis for concerted and collaborative national action across all sectors and settings of care to improve health outcomes and the efficiency and effectiveness of the health system.

To take this forward, the Australian Health Ministers Advisory Council has asked the Commission to identify a small number of national safety and quality goals. The goals will identify priority areas that could form the basis of coordinated national action and provide the opportunity for integrated effort to maximise the benefits that can be achieved from existing and new safety and quality work.

Work commenced to identify and develop the Australian Safety and Quality Goals for Health Care (the Goals) in August 2011, and it is intended that a final set of recommendations will be available in late March 2012. The recommended Goals will then be submitted to Health Ministers.

Goals that are developed as part of this process will need to be considered in the context of other national safety and quality improvement initiatives. In particular, the Australian Safety and Quality Framework for Health Care sets out a vision for safe and high quality care in Australia that is consumer centred, driven by information and organised for safety.² In addition, the National Safety and Quality Health Service Standards provide explicit statements of the level of care that people can expect from health services.³

The purpose of this document is to present the draft Australian Safety and Quality Goals for Health Care for consultation and discussion. This document is the result of the first phase of work on the Goals. It provides information about the context and development of the Goals, and sets out the details of the proposed Goals and why they have been put forward.

Prior to reaching final agreement on the recommended Goals in March 2012, the Commission will be undertaking a second phase of work to further develop the Goals. For this phase the Commission will be working with stakeholders to identify:

- key activities, programs, initiatives and system drivers already in place that could support achievement of the Goals
- actions that could be taken within the health system to achieve the Goals
- potential measures that could be used to assess progress towards achievement of the Goals.

2. Why have national safety and quality goals?

There has been an explicit focus on improving the safety and quality of health care in Australia for many years. Since the landmark safety and quality studies in Australia and internationally in the 1990s and 2000s,⁴⁻⁶ Australian governments, clinical and health professional organisations, universities, non-government organisations and consumer organisations have committed considerable financial and other resources to efforts to improve the safety and quality of care.

These efforts have resulted in gains for patients and improvements to the health system. For example, management of asthma in general practice has improved, and hospitalisations for asthma have decreased in the 10 years to 2008.⁷ Also, hospitals are now submitting data about hand hygiene practices to a national body, and it is clear that hand hygiene compliance rates are improving.⁸

Despite the gains that have resulted from this investment, there are opportunities for further improvements. Initiatives to improve the quality and safety of health care have not always been sustainable; policies and programs do not always change the way care is delivered to individuals; and patients do not always receive the care they should.⁸⁻¹¹ The safety and quality 'problem' has not yet been fixed, and more needs to be done to achieve the vision of the safe and high quality health care described in the Australian Safety and Quality Framework for Health Care.²

There is important work going on throughout the health system to improve the safety and quality of care. This work needs to continue; however, it is also important to look for opportunities that can provide an additional impetus to these efforts. Such an opportunity has arisen within the current health reform environment. (See Appendix A for information about the principal components of the health reform processes.)

The emphasis on safety and quality within the health reforms, and the role of the Commission in leading and coordinating safety and quality nationally, provide a timely opportunity to reach agreement on the key safety and quality challenges facing Australia over the next five years, and to address these challenges collaboratively. It is proposed that these challenges be expressed in a set of national safety and quality goals.

There have been health goals in Australia in the past that emerged from population health approaches and were broadly focussed on improving health and improving inequalities in health status.¹²⁻¹³ The initial goals and targets proposed in the original *Health for All Australians* report in the 1980s focussed on social, economic and environmental determinants of health status for specific population groups, major causes of sickness and death, and key risk factors.¹⁴⁻¹⁵ These evolved into the national health priority areas that focussed on important clinical issues and covered the spectrum from prevention to treatment and care.¹⁶

A review of the national health priority areas conducted in 1999 concluded that there was support for the initiative, and that the health priority areas provided a framework

for reporting and monitoring of the clinical areas that carry the greatest burden of cost and disease.¹⁶

Analyses of the use of health goals and targets internationally has found that they provide a number of benefits, including:¹⁷

- support for a more rational and transparent health policy
- a greater focus and recognisability for health policy
- an increase in consistency among disparate health programs, and a common language for programs and priorities
- increased awareness for health programs among policy makers, healthcare providers and consumers
- support for more efficient implementation and planning of health care
- identification of where data development is needed
- a basis for measurement of progress.

(More information about health goals in Australia and internationally is included in Appendix B.)

The impact of goals and targets on health status is hard to measure, and difficult to distinguish from the effects of other societal processes.¹⁷ There is evidence that the introduction of goals and targets in England has improved health service performance.¹⁸⁻²⁰ However, there are also criticisms regarding the use of targets, including the risks of manipulation of data to achieve targets, diversion of attention from issues that are not the subject of targets, and seeing achievement of the target as the end, rather than the means to better care.^{17-18,20-22}

Health goals and targets can provide benefits if mechanisms are put in place to address the unintended consequences that can emerge.^{17,20,23-24} A number of lessons can be learned for the Australian Safety and Quality Goals for Health Care from the experiences of the use of goals and targets internationally. These lessons include the need to:

- focus goals on the achievement of desired results that are linked with a strategic vision for health¹⁷
- be aware of existing policies and programs in specific areas with which a goal can interlock¹⁷
- support effective coordination and consensus-building regarding the achievement of the goals^{17,24}
- be selective and choose a limited number of goals to reduce fragmentation of improvement efforts and focus attention and discussion¹⁷
- support local flexibility and ownership by health services and providers in the actions that are taken to achieve the goals^{20,23}
- put in place strategies to monitor progress using measures that are timely and quantifiable.^{17,24}

3. Australian Safety and Quality Goals for Health Care: Overview

The purpose of the Australian Safety and Quality Goals for Health Care is to describe priority areas that could be the basis of coordinated national action to:

- improve the safety and quality of health care
- achieve better outcomes for patients
- provide a more effective and efficient health system.

It is anticipated that the Goals, and the priority areas identified within them, will:

- provide the basis for integrating improvements in safety and quality in the day-to-day business of providing health care
- help form the strategic direction for safety and quality improvement for health organisations
- inform the development of the Commission's work plan.

This section provides information about the development of and context for the Goals.

Scope of the Australian Safety and Quality Goals for Health Care

The scope of the Goals is to look at the way that care is delivered within the health system, with an emphasis on the prevention of harm, the delivery of appropriate care and the factors that are necessary for this to occur. Although the emphasis will vary for different Goals and priority areas, the focus is on the entire health system in Australia, including care delivered in the public and private, primary and acute care sectors. Actions that can be taken in specific settings and sectors to achieve the Goals will be considered in future work of the Commission.

The Goals are focused on areas where action can be taken to improve outcomes and experiences for all people, not just for specific groups or sub-populations. However, it is recognised that within the general population there are specific groups such as Aboriginal and Torres Strait Islander peoples, people from culturally and linguistically diverse backgrounds, older people and people who have both physical and mental health conditions who have significantly worse health outcomes or receive significantly poorer care. Achieving the Goals is particularly important for groups such as these, and an explicit focus on the Goals will be particularly important in the planning and delivery of health services for them. Further actions that can be taken to address the needs of specific groups within the framework of the Goals will be considered as part of the second phase of work on the Goals.

The Goals and priority areas have been structured so that there is a balance between providing sufficient focus to guide action to improve safety and quality, and

sufficient breadth to allow different participants to undertake a range of actions within different settings over a five year timeframe.

Selection of the Australian Safety and Quality Goals for Health Care

The process for identifying the draft Goals and priority areas presented in this paper was based on varied research. This included a review of international health and safety and quality goals, literature reviews, consultation with topic experts and consultation with a technical advisory panel made up of consumers, clinicians, managers, policy makers and researchers.

During this process, the broad criteria that were considered when deciding to include a specific topic within a goal were:

- the impact on the health system in terms of issues such as the burden of disease, cost to the system and number of adverse events
- the existence of significant safety and quality problems, such as high levels of preventable harm and significant gaps between evidence and practice
- the existence of a body of work that could be built on to make improvements, with broad agreement about clinical guidelines or other evidence-based strategies
- that the potential goal was amenable to national action at multiple levels of the health system
- the likelihood that improvements would be achieved in a three to five year timeframe
- the existence of links to other national priorities
- the potential for the goal to be relevant across disease groups, sectors and settings of care
- the existence of measures, or potential to develop measures, that could be used to monitor progress.

Australian Safety and Quality Goals for Health Care

The Commission proposes three draft Goals, listed below. The first two of these Goals identify specific priority areas that describe initial areas for coordinated action.

1. **Safety of care:** That people receive their health care without experiencing harm.

Initial priorities are to:

- reduce harm from adverse medicines events and improve quality use of medicines
- reduce harm from healthcare associated infections through effective infection control and antimicrobial stewardship.

2. **Appropriateness of care:** That people receive appropriate, evidence-based care.

Initial priorities are for:

- people living with type 2 diabetes
- people with acute coronary syndrome or stroke.

3. **Partnering with patients and consumers:** That there are effective partnerships between patients, consumers and healthcare providers and organisations at all levels of healthcare provision, planning and evaluation.

The Goals specify the broad areas where improvements in safety and quality are being sought, initially within the identified priority areas. The next phase of work on the Goals will provide more detail about the process level or implementation goals that will need to be identified and addressed to achieve these improvements.

It is important to note that the Goals and the priority areas reflect only a small proportion of the processes and issues that are needed for all people in Australia to receive safe and high quality care. The intention of the Goals is to describe some of the key safety and quality challenges where actions and achievements are possible over the next five years. This does not mean that all national attention will, or should, only be on the areas covered by the Goals. The Goals themselves, and the priority areas within them, may change over time as new information becomes available. The identification of the Australian Safety and Quality Goals for Health Care is the beginning of a long-term process that will contribute to and support efforts to improve safety and quality in Australia.

