

**Practice-level indicators
of safety and quality for
primary health care**

CONSULTATION PAPER

This Consultation Paper is available on the website of the Australian Commission on Safety and Quality in Health Care: www.safetyandquality.gov.au

The Commission will be accepting written submissions up to 25 October 2011.

Submissions marked 'Practice-level indicators for primary health care' should be forwarded to:

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GLOSSARY

Acceptability

The care/service provided meets the expectations of the client, community, providers and paying organisations, recognising that there may be conflicting or competing interests among stakeholders, and that the needs of the clients/patients are paramount. [1]

Accessibility

Clients/patients can obtain care/service at the right place and the right time, based on respective needs. [1]

Appropriateness

The care/service provided is relevant to the clients/patients' needs and based on established standards. [1]

Coordination of care

Coordinated use of other levels of health care. [2]

Continuity of care

Uninterrupted, coordinated care/service across programs, practitioners, organisations and levels of care/service over time. [1]

Dimensions of quality

Notion popularised by the US Institute of Medicine in *Crossing the quality chasm*. [3] The usual six dimensions of quality are safety, effectiveness, appropriateness, consumer participation (or acceptability), access and efficiency. [4]

Effectiveness

The care/service, intervention or action achieves the desired results. [1]

Practice-level indicators of safety and quality for primary health care

Measures or markers of quality of care that should be generated and reviewed routinely by primary health care providers at the service unit, practice or local level. [Australian Commission on Safety and Quality in Health Care]

Quality indicators

Succinct measures or markers of quality of care. [Australian Commission on Safety and Quality in Health Care]

Safety

Potential risks of an intervention, or the environment, are avoided or minimised. [1]

1. Introduction

1.1 Background

The Australian Commission on Safety and Quality in Health Care (the Commission) was established by Australian health ministers to lead and coordinate improvements in safety and quality in health care at a national level. Under the *National Health and Hospitals Network Act 2011*, the Commission is required to develop indicators relating to healthcare safety and quality.

Before formulating standards, guidelines or indicators, the Commission must, under the Act, consult:

- clinicians
- bodies known as lead clinical groups
- heads of states' and territories' health departments
- any other persons or bodies who, in the Commission's opinion, are stakeholders in relation to the formulation of the standards, guidelines or indicators
- the public.

The Commission follows a consistent process for identifying and selecting national sets of safety and quality indicators (for further information about this process, see Appendix 1).

1.2 Project purpose and scope

The purpose of this project is to:

- research the context for improving safety and quality in primary health care, and identify practice-level indicators currently in use
- develop a candidate set of practice-level indicators of safety and quality for primary health care, in consultation with relevant individuals and organisations
- obtain endorsement for the national set of practice-level indicators of safety and quality for primary health care
- develop a specification for the national set of practice-level indicators of safety and quality.

'Practice level' refers to organisations, teams and individual practitioners providing primary health care services. Recommendations regarding indicators for general practice are not in this project's scope for the outcomes. The Royal Australian College of General Practitioners (RACGP) is conducting a dedicated project to develop indicators for general practice.

Safety and quality practice-level indicators are measures or markers of the quality of care delivered by primary healthcare providers at the service unit, practice or local level. Practice-level indicators are intended to support continuous quality improvement through monitoring of trends over time, and to identify issues or significant variances in one or more dimensions of quality of care. These indicators should be generated and reviewed routinely by providers at the local level.

The national set of practice-level indicators of safety and quality will be designed for voluntary inclusion in quality improvement strategies at the local practice or service level. It is intended that primary health care services will choose a 'local bundle' of indicators from the national indicator set as a tool to assess and monitor the service's improvement in different dimensions of quality, and particular aspects of care, pathways or conditions. The

components of a local bundle of indicators may vary over time, depending on local circumstances, priorities for quality improvement, patient needs, and concurrent state and national reporting obligations applicable to the service.

Note: The term 'patient' has been used to denote 'patient/client/consumer' for ease of presentation in this paper. The exception is when information has been taken from another source.