Context for the Australian Safety and Quality Goals for Health Care in the health system

There are many organisations, initiatives, processes and structures in place that aim to improve the safety and quality of the health system. If the Goals are to add value to existing work it is important to be clear about where they sit within the health system, how they may influence key stakeholders and how change and improvement may be brought about.

Table 1 provides an overview of the contextual framework for the Goals. The table is organised around five questions, and sets out the key policies, organisations and activities that could support achievement of the Goals. The questions that provide the structure for the table are:

1. What are we trying to achieve?
2. How will we achieve safety and quality improvements in these priority areas?
3. Who could undertake the actions required to improve the safety and quality of care in these priority areas?
4. What structures and processes already exist that could support improvements in safety and quality in these priority areas?
5. How will we know whether we have made improvements?

In summary, the Goals describe the priority areas where improvements in the safety and quality of care can be brought about by coordinated national action and integration of effort that will lead to benefits for consumers and patients, and the health system. The Goals are linked to the strategic vision set out in the Australian Safety and Quality Framework for Health Care and identify specific areas in which improvements are initially being sought. There are a range of mechanisms through which these improvements could occur, and many organisations and individuals who could have a role in bringing about change. Of particular importance in the current environment are the National Safety and Quality Health Service Standards, and the focus they will bring for high risk services that need to be assessed against the Standards as part of their accreditation process from January 2013. For primary healthcare organisations, the establishment of the Medicare Locals and local Lead Clinicians Groups provides opportunities to develop new clinical governance frameworks to support safety and quality improvements in this sector.

To achieve the Goals, action needs to be integrated into existing systems and processes. However it needs to be recognised that although the existence of systems, policies and processes is necessary to improve safety and quality, it is not sufficient. An understanding of the principles of behavioural change and the range of factors that can influence individual behaviour is also required. In addition, for improvements to be effective across the health system, coordinated action is needed at multiple levels, and in different settings and sectors of care. This includes action at the level of:

- patients, families, carers and consumers
- clinical microsystems or teams of healthcare providers and supporting staff
- health services and healthcare organisations ranging from hospitals to private practices and community-based providers
- governments, regulators and other non-government organisations that set the health policy framework.

Table 1: Contextual overview of the Australian Safety and Quality Goals for Health Care

1. What are we trying to achieve?	
Safe and high quality health care for Australia; i.e. care that is: <ul style="list-style-type: none"> • consumer centred • driven by information • organised for safety 	→ Australian Safety and Quality Framework for Health Care
Improved safety and quality of care in specific priority areas through coordinated national action	→ Australian Safety and Quality Goals for Health Care
2. How will we achieve safety and quality improvements in these priority areas?	
Provide care that respects the rights of patients and consumers	→ Australian Charter of Healthcare Rights
Provide care that is in accordance with best practice	→ Clinical standards and guidelines (National Clinical Standards and other agreed standards and guidelines)
Meet safety and quality standards	→ National Safety and Quality Health Service Standards
Undertake actions that contribute to safe and high quality care in the specific areas covered by the Goals	→ Actions specified in the Australian Safety and Quality Framework for Health Care Other evidence-based strategies and actions to improve care
Provide appropriate education and training	→ Undergraduate and postgraduate training Continuing professional development (patient safety, quality improvement and relevant clinical issues)
Identify and promote system drivers that support safety and quality improvement	→ Health policy framework (national, jurisdictional and local)
Monitor and evaluate progress	→ Routine measurement of performance Evaluation of safety and quality initiatives Assessment against standards Development and use of reporting and feedback mechanisms Research findings
3. Who could undertake the actions required to improve the safety and quality of care in these priority areas?	
Patients, families, carers and consumers	→ Partner with healthcare providers and health service organisations to the extent that they wish and are able to do so Form partnerships at all levels: individual treatment and care, safety and quality improvement, health service planning, governance and evaluation
Healthcare providers	→ Provide care in accordance with best practice Partner with patients, families and carers Participate in safety and quality initiatives Participate in education and training Model high-quality care – lead by example Review clinical performance and make necessary changes to improve

Table 1: Contextual overview of the Australian Safety and Quality Goals for Health Care (continued)

3. Who could undertake the actions required to improve the safety and quality of care in these priority areas? (continued)	
Organisations that provide healthcare services (public and private; acute care and primary care)	→ Require provision of care in accordance with best practice Meet the National Safety and Quality Health Service Standards Develop and support partnerships with consumers, patients, families and carers Undertake safety and quality initiatives Provide education and training Assess safety and quality performance and make necessary changes to improve Develop and maintain a positive safety culture Organise services to support the provision of safe and high quality care
Government organisations, regulators and bodies that set health policy	→ Require and support partnerships with consumers, patients, families and carers Set clinical, and safety and quality policy Regulate health service organisations Undertake safety and quality initiatives Provide education and training Measure safety and quality performance Coordinate services from different providers Register health professionals Support the provision of safe and high quality care
Research, education and training organisations	→ Develop safety and quality curricula Establish formal professional training programs Deliver safety and quality education and training Produce health professionals who are knowledgeable about safety and quality issues Conduct research about the best ways to achieve the Goals Measure progress towards achieving the Goals Partner with healthcare organisations to conduct research about safety and quality Support implementation of research into practice
Australian Commission on Safety and Quality in Health Care	→ Develop work program around identified Goals Monitor and support implementation of the National Safety and Quality Health Service Standards Develop, monitor and support national clinical standards Lead and coordinate for safety and quality nationally Develop indicators to measure performance Identify and minimise barriers to safe and high quality care
4. What structures and processes already exist that could support improvements in safety and quality in these priority areas?	
Consumer organisations, groups and networks	→ Advocacy for patients and consumers Contribution to health policy development, safety and quality improvement and knowledge development Support for patients and consumers to participate in the health system

Table 1: Contextual overview of the Australian Safety and Quality Goals for Health Care (continued)

4. What structures and processes already exist that would support improvements in safety and quality in these priority areas? (continued)	
Clinical and professional bodies, including non-government organisations	→ Standards and guidelines Education and training Advocacy Quality improvement Professional practice
Jurisdictions	→ Managers of the public health system at a jurisdictional level Safety and quality programs Regulation of health services Health policy framework Education and training Evaluation and monitoring
Private healthcare organisations	→ Policy framework regarding delivery of health care Safety and quality programs Education and training Evaluation and monitoring
Universities, education and training and information bodies	→ Research Provision of education and training Accreditation of education and training Reporting and dissemination of information
National health reform processes	→ Council of Australian Governments National Health Reform Agreement National Health Performance Authority Independent Hospital Pricing Authority Local Hospital Networks Medicare Locals Lead Clinician Groups Performance and Accountability Framework Integration with existing state and territory processes
Other bodies	→ National e-Health Transition Authority Health Workforce Australia Australian Health Professionals Regulation Agency National Health and Medical Research Council Australian Research Council Divisions of General Practice / Medicare Locals Australian Primary Care Collaboratives Accrediting bodies
5. How will we know whether we have made improvements?	
Collect agreed indicators	→ Indicators for local improvement Indicators for reporting nationally
Public reporting	→ Performance and Accountability Framework National Healthcare Agreement Reporting on MyHospitals web site Jurisdictional reporting
Information from clinical quality registries	→ Existing individual registries and consideration of national clinical quality registries
Accreditation	→ Results of accreditation against the National Safety and Quality Health Service Standards
Research, evaluation and monitoring	→ Local evaluation and quality improvement Evaluation of specific programs Ongoing monitoring of performance Research regarding changes to processes and outcomes

4. Australian Safety and Quality Goals for Health Care: Detailed analysis

This section provides a detailed analysis of the three Australian Safety and Quality Goals for Health Care, and the associated priority areas within the first two.

Information is provided to support the selection of each goal or priority area as a Australian Safety and Quality Goal for Health Care. Information is also provided about the impact of the issue on the health system, evidence of effective strategies to address the issue and the existence of a safety and quality problem to be addressed.

Goal 1: Safety of care

Description of Goal

That people receive their health care without experiencing harm

Initial priorities are to:

- reduce harm to people from adverse medicines events and improve quality use of medicines
- reduce harm to people from healthcare associated infections through effective infection control and antimicrobial stewardship

Defining the problem

Despite the existence of many evidence-based risk management and harm reduction strategies, many Australians are still experiencing unnecessary harm while receiving health care. As well as the direct impact on patients, this results in increased costs to the healthcare system.

Priority area 1: Medication safety

Objective

To reduce harm to people from adverse medicines events and improve quality use of medicines.

Impact on patients and the health system

Medication safety is associated with the prescription, dispensing and administration of medication.²⁵ Medication error often results in adverse medicines events, which can affect a patient's health in a range of ways, from mild allergic reactions to death.²⁶

Adverse medicines events include the harm that results from the medicine itself (an adverse drug reaction) and the potential or actual patient harm that comes from errors or system failures associated with the preparation, prescribing, dispensing, distribution or administration of medicines (medication incident).²⁷ It is estimated that around one third to three quarters of medication-related hospital admissions and adverse medicines events associated with hospitalisation are preventable.²⁸

Community and primary health care

A study by Miller et al. based on 2004 data²⁹ indicated that around one in ten general practice patients experienced an adverse event after using a medication in the previous six months. Almost 50% of these events were reported as resulting in a moderate to severe reaction and around 8% of these patients required hospitalisation.²⁹

Under-reporting of adverse medicines events in the community is a significant issue, as currently there is no requirement to report these events systematically. Also, there is no systematic method of tracking patients between the primary and acute care sectors to identify causes, consequences and accurate prevalence of adverse medicines events. For example, the Miller study would not have identified patients who may have died from adverse medicines events or those treated for a community-acquired adverse medicines event in hospital.

Acute care

In 2009–10, drugs and medications were the second most commonly reported cause of adverse events treated in Australian hospitals.³⁰ These adverse medicines events contributed to around 34% and 18% of total adverse events treated in public and private hospitals respectively.³⁰

It is estimated that around 2–3% of all admissions are medication related,²⁸ which equated to around 163,000 admissions in 2008–09. In addition, if the average casemix cost per admission is \$4471³⁰ then the total annual estimated cost of those medication-related admissions would be around \$729 million. It has been estimated that around 50% of those admissions are preventable.²⁵

In addition to the base cost of medication-related admissions, patients who have adverse medicines events tend to have longer, more expensive hospitalisations. For example, a US study based on data from the early 1990s found that, on average, additional costs of US\$2013 and an increased average length of stay of 1.74 days per patient per episode were attributable to an adverse medicines event.³¹

It also should be noted that these figures do not include patients who are admitted to hospital and *then* experience an adverse medicines event. Consequently, these figures are an underestimate of the total acute care costs of adverse medicines events.

Care transition

The transition from one healthcare sector to another presents an increased risk of medication error. For example, Stowasser suggests that there is a two-fold increase in the relative risk of re-admission associated with the omission of a medication from a discharge summary.³² In addition, a 2010 study found that over one third of patients had a medication error at admission, 85% of which originated in their medication histories.³³

Vulnerable populations

Adverse medicines events are more likely to be experienced by those who are most vulnerable including those aged one to four years,²⁹ 65 years and older,^{29,34-35} and people with multiple morbidities, dementia, renal insufficiency, recent hospitalisation experience, multiple prescriptions, regular use of alcohol and prior adverse medicines event.³⁶ Adverse medicines events are also likely to have a disproportionate impact on Aboriginal and Torres Strait Islander peoples, given the high rates of chronic and complex conditions experienced.

Evidence of effective strategies

Analysis of medication errors by Leape in the mid-1990s suggested that a focus on systems rather than individuals is most effective at reducing errors.³⁷ In addition, a 2011 review of the determinants of patient-reported medication errors indicated that improved communication, as well as systematisation and organisation across the healthcare sector were important factors in reducing medication error.³⁸

Standardisation of systems and processes

There is strong evidence that errors may be reduced with better understanding and standardisation of systems and processes.³⁹ Areas where evidence exists of potential benefit from standardisation include the following:

- **Standardisation of medication charts** as a means of improving prescription writing, and reducing prescription and administration errors. A 2005 report on the piloting of a national inpatient medication chart for Australia demonstrated improvements in documentation, prescription and frequency of provision of medications.⁴⁰ In addition, a 2011 study by Coombes found that use of a national inpatient medication chart reduced the frequency of prescribing errors by almost one third.⁴¹ There is potential for the standardisation of charts to be expanded into residential aged care, mental health services and other areas as a means of reducing errors.
- Implementation of a systematic **medication reconciliation** process, which can decrease the incidence of medication errors that occur at points of transition of care.^{39,42-43} For example, in 2003 Pronovost studied the effectiveness of a medication reconciliation process, including a discharge survey, in intensive care units and found that by week 24 nearly all medication errors in discharge orders were eliminated.⁴²
- Use of **standardised labelling and packaging**. It has been shown that errors in injectable medicine administration are less likely to occur when a single person is responsible for preparing and labelling each injectable medicine,⁴⁴ and that medicines in well-labelled syringes are more likely to have been prepared correctly.⁴⁵ The use of 'Tall Man Lettering' is another strategy that can reduce errors from confusion with look-alike, sound-alike medication names.⁴⁶

Electronic medication management and the use of technology

Areas where evidence exists of potential benefit from electronic medication management and the use of technology include the following:

- Use of **computerised physician order entry and clinical decision support systems**. There is growing evidence indicating that using these tools in

combination can provide an effective approach to reducing medication errors⁴⁷⁻⁵⁰ and consequently they have potential for reducing adverse medicines events.

- Implementation of **bar code technology** in the medication management pathway,^{28,47} where evidence is currently evolving. In 2010 Poon reported on a 2005 experiment using bar code medication verification technology. The results indicated a 41% reduction in non-timing administration errors (errors not associated with late administration of medication), a 51% reduction in potential adverse medicines events from these errors and the elimination of transcription errors.⁵¹

Medication continuity

Areas where evidence exists of potential benefit from improved continuity of care include the following:

- The use of **discharge planning, structured communication about medication safety risks, integrated discharge prescription forms and the use of clinical pharmacists to review medications at hospital admission** to improve continuity of medication across sectors and settings. A 2010 literature review on discharge, referral and admission found that medication communication and medication management were key risks to patient safety during these transition processes.⁵²
- Implementation of **home medicines review (HMR)**. In 2003, Sorensen reviewed a pilot of the Australian HMR program and found that it resulted in some risk reduction for adverse medicines events and a trend towards positive patient outcomes.⁵³ The evidence in this area is building and other research has indicated HMR may have a positive influence on the prescribing of potentially inappropriate medications⁵⁴ and that it may improve the delivery of appropriate medicines and relationships between GPs, pharmacists and patients.⁵⁵
- Implementation of **medication reconciliation processes**, as described above.

Patient based strategies

A 2011 systematic review of consumer-oriented interventions for prescribing and medicines found that there is:

- sufficient evidence that **self-monitoring or self-management** improves medicines adherence, decreases adverse events and is generally effective⁵⁶
- some evidence that **strategies to improve interactions**, including strengthening communication between healthcare professionals and patients, may decrease adverse events and improve other outcomes, but results are mixed⁵⁶
- some evidence that **educational strategies to minimise risks and harms** may be effective, and telling patients about the adverse effects of medicines does not reduce adherence.⁵⁶

There is also a well-established evidence base regarding the association between health literacy and health outcomes.

Healthcare professionals based strategies

As mentioned above, strategies such as the use of **clinical pharmacists to review medications at admission**⁵⁷⁻⁵⁹ have been shown to reduce the error rate within

emergency departments. A 2006 systematic review found that the use of clinical pharmacists in the acute setting generally improved the quality and safety of care. Of the trials that looked at adverse medicines events, adverse drug reactions and medication errors, almost 60% found the use of clinical pharmacists reduced these adverse outcomes.⁶⁰

In addition, **education and training programs** have been studied by a number of researchers who found that these types of programs can improve awareness of medication safety risks and knowledge.⁶¹⁻⁶² However, there is a need for research to identify the impact of this on health outcomes.

Finally, the Commission has developed a set of National Safety and Quality Health Service Standards which will be incorporated into accreditation processes for all high risk healthcare organisations from 2013. One of the Standards relates to medication safety and describes the expected level of governance, documentation, medication management, continuity and communication for safe medication practices.⁶³

Safety and quality issue

A 2011 systematic review of the incidence and nature of hospital-based adverse events found that drugs were the second most common cause of adverse events, and the researchers concluded that funds and efforts should be concentrated on reducing these events as a priority.⁴⁷

It is estimated that around 50% of adverse medicines events are avoidable. Avoidable adverse medicines events can be a result of:

- underuse, such as failure to prescribe evidence-based preventative medication for cardiovascular disease
- overuse, such as inappropriate prescribing of antibiotics
- misuse, such as patient failure to adhere to a diabetes medication regimen.

There are also a range of specific medications and conditions where there are known evidence-practice gaps and/or greater potential for harm. These include the following:

- **Venous thromboembolism (VTE).** Hospitalised patients are over 100 times more likely to develop VTE compared with the rest of the community.⁶⁴ The consequences of developing VTE can range from mild discomfort to death; however, many cases are preventable.⁶⁵⁻⁶⁶
- **Antibiotics.** Inappropriate use of antimicrobials leads to the emergence of antibiotic-resistant bacteria, an increase in the risk of patient harm from avoidable adverse reactions and interactions with other drugs, infection with multi-resistant bacteria or *Clostridium difficile*, and unnecessary costs.⁶⁷
- **High risk medicines** which have a low therapeutic index or present a high risk when administered via the wrong route or when other systems errors occur. These include potassium, insulin, narcotics, chemotherapies and heparin.⁶⁸

Priority area 2: Healthcare associated infection

Objective

To reduce harm to people from healthcare associated infections through effective infection control and antimicrobial stewardship

Impact on patients and the health system

Healthcare associated infections (HAIs) are one of the most common, significant and preventable patient safety issues today. HAIs generate considerable health and economic burden for both the individual and the health system.

Table 2: Estimated incidence and estimated annual cost of HAI

	Est. number of patients admitted to hospital who develop HAI	Est. deaths associated with HAI	Est. annual cost of HAI
United States ⁶⁹ (2002)	1.7 million	100,000	US\$28–45 billion ⁷⁰
Canada ⁷¹ (2003)	220,000	8,000	
England ⁷² (2000)	100,000	5,000	£1 billion
Australia ⁷³	200,000		

NB: National data on the incidence of HAIs in Australia is limited, therefore this is an estimate only.

The impact of HAIs includes increased patient morbidity and mortality risks, prolonged hospital stay, reduced quality of life, and additional costs to both the patient and the system for consumable items used to treat the infection.^{69,74-76}

Infections such as catheter associated urinary tract infection (CAUTI) and central line associated blood stream infections (CLABSI) are some of the most common, costly and potentially lethal HAIs.⁷⁷⁻⁷⁸ In Australia, it is estimated that there are at least 3500 cases of intravenous catheter-associated bloodstream infections annually and the mortality rate directly attributable to intravenous catheter sepsis is 12%. This equates to around 1.5 infections per 1000 admissions.⁷⁹ This estimate is based in studies in the late 1990s so is likely to be an underestimate.