1.3 Consultation processes

The eHealth Services Research Group (eHSRG) from the University of Tasmania was engaged to undertake research and conduct initial consultation with peak and expert groups, including two focus groups held in March 2011. The literature review and environmental scan completed by eHSRG informed the development of this paper and the candidate set of indicators. [5]

Further consultation in 2011 was conducted by the Commission with representatives of stakeholder groups to develop the candidate set of indicators. Following the current public consultation, the Commission will hold a national forum to present the national set of practice-level indicators of safety and quality for endorsement.

1.4 Purpose of the consultation paper

The purpose of this consultation paper is to provide:

- contextual information for the project
- a candidate set of practice-level indicators of safety and quality for primary health care (see Section 7 for candidate indicators)

This consultation paper seeks comment from interested organisations and individuals on the candidate set of indicators, their relevance and usefulness for local quality improvement at the service or practice-level, and whether there are any gaps in the candidate set.

What is 'primary health care'?

Primary health care is commonly viewed as the first level of health care or the entry point to the healthcare system for consumers.[6] Primary health care can include care delivered by general practitioners, nurses, allied health providers, indigenous health workers, community pharmacists, dentists, health promotion officers and paramedics. It can be delivered in settings such as general practices, dental practices, community health centres, Aboriginal Community Controlled Health Services, pharmacies, private allied health practices, residential aged care facilities, homes, schools, workplaces and nonhealth-based community settings (such as shopping centres and community halls).

2 GUIDING PRINCIPLES — PRACTICE-LEVEL INDICATORS OF PRIMARY HEALTH CARE

The guiding principles aim to:

- set out the Commission's approach to practice-level indicators of safety and quality for primary health care
- provide guidance on the selection of practice-level indicators of safety and quality for primary health care
- inform health professionals and service providers in designing and undertaking practice-level quality improvement activities.

The guiding principles are as follows:

1. Practice-level indicators of safety and quality for primary health care are intended for voluntary use in quality improvement strategies at the local practice or service level, and are not designed to serve as performance indicators.
2. 'Quality is complex and multidimensional. No single group of indicators is likely to capture all perspectives on, or all dimensions of, quality.' [7] Services should choose a local bundle of indicators from the national set of practice-level indicators of safety and quality to support their focus on certain dimensions of quality, a range of process and outcome measures, and particular aspects of care, pathways or conditions.
3. The components of the local bundle of indicators will vary over time, depending on local circumstances, priorities for quality improvement, patient needs and the service's scope of practice. (Note: Information on how services construct and use these bundles should be provided as part of the implementation strategy for the national set of indicators.)
4. State and national reporting obligations, as well as the local scope of practice, will determine which other specific clinical, professional and health service standards and indicators are also applicable to the practice or service.
5. Practice-level indicators of safety and quality should be:
 - clearly defined
 - supported by a clear rationale
 - achievable and relevant for primary health care practice
 - easily collected, preferably from existing datasets
 - reliable and valid
 - attributable to actions in primary health care
 - free from obvious unintended consequences.

6. The national set of practice-level indicators of safety and quality for primary health care should reflect:
 - that safe and high-quality care is consumer centred, driven by information and organised for safety [8]
 - the significance of the communications between healthcare providers involved in a patient's care [9]
 - the defining characteristics of primary healthcare practice as identified by Starfield: [10]
 - first-contact care
 - person-focused care over time
 - comprehensive care
 - coordinated care.

7. The national set of practice-level indicators of safety and quality for primary health care should:
 - cover those aspects of primary health care and patient issues that are broadly applicable across settings, disciplines and geographic locations
 - consist of a core set of indicators of safety and quality that every practice or service can use.

3 CONTEXT FOR QUALITY IMPROVEMENT IN PRIMARY HEALTH CARE

There is currently a significant impetus for healthcare reform in Australia to improve access to services, quality of service delivery, patient outcomes and patient experience. [11] There are a number of programs and initiatives relevant to quality improvement in primary health care described below.

Note: In this paper, the use of 'primary health care' has been selected to align with the National Primary Health Care Strategy.