Of all HAIs, surgical site infections (SSIs) have the greatest impact on length of hospital stay.⁸⁰ Modelling has led to estimates of excess length of stay attributed to SSI ranging between 3.5 and 23 days, depending on the type of infection.⁸¹ In addition, a 2006 Victorian study examining the costs attributed to surgical site infections of hip and knee prostheses found that when the excess length of stay and all additional hospital costs were added together, 126 infections had cost the Victorian healthcare system an estimated total of \$5,019,994.⁸²

Added to this, prolonged use of antibiotics as a first line of defence to an increased number of infections has led to the rise of antibiotic-resistant bacteria. These bacteria are considered to have a greater impact on morbidity and mortality, hospital stays and costs compared to those that result from infections with antibiotic susceptible bacteria.⁸³⁻⁸⁴ A study based on 2000 data by Roberts found that the additional medical costs attributable to antimicrobial resistance were from \$18,588–\$29,069 per patient and mortality attributable to antimicrobial resistance was 6.5%.⁸⁴

Evidence of effective strategies

The *Australian Guidelines for the Prevention and Control of Infection in Healthcare* were developed by the Commission and the National Health and Medical Research Council and provide evidence-based recommendations for individuals and organisations to manage and mitigate the risk of HAIs. These guidelines focus on areas where there is strong evidence for preventive interventions around **hand hygiene, personal protective equipment, handling and disposal of sharps, routine and environmental cleaning, as well as contact, droplet and airborne precautions**. The guidelines are consistent with similar guidance developed by the World Health Organization and the National Institute for Health and Clinical Excellence.⁸⁵⁻⁸⁷ The guidelines also build on Australian profession-specific guidance developed by the Royal Australian and New Zealand College of General Practitioners and the Australian Dental Association⁸⁸⁻⁸⁹ and are applicable to acute, primary and aged care settings.

The Commission has also developed the National Safety and Quality Health Service Standards. These Standards will become part of accreditation processes and the HAI Standard includes requirements regarding governance and strategies for infection control and prevention, as well as managing infection, antimicrobial stewardship, hygiene and communication.⁶³

There is evidence that interventions such as the use of **checklists** and **bundles of care** supported by **education and training programs, audits, cross monitoring, surveillance** and **feedback** can significantly reduce the rates of CAUTI and CLABSI infections.⁹⁰⁻⁹⁴ A 2007 Australian study in intensive care units in NSW hospitals found that compliance with all aspects of central venous line insertion using a checklist resulted in a 60% reduction in CLABSI rates.⁹⁵ The study also demonstrated an increasing interest in the value of these types of strategies, as participation increased from 65% of eligible intensive care units in the first 6 months to 92% in the final 6 months.⁹⁵ This builds on the work of Pronovost, et al. who found that an intervention that combined these activities resulted in up to 66% reduction in the rate of catheter-related bloodstream infections at 16–18 months after implementation.⁹⁶ Significant reductions in morbidity and healthcare costs are possible if these types of intervention can be introduced successfully nationwide.

In addition, support for the appropriate use of antibiotics through **antibiotic stewardship** programs has been shown to reduce resistance rates, morbidity, mortality and costs.⁹⁷⁻⁹⁸ Multi-faceted interventions where educational components occur on many levels may be successfully applied to communities after addressing local barriers to change in antibiotic use.⁹⁹ These interventions are applicable within acute, primary and aged care sectors. It has been estimated that if there was optimal antimicrobial use and containment of antimicrobial resistance, around \$300 million of the Australian national healthcare budget could be redirected every year.¹⁰⁰

The **collection and reporting of surveillance data** is an important component of the *WHO Global Strategy for the Containment of Antimicrobial Resistance* (2001). In the 1980s, the US Centers for Disease Control undertook a large study of the efficacy of nosocomial infection control which demonstrated that hospitals having infection control programs which included a combination of surveillance and control activities were effective in reducing rates of nosocomial infection.¹⁰¹ Effective

surveillance systems can provide the impetus for change and make it possible to evaluate the effectiveness of interventions. Currently, Australian efforts in HAI surveillance and prevention are mostly coordinated at a state or regional level and relate to the acute sector; consequently, there is limited national data available.

A 2008 UK study found a range of organisational characteristics which may facilitate effective infection control. These include positive senior clinical leadership at a ward level, team stability and morale as well as organisational mechanisms for supporting training, appraisal and clinical governance. In addition, high rates of bed occupancy and heavy workloads were considered barriers to effective practice.¹⁰²

Safety and quality issue

HAIs are a clear risk to patient safety, including health and outcomes, for many of the reasons described above. In particular, for issues such as hand hygiene, infection control and antibiotic prescribing, there can be a gap between what is known to be best practice and the care that is delivered. Despite the fact that there are guidelines and/or strong evidence regarding best practice hand hygiene, compliance is not optimal, preventable infections occur and antimicrobial resistance is an increasing issue. Key safety and quality issues include the following:

Antibiotic prescribing. Inappropriate use of antimicrobials has contributed to the emergence of antibiotic-resistant bacteria, which increases the risk of patient harm.¹⁰³ Patients with infections due to antibiotic-resistant bacteria experience delayed recovery, treatment failure and, in some cases, death.¹⁰⁴

Hand hygiene. Hand hygiene has long been regarded as an effective preventive strategy for HAIs.¹⁰⁵⁻¹⁰⁶ However, the quarterly audit of the National Hand Hygiene Initiative from June 2011 indicates a national average compliance rate for medical practitioners of 55% and for nurses and midwives 76%.¹⁰⁷ Hand hygiene is a key modifiable risk factor for the prevention of HAIs.

Infections. CAUTI and CLABSI are the most common and costly HAIs and are considered to be largely preventable. In Australia, state level data indicates that in some states the rates for these types of infection have remained stable or increased over time.¹⁰⁸⁻¹⁰⁹ Work in NSW implementing CLABSI checklist in intensive care units has contributed to a significant reduction in CLABSI in this state.⁹⁵

Goal 2: Appropriateness of care

Description of Goal

That people receive appropriate, evidence-based care

Initial priorities are for:

- people living with type 2 diabetes
- people with acute coronary syndrome or stroke

Defining the problem

Not all patients are receiving recommended care. This may lead to avoidable harm to patients and the inefficient spending of limited healthcare funds. There is extensive evidence to guide appropriate care and it is essential that this evidence be applied across the healthcare system to bring about the best outcomes for patients.

Priority area 1: Type 2 diabetes

Objective

To provide appropriate, evidence-based care for people living with type 2 diabetes

Impact on patients and the health system

Diabetes is the fastest growing chronic disease in Australia. The rising prevalence of type 2 diabetes is responsible for the majority of this growing epidemic. In 1999–2000, it was estimated that one million Australians have diabetes.¹¹⁰ It is estimated that by 2031, 3.3 million Australians will be living with type 2 diabetes.¹¹¹

Type 2 diabetes is a chronic condition that can progressively damage all the major organs in the body including the heart, blood vessels, nerves, kidneys and eyes if it is not optimally managed. Type 2 diabetes is also a major risk factor for several life threatening diseases including cardiovascular disease, kidney failure, retinopathy, and neuropathy.¹¹⁰

Diabetes is a major cause of illness, disability and death. In Australia approximately 10,000 people with type 2 diabetes visit a general practitioner every day and diabetes is responsible for at least 800,000 hospitalisations every year.¹¹² It is the leading cause of preventable hospital admissions.¹¹³ In 2009, diabetes was a contributing factor in over 14,000 deaths. Type 2 diabetes was the underlying or principal cause of 42.5% of these deaths.¹¹⁴

Approximately 96,000 Australians have a disability primarily caused by diabetes. Individuals with diabetes often suffer from other medical conditions that significantly affect their quality of life. In 2009, 40% of individuals with diabetes ranked their health as fair or poor, compared to 14% of individuals who did not have diabetes.¹¹⁴

The burden of diabetes is disproportionately greater among Aboriginal and Torres Strait Islander peoples. Aboriginal and Torres Strait Islander peoples are two to four times more likely to develop type 2 diabetes than other parts of the population.

Aboriginal and Torres Strait Islander peoples are also 12 times more likely to die from diabetes related complications compared to other Australians.¹¹²

Diabetes is responsible for a significant portion of healthcare spending. In 2004–05, \$989 million was spent on treating patients with diabetes; 84% of this expenditure was for the treatment of type 2 diabetes. A significant portion of this spending was for potentially preventable hospital care.¹¹² People with diabetes are at a higher risk of hospitalisation and remain in hospital longer than patients without diabetes. Clark, et al. estimated that it costs 38% more to treat a patient with diabetes in the acute care system compared to a patient without diabetes.¹¹⁵

Evidence of effective strategies

Diabetes Australia and The Royal Australian College of General Practitioners' *Diabetes Management in General Practice: Guidelines for Type 2 Diabetes* (the Guidelines) provide evidence-based recommendations for the appropriate care of patients with type 2 diabetes.¹¹⁶ The Guidelines recommend that the appropriate management of type 2 diabetes should involve:

- screening patients at risk of undiagnosed diabetes
- tight control of metabolic risk factors including blood glucose, blood pressure and cholesterol using medical therapy and lifestyle counselling
- systematic, comprehensive medical assessment and monitoring involving a multidisciplinary care team led by a general practitioner
- ongoing patient education to foster effective self management practices.