3.1 National health reform

Under national health reform, the Australian Government is shifting the centre of gravity of the health system from hospitals to primary health care. [12] The coordination and organisation of services to meet local communities' primary healthcare needs will rest with Medicare Locals, a national network of primary healthcare organisations. Medicare Locals will work with local primary healthcare providers to ensure appropriate care is provided, and to help providers meet safety and quality standards. [12] Medicare Locals 'are to be charged with ensuring more responsive primary healthcare services, encouraging multidisciplinary and better coordinated care, and identifying and rectifying gaps in health services'. [13] Medicare Locals will work closely with local hospital networks, which have similar geographic boundaries to Medicare Locals and are responsible for public hospital services.

Other national health reforms include

- establishment of the Commission under the *National Health and Hospitals Network Act 2011* (The Commission has transitioned to a permanent Authority under the Commonwealth Authorities and Companies Act 1997 (CAC Act) and commenced operating as an independent Commonwealth Authority on 1 July 2011.)
- the National Health Reform Agreement that the Council of Australian Governments (COAG) agreed on 2 August 2011, including the establishment of the National Health Performance Authority and the Independent Hospitals Pricing Authority
- a performance and accountability framework with national performance indicators agreed through COAG in the 2012 National Healthcare Agreement (NHA) to report on national trends and the performance of all jurisdictions
- National Safety and Quality Health Service Standards developed by the Commission
- new hospital and health service performance reports.

3.2 National Safety and Quality Health Service Standards

The Commission was tasked with developing the National Safety and Quality Health Service (NSQHS) Standards by Australian health ministers. The Governance for Safety and Quality in Health Service Organisations Standard provides the safety and quality governance framework for health service organisations. Under this Standard, health service organisations must monitor and improve the safety and quality of patient care. This Standard, with the Partnering with Consumers Standard, forms the foundation on which each of the other ten standards should be applied.

Under the new arrangements, health services such as hospitals and day surgeries will be accredited against the NSQHS Standards. Other health services may choose to use the

NSQHS Standards as part of their internal quality systems. It is expected that full implementation of the NSQHS Standards will commence from 1 January 2013. See Appendix 3 for more information about the NSQHS Standards.

3.3 National Primary Health Care Strategy

In Australia's first National Primary Health Care Strategy, released as part of the National Health Reform in 2010, four priority directions for change are identified. The fourth priority area focuses on improving quality and safety to 'establish a strong framework for quality and safety in primary health care, based on improved information and quality assurance systems to support measurement, feedback and quality improvement for providers, and greater transparency for consumers and funders'. [14]

3.4 Patient-centred health care

A variety of national service-level initiatives, strategies and policies set out a patient-centred approach to health care. National initiatives include the Australian Charter of Healthcare Rights and the Australian Safety and Quality Framework for Health Care. National strategies such as the National Primary Health Care Strategy, the National Chronic Disease Strategy, the Fourth National Mental Health Plan and the Fifth Community Pharmacy Agreement all state that a patient-centred approach to health care is needed to improve the quality of health care in Australia. Current Aboriginal and Torres Strait Islander policies also reflect patient-centred principles, and focus on family and community. [11]

3.5 Australian Safety and Quality Framework for Health Care

The Australian Safety and Quality Framework for Health Care, developed by the Commission, describes a vision for safe and high-quality care for all Australians, and specifies three core principles: that care is **consumer centred**, **driven by information** and **organised for safety**. The framework provides twenty-one areas for action that all people in the health system can take to improve the safety and quality of care provided in all healthcare settings over the next decade. The framework should:

- be used as the basis of strategic and operational safety and quality plans
- provide a mechanism for refocusing current safety and quality improvement activities, and designing goals for health service improvement
- be used as a guide for reviewing investments, and research in safety and quality
- promote discussion with patients, clinicians, managers, researchers and policy makers about how they might best form partnerships to improve safety and quality. [8]