Safety and quality issue

Approximately half of all Australians living with type 2 diabetes are not aware that they have the disorder.¹¹⁰ In 2008, the Australian, state and territory governments launched the Australian Diabetes Risk (AUSDRISK) Assessment Tool to facilitate the early diagnosis of type 2 diabetes in high risk adults. In addition, a Medicare Benefit Schedule (MBS) item was created to support the early diagnosis of type 2 diabetes in adults over 40 years of age.¹¹⁷

A recent survey examining the use of the AUSDRISK tool by general practitioners in Central West New South Wales revealed that only 25% of general practitioners surveyed were aware of the tool and less than 15% of those surveyed had used the risk assessment tool in their practice.¹¹⁷

The Guidelines recommend that people with type 2 diabetes should try to achieve a blood glucose level (HbA1c) $\leq 7\%$, a blood pressure $\leq 130/80\text{mmHg}$ and a LDL cholesterol level $< 2.5\text{mmol}$.¹¹⁶

The National Evaluation of the Frequency of Renal Impairment Co-existing with Non-Insulin Dependent Diabetes Mellitus (NEFRON) study examined the primary care of over 3500 patients with type 2 diabetes in 2005. It found that over half the patients treated had a blood glucose level above that recommended in the Guidelines, and one in four patients had poor glycaemic control (HbA1c ≥ 8.0).¹¹⁸ In addition, the study found that three out of four Aboriginal and Torres Strait Islander patients had an HbA1c $> 7.0\%$ and over 50% had poor glycaemic control.¹¹⁹

The NEFRON study also found that approximately 60% of patients were not achieving the treatment target for blood pressure and about half of the patients had an LDL cholesterol level above the recommended target.¹¹⁹⁻¹²⁰ Wan et al. found similar sub-optimal control of blood glucose, blood pressure and cholesterol in their audit of 3286 patients records in 2002.¹²¹

Both studies found that many patients who were not achieving the targets for metabolic control were not prescribed the pharmacological treatments recommended by the Guidelines or were not being treated to the recommended intensity.¹¹⁸⁻¹²¹

Achieving treatment targets also requires ongoing, systematic medical monitoring. Porter et al., in a retrospective audit of 755 patient records held by general practitioners in rural Western Australia, found that almost 30% of patients were not screened appropriately for blood pressure, cholesterol and blood glucose. The study also found that there were no established care plans in place for a third of the patients.¹²²

A recent study examined the Medicare claims of more than 9000 NSW adults with diabetes. It found that between July 2004 and December 2005 less than half of the study participants had made a claim for a chronic disease item and less than 25% of participants had submitted a claim for the specific MBS diabetes annual cycle of care service item.¹²³

Priority area 2: Management of acute coronary syndrome and stroke

Objective

To provide appropriate, evidence-based care for people with acute coronary syndrome or stroke

Impact on patients and the health system

Cardiovascular disease (CVD) is the leading cause of death and disability in Australia. In 2008, CVD was responsible for 34% of all deaths (48,456) and approximately 1.4 million Australians had a disability as a result of CVD.¹²⁴

Stroke and acute coronary syndromes, which encompass heart attacks and angina, are responsible for the majority of the burden of cardiovascular disease.¹²⁴ More than 60,000 strokes occur each year and there are over 120,000 hospitalisations a year for acute coronary syndromes.¹²⁴⁻¹²⁵ The direct healthcare costs for acute coronary syndrome (ACS) and stroke are estimated to exceed \$2.2 billion. This figure does not include the financial costs incurred by patients and their families.¹²⁴

The outcomes for patients experiencing these life threatening and debilitating events are influenced by the health care they receive both acutely and in the long term. There is strong evidence and guidelines available to guide the appropriate care of both ACS and stroke patients.

Evidence of effective strategies

The National Heart Foundation of Australia, the Cardiac Society of Australia and New Zealand, and The National Stroke Foundation have developed evidence-based guidelines to support the appropriate care of patients with acute coronary syndromes and stroke.

The *Guidelines for the Management of Acute Coronary Syndromes* indicate there is significant established research to demonstrate that patients having an acute coronary event have better outcomes when they receive:¹²⁶

- organised and comprehensive pre-hospital care which may include en route ECG assessment and treatment with a fibrinolytic if appropriate
- immediate ECG assessment upon presentation to hospital
- timely reperfusion
- early risk stratification if the patient is experiencing a non-ST-segment-elevation myocardial infarction (non-STEMI) or unstable angina
- initiation of medical therapy prior to hospital discharge
- referral to a cardiac rehabilitation program.

The *Clinical Guidelines for Stroke Management 2010* identify a robust body of evidence to indicate that people who have had a stroke are more likely to survive and have a better quality of life when they receive:¹²⁷

- organised acute care delivered in a specialised unit by a multidisciplinary healthcare team trained in stroke care
- thrombolysis within 4.5 hours of stroke onset
- antiplatelet therapy within 48 hours of stroke onset
- antihypertensive medications as soon as possible after their stroke
- early and ongoing rehabilitation therapy.

In addition to evidence-based acute care, it is imperative that individuals with cardiovascular disease receive ongoing, evidence-based primary care to reduce their risk of future cardiovascular complications. Secondary prevention should focus on achieving effective management of cardiovascular risk factors through lifestyle counselling and appropriate medical management.¹²⁷⁻¹²⁸

To achieve evidence-based care it is essential that an appropriately trained workforce is available and the necessary systems and processes are in place to guide, monitor and evaluate the care given and the outcomes achieved.¹²⁶⁻¹²⁷

Safety and quality issue

There are Australians who are not receiving the most effective care for a heart attack, unstable angina or a stroke. The Australian Collaborative Acute Coronary Syndromes Prospective Audit conducted between November 2005 and July 2007, involving over 3000 patients, found that almost a third of patients treated for a ST-segment-elevation myocardial infarction (STEMI) did not receive reperfusion therapy. In addition, only 35% of patients received reperfusion within the recommended timeframes.¹²⁹⁻¹³⁰

Preliminary data from the Cooperative National Registry of Coronary Care, Guideline Adherence and Clinical Events (CONCORDANCE) registry indicates that 18.8% of STEMI patients who arrived within 12 hours of symptom onset did not receive reperfusion therapy and over 70% did not receive thrombolysis within 30 minutes as recommended by the guidelines. Similarly, 46% of patients who underwent percutaneous coronary intervention did not receive that intervention within the recommended timeframe.¹³¹

The National Heart Foundation of Australia and the Cardiac Society of Australia and New Zealand *Guidelines for the Management of Acute Coronary Syndromes* recommend that all patients should be started on appropriate medications before hospital discharge. Data from both the CONCORDANCE registry and the NPS Discharge Management of Acute Coronary Syndromes (DMACS) national quality improvement initiative found that approximately 40% of eligible patients were not prescribed all the guideline-recommended medications prior to discharge.¹³¹⁻¹³²

The DMACS initiative and CONCORDANCE registry also found that approximately 40% of patients were not referred to a cardiac rehabilitation program prior to discharge.¹³² The CONCORDANCE data suggests that referral rates vary quite significantly between hospitals (16.3–91.6%).¹³¹⁻¹³²

The 2011 National Stroke Audit coordinated by the National Stroke Foundation involved 188 hospitals providing acute care across Australia. The audit found that 40% of acute stroke patients did not receive their clinical care in a stroke unit. The organisational survey also indicated that stroke patients may not be receiving the most expeditious emergency care as 59% of hospitals do not have processes in place with pre-hospital emergency services to expedite patient transfers to the most appropriate hospital in the area. In addition, over a third of hospitals do not have emergency department protocols for rapid triage.¹²⁵

The 2011 National Stroke Audit also included a clinical audit of 3,548 patient cases. This audit found that of those patients with known stroke onset 41% arrived at hospital within four and half hours of their stroke. However, less than one fifth of patients with ischaemic stroke arriving within this timeframe receive thrombolysis, and only 7% of all patients with an ischaemic stroke received this treatment. The audit also found that nearly 40% of stroke patients with an ischaemic stroke did not receive aspirin within the first 48 hours.¹³³

The clinical audit also identified that 20% of patients were discharged from hospital without the appropriate blood pressure and cholesterol medications to prevent a recurrent stroke and half of patients did not receive a discharge care plan to support their transition home.^{125,133}

Goal 3: Partnering with patients and consumers

Description of Goal

That there are effective partnerships between patients, consumers and healthcare providers and organisations at all levels of healthcare provision, planning and evaluation

Defining the problem

There are a range of benefits that can be gained through effective partnerships, including improving the quality of healthcare. Many healthcare organisations and professionals support patient-centred practice, but can have difficulty developing and maintaining systems and processes for effective partnerships.

Impact on patients and the health system

Patients, consumers, families and carers can be engaged as partners in a variety of ways at an individual, organisational and/or system level to improve the way healthcare is delivered across the healthcare sector. Delivering care that is patient-centred and focused on partnerships with patients provides many benefits for the patient, provider, organisation and system.

There are a range of real or perceived barriers to implementing patient-centred care, including issues such as the perception of patient-centred care as being impractical, hard to implement and time consuming.¹³⁴ However, there is an increasing body of evidence outlining the association between a patient-centred approach, good patient experience and high quality health care.¹³⁵⁻¹³⁹

In addition, evidence is building about the link between patient-centred care and:

- clinical outcomes¹⁴⁰⁻¹⁴³ including associations with decreased re-admission rates¹⁴⁴
- decreased healthcare acquired infections¹⁴⁵⁻¹⁴⁷
- improved delivery of preventive care services¹⁴⁸
- reduced length of stay^{146,149}
- improved adherence to treatment regimens¹⁵⁰
- improved functional status.¹⁴⁵⁻¹⁴⁶

These kinds of outcomes provide benefits across the healthcare system, including benefits for primary, acute and aged care services.

One study from the United States, based on 2002–06 hospital data, noted positive effects on business and operational metrics from using patient-centred approaches to care.¹⁴⁹ Another US study, based on 2004 data, found that patient-centred care resulted in reduced hospital costs, including gross savings in utilisation costs of more than three times the cost of providing patient-centred care.¹⁵¹ In this study, the average combined utilisation cost for the patient-centred care cohort was \$US49,792, which was \$US18,599 per patient less than the control cohort at \$US68,341.¹⁵¹

Evidence of effective strategies

A number of strategies for improving patient experience, fostering partnerships and delivering patient-centred care focus on **improving communication, supporting consumer and patient engagement and supporting organisational improvement.**

Patient-provider communication

Key findings of a 2010 review by the Picker Institute Europe¹⁵² indicates that some of the best buys for improving patient experience in terms of evidence for effectiveness included communication training for health professionals,¹⁵³⁻¹⁵⁹ patient-centred consulting styles and longer consultations.¹⁶⁰

Supporting consumer and patient engagement

Self-management

Research indicates that for people with long-term conditions, self management interventions based around information, communication, education and planning can reduce hospitalisation rates,¹⁶¹⁻¹⁶² unscheduled visits to the doctor and days off work or school¹⁶² as well as overall healthcare costs.¹⁶³

A number of economic analyses have found that diabetes self-management training is generally cost-effective.¹⁶⁴ In addition, the 2010 Picker Institute Europe review of research on self management also found that health education and stress management programs can improve health outcomes for patients with coronary heart disease.^{152,165} The review also found self-monitoring and self-management can improve quality of life for people with cardiovascular disease and diabetes.^{152,166-168}

Shared decision-making

A number of studies have found that patient participation in decision making may be associated with favourable health outcomes.^{159,169} In addition, healthcare professional training is anticipated to be an important factor in this process¹⁷⁰⁻¹⁷¹ and patient mediated interventions such as decision aids have been shown to improve patient knowledge and involvement in decisions, both in acute and primary healthcare environments.¹⁷²

Health literacy

Another 2006 review by the Picker Institute Europe and the Health Foundation in the UK, found that a combination of good quality written and verbal information and information that is personalised contributes to patients' knowledge. The review also found that information is most likely to be useful if user groups are involved in its development.¹⁷⁰

Developing actions to supporting consumer and patient engagement is particularly important for vulnerable groups such as Aboriginal and Torres Strait Islander peoples, those from culturally and linguistically diverse backgrounds, the elderly, and those with low socio-economic status. Interventions aimed at assisting vulnerable populations need to be strategic, evidence-based and utilise culturally sensitive practices in order to be effective.¹⁷³

Supporting organisational improvement

Collection and use of feedback

The emerging evidence that shows an association between poor quality experience and poorer health outcomes has led to greater focus on measurement of the experience of patients and use of patient feedback in a variety of forms across the acute, primary and aged care sectors.

Feedback from patients through surveys, choice of provider, compliments and complaints is increasingly being seen as a means of informing quality improvements and improving patient experience. There is much work being undertaken in the US, Australia, the UK and a number of other European countries to develop mechanisms to capture and utilise patient experience data.¹⁷⁰ This includes a movement towards an increase in public reporting of data, as well as utilisation of this information at the local level for improvement purposes.

Organisational facilitators

A 2011 study of US organisations, including public and private facilities providing acute and primary care services with a strong reputation for patient-centred care, showed that an organisation-wide approach is important in the successful implementation of patient-centred care.¹⁷⁴ The study found that key facilitators of success included:¹⁷⁴

- strong, committed senior leadership
- clear communication of strategic vision
- active engagement of patients and families throughout the institution
- sustained focus on staff satisfaction
- active measurement and feedback reporting of patient experiences
- adequate resourcing of healthcare delivery redesign
- staff capacity building
- accountability and incentives
- a culture strongly supportive of change and learning.

The Commission has also recently developed a set of 10 National Safety and Quality Health Service Standards, one of which focuses on Partnering with Consumers. This Standard, together with the Standard on Governance for Safety and Quality in Health Service Organisations, sets the overarching requirements for effective implementation of the remaining eight Standards.³

Safety and quality issue

Patient-centred care was identified as a critical contributor to the quality of health care by the US Institute of Medicine in 2001 in the seminal book *Crossing the Quality Chasm: A New Health System for the 21st Century*. Patient-centred care is now frequently cited as a dimension of high quality care in a range of international policies and programs, and is a strong focus for many leading safety and quality organisations.¹⁷⁵ The principles of patient-centred care have also underpinned healthcare reform in the UK and the US since the early 2000s, and are evident in

recent legislation including the draft UK Health and Social Care Bill 2010¹⁷⁶ and the US *Patient Protection and Affordable Care Act 2010*.¹⁷⁷

In 2010, Australian Health Ministers agreed to structure safety and quality improvements on the Australian Framework on Safety and Quality in Health Care, which places consumer-centred practice at the heart of safe, high-quality care.² National health reform and jurisdictional health policy includes patient-centredness as a core principle¹⁷⁵ and many of Australia's consumer healthcare advocacy groups cite consumer focus and partnerships as critical to healthcare improvement. Patient-centred care is seen as equally important for both the primary and the acute healthcare sectors.

A 2010 Commonwealth Fund survey¹⁷⁸ of primary care patients' and physicians' views on care experiences, found that Australia fared well in terms of overall patient-centred care. However, when it came to engagement and participation, only 66% of surveyed patients reported that their doctor told them about treatment options and involved them in decisions. This suggests that well established strategies for shared decision-making and improved communication are not always used despite the evidence that they can contribute to improved outcomes and experience.

Healthcare professionals in Australia feel they understand the principles and value of, and deliver, patient-centred care. However, feedback received through state-based patient experience surveys,¹⁷⁹⁻¹⁸¹ complaints processes and projects such as 100 Patient Stories¹⁸² indicate there is still some work which can be done to improve the experiences of, and outcomes for, patients.

In addition, there is now strong evidence of the link between health literacy skills and health outcomes.¹⁸³ The Australian healthcare system is complex: information, resources and care pathways can be technical, multifaceted and difficult to navigate,¹⁸⁴ and yet, according to a study by the Australian Bureau of Statistics in 2006, almost 60% of the Australian population does not have a level of health literacy required to meet the complex demands of everyday life.¹⁸⁵

This combination of high complexity and limited health literacy contributes to the effectiveness of partnerships within the healthcare environment, including in the area of informed consent, self management and treatment compliance. This complexity also tends to exacerbate health inequalities¹⁸⁶ as it is often people from vulnerable populations who have lower health literacy.

5. Consultation questions and next steps

A number of individuals have assisted in identifying the draft Australian Safety and Quality Goals for Health Care. This consultation paper is now being circulated widely to seek the views of consumers, clinicians, healthcare organisations, governments, education, research and other bodies and individuals about the proposed goals and priority areas.

Feedback to the Commission on the Goals is essential for ensuring that they provide a useful framework for coordinated national action to improve the safety and quality of care and achieve better outcomes for patients and a more effective and efficient health system. The Commission encourages general comments and responses to any or of all the questions below. Responses and comments could be made for any or all of the Goals and priority areas. Specific suggestions for actions and details of existing relating to the issues discussed would be particularly welcomed.

1. How do you think national safety and quality Goals could add value to your existing efforts to improve the safety and quality of care?
2. Do you agree with the topics that have been included as Goals and priority areas? Are there other areas that should be considered?
If additional safety and quality Goals or priority areas are proposed, referenced information should be provided to the Commission about how the proposed issue meets the criteria used to select the proposed Australian Safety and Quality Goals for Health Care (page 6).
3. What do you think about the specificity of the Goals and priority areas? Are they too broad or too specific?
4. Do you think that there should be specific targets attached to the Goal or priority area? If so, what form should such a target take?
5. How do you see the Goals applying in different healthcare settings or for different population groups?
6. What systems, policies, strategies, programs, processes and initiatives already exist that could contribute to achievement of the Goals?
7. What do you think should be the initial priorities for action under the Goals?
8. How could the different stakeholders within the healthcare system be engaged in working towards achievement of the Goals?
9. What barriers exist in achieving the Goals? How could these be overcome?

The Commission will be accepting written submissions up to **10 February 2012**. Submissions marked 'Australian Safety and Quality Goals for Health Care' should be either:

Sent to: GPO Box 5480, Sydney NSW 2001

Emailed to: goals@safetyandquality.gov.au

Submitted via an online survey at:

<https://www.surveymonkey.com/s/ACSQHCGoalsConsultation>

Next steps

This paper is the basis of a consultation process which will close on 10 February 2012. Once this consultation is complete the draft Goals will be reviewed and modified.

The second phase of work to develop the Australian Safety and Quality Goals for Health Care will commence while the consultation process is underway. The purpose of the second phase is to provide guidance about and support implementation of actions to achieve the outcomes specified in the Goals. This work will involve consideration of:

- effective ways to change practice and support safety and quality improvement
- approaches and systems that can be used to integrate the Goals into the Australian health system
- stakeholders and leadership that are required
- activities, programs and initiatives already in place that could support achievement of the Goals
- specific needs of particular groups in the population
- application of the Goals and priority areas in specific sectors and settings of care
- potential measures that could be used to assess progress towards achievement of the Goals.

The output of this phase will inform the development of the work plan for the Commission, and support the safety and quality efforts of other individuals and organisations within the health system.

During this phase, work will also be undertaken to develop a process for ongoing support of the Goals and measurement of progress towards achieving them.

The final set of recommended Australian Safety and Quality Goals for Health Care will be submitted to Health Ministers in mid-2012.

Appendix A: Principal components of the national health reform process

A program of national health reform has been undertaken to address the challenges facing Australia's health system and ensure its sustainability and continued delivery of world class health care. Since early 2010, work has been underway across the Australian health system in eight key streams of health reform. These streams are:¹⁸⁷

1. hospitals
2. general practitioner and primary health care
3. aged care
4. mental health
5. national standards and performance
6. workforce
7. prevention
8. e-health.

Safety and quality is central to the delivery of health care, and considerations about safety and quality are embedded in all aspects of the health reforms. There is a strong link between the Australian Safety and Quality Goals for Health Care and the health reform process. This Appendix provides a summary of the principal components of the current health reforms.

National Health Reform Agreement

The National Health Reform Agreement sets out the architecture of national health reform, which has been designed to deliver major structural reforms to establish the foundations of Australia's future health system. In particular, the Agreement focuses on providing more sustainable funding arrangements for Australia's health system.

The Agreement was made between the Commonwealth of Australia and all states and territories on 2 August 2011 and sets out the shared intention of the Australian, state and territory governments to work in partnership to improve health outcomes for all Australians and ensure the sustainability of the Australian health system.¹

As part of the reforms to local health governance, the National Health Reform Agreement outlines the role of Local Hospital Networks and Medicare Locals to improve local accountability and responsiveness to the needs of communities.

The Agreement also sets out the establishment of several national bodies, including the Independent Hospital Pricing Authority, the National Health Performance Authority, and the Australian Commission on Safety and Quality of Health Care.¹

Performance and Accountability Framework

The Commonwealth, states and territories will develop a new Performance and Accountability Framework, which will incorporate national performance indicators agreed by the Council of Australian Governments (COAG), and national clinical quality and safety standards to be developed by the Australian Commission for Safety and Quality in Health Care. This framework will provide the basis for national reporting for Medicare Locals and Local Hospital Networks.¹

National bodies

Australian Commission on Safety and Quality in Health Care

The *National Health Reform Act 2011* establishes the Australian Commission on Safety and Quality of Health Care (the Commission) as a permanent, independent, statutory authority under the *Commonwealth Authorities and Companies Act 1997*.

The role of the Commission is to lead and coordinate improvements in safety and quality in health care across Australia. The functions of the permanent Commission, as outlined in the legislation, are:

- (a) to promote, support and encourage the implementation of arrangements, programs and initiatives relating to health care safety and quality matters;
- (b) to collect, analyse, interpret and disseminate information relating to health care safety and quality matters;
- (c) to advise the Minister about health care safety and quality matters;
- (d) to publish (whether on the internet or otherwise) reports and papers relating to health care safety and quality matters;
- (e) to formulate, in writing, standards relating to health care safety and quality matters;
- (f) to formulate, in writing, guidelines relating to health care safety and quality matters;
- (g) to formulate, in writing, indicators relating to health care safety and quality matters;
- (h) to promote, support and encourage the implementation of:
 - (i) standards formulated under paragraph (e); and
 - (ii) guidelines formulated under paragraph (f);
- (i) to promote, support and encourage the use of indicators formulated under paragraph (g);
- (j) to monitor the implementation and impact of:
 - (i) standards formulated under paragraph (e); and
 - (ii) guidelines formulated under paragraph (f);
- (k) to advise:

- (i) the Minister; and
 - (ii) each participating State/Territory Health Minister;
- about which standards formulated under paragraph (e) are suitable for implementation as national clinical standards;
- (l) to formulate model national schemes that:
 - (i) provide for the accreditation of organisations that provide health care services; and
 - (ii) relate to health care safety and quality matters;
 - (m) to consult and co-operate with other persons, organisations and governments on health care safety and quality matters;
 - (n) such functions (if any) as are specified in a written instrument given by the Minister to the Commission Board Chair;
 - (o) to promote, support, encourage, conduct and evaluate training programs for purposes in connection with the performance of any of the Commission's functions;
 - (p) to promote, support, encourage, conduct and evaluate research for purposes in connection with the performance of any of the Commission's functions;
 - (q) to do anything incidental to or conducive to the performance of any of the above functions.

As part of its role to in accreditation reform, the Commission developed the National Safety and Quality Health Service Standards to drive the implementation and use of safety and quality systems and improve the quality of health service provision in Australia.³

The Standards focus on areas that are essential to improving patient safety and quality of care and include:

1. Governance for Safety and Quality in Health Service Organisations
2. Partnering with Consumers
3. Preventing and Controlling Healthcare Associated Infections
4. Medication Safety
5. Patient Identification and Procedure Matching
6. Clinical Handover
7. Blood and Blood Products
8. Preventing and Managing Pressure Injuries
9. Recognising and Responding to Clinical Deterioration in Acute Health Care
10. Preventing Falls and Harm from Falls.

National Health Performance Authority

The National Health Reform Amendment (National Health Performance Authority) Bill 2011 was passed on 14 October 2011. The Bill established a new statutory authority, the National Health Performance Authority (NHPA).

The Government's decision to establish the NHPA is part of a broader commitment to "increasing the transparency of government and the services it delivers" and establishing "more effective reporting and monitoring of health service providers".¹⁸⁸ It is expected that this will improve the quality of healthcare services and drive value for money in the health system.

The functions of the NHPA under the *National Health Reform Act 2011* will be:

- (a) to monitor, and prepare reports on, matters relating to the performance of the following:
 - (i) local hospital networks;
 - (ii) public hospitals;
 - (iii) private hospitals;
 - (iv) primary health care organisations;
 - (v) other bodies or organisations that provide health care services;
- (b) to publish (whether on the internet or otherwise) reports prepared by the Performance Authority in the performance of the function conferred by paragraph (a);
- (c) to formulate, in writing, performance indicators to be used by the Performance Authority in connection with the performance of the function conferred by paragraph (a);
- (d) to collect, analyse and interpret information for purposes in connection with the performance of the function conferred by paragraph (a);
- (e) to promote, support, encourage, conduct and evaluate research for purposes in connection with the performance of any of the functions of the Performance Authority;
- (f) such functions (if any) as are specified in a written instrument given by the Minister to the Chair of the Performance Authority with the agreement of COAG;
- (g) to advise the Minister, at the Minister's request, about matters relating to any of the functions of the Performance Authority;
- (h) to do anything incidental to or conducive to the performance of any of the above functions.

The basis for the reports to be prepared by the NHPA will be the Performance and Accountability Framework.¹⁸⁸

Independent Hospital Pricing Authority

The National Health Reform Amendment (Independent Hospital Pricing Authority) Bill 2011 was introduced into the House of Representatives on 24 August 2011. If passed, this Bill will amend the *National Health Reform Act 2011* to establish the Independent Hospital Pricing Authority (IHPA) as a permanent statutory body.

An interim IHPA has been established as an executive agency from 1 September 2011, pending the passage and enactment of the National Health Reform Amendment (Independent Hospital Pricing Authority) Bill 2011.

The Commonwealth intends that the main function of the IHPA will be to determine the nationally efficient price for public hospital services that are funded by activity based funding (ABF), and to provide advice to state and territory governments about those prices.¹⁸⁹ This is intended to improve the transparency of public hospital funding.

The functions of the IHPA, as outlined in the Bill, are:

- (a) to determine the national efficient price for health care services provided by public hospitals where the services are funded on an activity basis;
- (b) to determine the efficient cost for health care services provided by public hospitals where the services are block funded;
- (c) to develop and specify classification systems for health care and other services provided by public hospitals;
- (d) to determine adjustments to the national efficient price to reflect legitimate and unavoidable variations in the costs of delivering health care services;
- (e) to determine data requirements and data standards to apply in relation to data to be provided by States and Territories, including:
 - (i) data and coding standards to support uniform provision of data; and
 - (ii) requirements and standards relating to patient demographic characteristics and other information relevant to classifying, costing and paying for public hospital functions;
- (f) except where otherwise agreed between the Commonwealth and a State or Territory—to determine the public hospital functions that are to be funded in the State or Territory by the Commonwealth;
- (g) to publish a report setting out the national efficient price for the coming year and any other information that would support the efficient funding of public hospitals;
- (h) to advise the Commonwealth, the States and the Territories in relation to funding models for hospitals;
- (i) to provide confidential advice to the Commonwealth, the States and the Territories in relation to the costs of providing health care services in the future;
- (j) such functions as are conferred on the Pricing Authority by Part 4.3 of this Act (cost-shifting disputes and cross-border disputes);
- (k) to publish (whether on the internet or otherwise) reports and papers relating to its functions;

- (l) to call for and accept, on an annual basis, public submissions in relation to the functions set out in paragraphs (a) to (f);
- (m) such functions (if any) as are specified in a written instrument given by the Minister to the Chair of the Pricing Authority with the agreement of COAG;
- (n) to do anything incidental to or conducive to the performance of any of the above functions.

Local governance

Local Hospital Networks

Local Hospital Networks (LHNs) are organisations established in accordance with the National Health Reform Agreement which provide public hospital services. LHNs are designed to “devolve operational management of public hospitals to the local level”.¹⁹⁰

LHNs will comprise single or small groups of public hospitals with a geographic or functional connection. They are intended to be large enough to operate efficiently and to provide a reasonable range of hospital services and small enough to enable the LHNs to be effectively managed to deliver high quality services.¹

With the introduction of LHNs, states and territories will continue to own, operate and manage public hospitals, including service planning and performance, the purchasing of public hospital services, and capital planning.¹⁹¹ It is intended that service agreements between jurisdictions and LHNs will regulate the provision of services and the flow of funding.¹⁹¹

The NHPA will assess and report on LHN performance against the measures in the Performance and Accountability Framework and provide advice to states and territories on poor performing LHNs.¹

Jurisdictions remain in control of public hospitals. A key source of advice to jurisdictions will be the newly established Lead Clinicians Groups at national and local levels. The Lead Clinicians Groups will promote evidence-based clinical practices and assist with prioritising and implementing clinical standards and guidelines

Medicare Locals

Medicare Locals are organisations funded by the Commonwealth to be the general practice and primary healthcare partners of Local Hospital Networks in accordance with the National Health Reform Agreement.

It is intended that Medicare Locals will be responsible for supporting and enabling better integrated and responsive local general practice and primary healthcare services to meet the needs and priorities of patients and communities. Medicare Locals will, among other functions, have responsibility for:¹

- assessing the health needs of the population in their region
- identifying gaps in general practice and primary healthcare services

- putting in place strategies to address these gaps.

The strategic objectives for Medicare Locals are:¹

- improving the 'patient journey' through developing integrated and coordinated services
- providing support to clinicians and service providers to improve patient care
- identifying the health needs of their local areas and development of locally focused and responsive services
- facilitating the implementation of primary healthcare initiatives and programs
- being efficient and accountable with strong governance and effective management.

It is intended that Medicare Locals will be independent legal entities (not government bodies) with strong links to local communities, health professionals and service providers, including GPs, allied health professionals and Aboriginal Medical Services. Medicare Locals will reflect their local communities and healthcare services in their governance arrangements.¹

Medicare Locals and Local Hospital Networks will be expected to share some common membership of governance bodies where possible. Medicare Locals will be expected to work closely, and establish a formal engagement protocol, with LHNs. The Commonwealth, states and territories will work together to create linkages and coordination mechanisms, where appropriate, between Medicare Locals and other services that interact with the health system, for example services for children at risk, people with serious mental illness and homeless Australians.¹

The NHPA will develop and produce reports on the performance of Medicare Locals and will provide confidential advice to the Commonwealth on poor performing Medicare Locals where ongoing poor performance has been identified.¹

The first group of 19 Medicare Locals were established in June 2011, with the process expected to be complete by 1 July 2012.

Lead Clinicians Groups

Lead Clinician Groups will seek to engage clinicians in the reform of the Australian health system and involve them in the planning and coordination of healthcare services. Participation of clinicians at this level, particularly at a local level, is expected to make health services more responsive to local needs and ensure they are informed by best clinical practice, leading to improved safety, quality, efficiency and effectiveness of care. Membership of the groups will be multidisciplinary and multi-sectoral.¹⁹²

National

The National Lead Clinicians Group was established on 29 September 2011 and has been created to advise the Minister for Health and Ageing on nationally relevant priorities and strategies to improve patient care across healthcare sectors.¹⁹²

Local

Local Lead Clinicians Groups (LCGs) will be established in each Local Hospital Network in order to improve clinical leadership and engagement. They will provide advice to LHNs and Medicare Locals on local implementation of standards and guidelines, and promote and facilitate better integration of services and the optimal 'patient journey'.¹⁹² It is envisaged that local LCGs will evolve from existing clinician advisory groups wherever possible, and include consumer representatives.¹⁹²

Appendix B: Review of national and international health goals

As part of the development of the draft Australian Safety and Quality Goals for Health Care, the Commission conducted a review of existing health and safety and quality goals. The purpose of the review was to examine existing national and international health and safety and goals, and identify issues that needed to be considered as part of the development of the Goals. This Appendix presents the findings of this review.

Scope

The review focussed on safety and quality goals where they existed, and broad health goals from the United States, Canada, England, New Zealand and Australia. The review covered goals that existed at the national level; state and provincial goals were excluded as they did not add significant new information to that gained from the review of national level goals.

The review examined:

- the topic areas covered by the goals and priorities, including specific sub-goals or activity areas
- illustrative indicators and measures where they were available
- the context in which the goals and priorities were developed.

Table A1: Documents included in the review of health and safety quality goals

Country	Source	Document
Australia	Australia Health Ministers Conference	<i>National Health Priority Areas, 1996</i>
Canada	Health Canada	<i>Integrated Pan Canadian Health Living Strategy, 2005</i>
	Public Health Agency of Canada	<i>Health Goals for Canada, 2005</i>
		<i>Consultations for public health goals for Canada, 2005</i>
England	National Health Service	<i>NHS Outcomes Framework (2011/12), 2011</i>
	Department of Health	<i>Quality, Innovation, Productivity and Prevention Program, 2011</i>
New Zealand	Ministry of Health	<i>New Zealand Health Strategy, 2000</i>
United States	Department of Health and Human Services	<i>Partnership for Patients, 2011</i>
	Department of Health and Human Services	<i>National Strategy for Quality, 2011</i>
	National Priorities Partnership convened by	<i>National Priorities and Goals, 2008</i>

Country	Source	Document
	the National Quality Forum	
	Joint Commission	<i>National Patient Safety Goals, 2011</i>
	Department of Health and Human Services	<i>Healthy People 2020, 2010</i>

Issues arising

The review identified considerable variation in the nature of the goals themselves, the areas that they covered and the reasons that they were developed. There are a number of key issues arising from this review that are discussed in this Appendix. These include the purpose and context of the goals, their scope, their broad areas of focus and the specific topics that they cover.

Purpose and context of the goals

The goals and priorities examined in this review were developed in specific contexts and for specific purposes. These included:

- providing information about the performance of health systems
- forming the basis of an accountability framework for improving health outcomes
- acting as a catalyst for improving quality in health services
- focussing efforts to improve quality at national, state and local levels
- providing standards for hospitals to meet as part of accreditation processes.

Goals have sometimes been developed as part of health reform processes and health system restructures. Goals have also been developed in the context of specific legislation, or overarching national or international policy. In some cases goals were developed in the context of allocation of existing resources, while in others funding was made available for testing and implementation of strategies to improve care.

Scope of the goals

As well as having different purposes, the national and international goals examined in this review also varied in terms of their scope. It was possible to identify goals that were expressed at three different levels:

- **Macro-level** – goals that are expressed at a very high level, with little detail of the specific issues that would need to be addressed to achieve the goal
*Example: Eliminate preventable healthcare-acquired conditions.*¹⁹³
- **Meso-level** – goals that mention or describe the specific conditions or areas of focus to be addressed
*Example: Reducing time spent in hospitals by people with long-term conditions.*¹⁹⁴
- **Micro-level** – goals that specify specific actions to be taken to improve outcomes
*Example: Assess and periodically reassess each resident's risk for developing a pressure ulcer and take action to address any identified risks.*¹⁹⁵

Macro-level goals have generally been included within sets of goals that cover a range of different aspects of the health system. In many cases they are underpinned by more specific areas for action. For example, one of the two macro-level goals identified for the US Partnership for Patients program (2011) identifies nine specific areas where action will be taken:¹⁹⁶

- **Goal:** Keep patients from getting injured or sicker. By the end of 2013, preventable hospital-acquired conditions would decrease by 40% compared to 2010.
- **Areas of focus:** adverse medicines events, catheter-associated urinary tract infections, central line associated blood stream infections, injuries from falls and immobility, obstetrical adverse events, pressure ulcers, surgical site infections, venous thromboembolism, ventilator-associated pneumonia and other hospital-acquired conditions.

Broad areas of focus

The programs, goals and strategies included in the review covered many aspects of health care and the health system. Areas of focus for different sets of goals included:

- Public health, social determinants of health and reducing health disparities
*Example: By 2015 increase by 20% the proportion of Canadians who make healthy food choices.*¹⁹⁷
- Access to healthcare services and affordability of services
*Example: Ensure affordable and accessible high-quality healthcare for people, families, employers and governments.*¹⁹⁸
- Health outcomes, including mortality and rates of preventable conditions
*Example: Reducing premature mortality from the major causes of death (cardiovascular disease, respiratory disease, liver disease, cancer).*¹⁹⁴
- Quality of life and experience of patients receiving care
*Example: Proportion of people feeling supported to manage their condition.*¹⁹⁴
- Healthcare services, including hospital re-admissions and transitions between services
*Example: Ambition is to reduce unscheduled hospital admissions by 20%, reduce length of stay by 25% and maximise the number of people controlling their own health through the use of supported care planning by 2013/14.*¹⁹⁹
- Safety of care
*Example: Reduce the risk of patient harm from falls.*¹⁹⁵

In some cases specific goals have been identified for specific parts of the population or health system (such as mental health settings or older people).

Specific topic areas for the goals

The issues and topics that the goals covered varied considerably, including:

- **Safer care:** healthcare associated infections, medication safety, falls prevention, pressure ulcers, safety in maternity and obstetrics, venous thromboembolism, patient identification, blood safety, medical product safety
- **Patient experience:** collecting information about experiences, preferences and outcome, shared decision making, self-management, understandable information
- **Coordination and communication:** transitions of care, handover, information exchange, communication among caregivers, reporting critical test results
- **Prevention and screening:** depression, oral health, nutrition and weight status, physical activity, substance abuse, tobacco use
- **Patient groups:** patients with chronic and complex conditions, maternal child and infant health, early and middle childhood, adolescent health, older adults, vulnerable populations, end of life care
- **Clinical conditions:** cardiovascular disease, cancer, mental health, respiratory diseases including asthma, diabetes, arthritis and musculoskeletal conditions, injuries and trauma, dementias including Alzheimer's disease, immunisation and infectious diseases, blood disorders, kidney disease, sexually transmitted diseases, liver disease, stroke, neurological disorders, obesity
- **Other issues:** hospital admission, re-admission and emergency attendance, access and affordability, inappropriate or unnecessary care, unnecessary caesarean sections, end of life care.

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