4 PRIMARY HEALTH CARE SERVICES

Primary health care is delivered in more than 7000 general practices across Australia. [12] As well as general practitioners (GPs) and specialists, primary health care services are delivered by nurses, allied health providers, indigenous health workers, pharmacists and dentists in the public and private sectors. The primary healthcare workforce, based on people employed in general practice medical services and community-based dental, allied health and pharmacy services, including nurses, is around 137,600. [15]

Results from the ABS 2007–08 National Health Survey show that 46% of Australians consulted a health professional other than a medical practitioner or dentist in the previous 12 months. The most commonly consulted health professionals were opticians or optometrists, chemists (pharmacists), and physiotherapists or hydrotherapists. People older than 65 were more likely than those aged 15–24 to consult other health professionals (see Table 1). [16]

Table 1: Persons consulting health professionals, other than medical practitioner or dentist, 2007–08(a) (per cent) [16]

Selected health professional	Age group (years)				Total		Persons
	15–24	25–44	45–64	≥65	Females	Males	
Accredited counsellor	1.1	2.6	1.5	0.6	1.4	2.3	1.9
Acupuncturist*	1.3	3.3	3.2	1.9	2.0	3.3	2.7
Chemist (for advice only)	7.8	15.2	11.9	11.0	9.8	16.2	13.0
Chiropodist or podiatrist	2.5	2.7	4.8	14.0	3.1	7.0	5.1
Chiropractor	7.2	11.1	9.7	4.9	8.9	9.1	9.0
Dietitian or nutritionist	3.2	3.9	4.7	6.3	4.0	4.4	4.2
Naturopath	2.1	4.7	3.8	1.6	1.9	5.1	3.5
Nurse	2.6	3.6	2.6	4.9	3.2	3.8	3.5
Occupational therapist	*	0.7	1.1	1.3	1.0	0.9	1.0
Optician or optometrist	10.2	10.7	17.3	26.6	12.8	16.8	14.8
Osteopath	1.1	2.3	2.0	**1.5	1.6	2.2	1.9
Physiotherapist/hydrotherapist	7.3	10.0	9.6	9.2	9.2	10.0	9.6
Psychologist	2.0	4.4	2.6	0.9	2.6	3.5	3.0
Social worker/welfare worker	0.9	1.6	1.1	2.4	1.2	2.0	1.6
Other	2.9	3.5	3.0	3.7	3.1	3.4	3.3
Total^(b)	38.9	47.4	46.3	51.2	41.7	50.5	46.2

* Figure omitted as relative standard error is >50%.

** Estimate has a relative standard error of 25–50% and should be used with caution.

(a) Consultations in the 12 months before the interview. Excludes consultations in/at hospitals or day clinics.

(b) Totals will not necessarily be the sum of rows, as some persons reported consultations with more than one type of professional.

5 THEMES FROM THE RESEARCH

A number of key themes that emerged from the research and consultation processes undertaken during 2011 were the complex nature of primary health care, patient-centered health care, coordination and continuity of care, clinical governance, quality improvement, and measures of quality and safety in health care.

5.1 The complex nature of primary health care

Most health care in Australia is provided in primary healthcare settings. Nearly one in five people visits a GP and one in ten visits an allied health professional in any two-week period. [17] Some people may receive care from only one primary healthcare provider; however, many people visit a range of primary healthcare providers across a range of different disciplines.

Healthcare professionals providing services in primary health care are from a range of disciplines including physiotherapy, social work, nursing, osteopathy, psychology, pharmacy, audiology, dietetics and radiography. Healthcare professionals providing primary health care work in a range of healthcare settings across urban, rural and remote areas of Australia, both within the public and private sectors.

Comprehensive primary health care includes health promotion, illness prevention, treatment and care of the sick, community development, and advocacy and rehabilitation. [18]

Primary healthcare delivery has been described as 'fragmented' and 'fractured'. Primary healthcare practices may be multidisciplinary, may be part of a dispersed network or may consist of a sole practitioner working in a single discipline. The levels of practice resources (e.g. practice managers and electronic information systems) are variable. The relationships, referral practices and communications with external organisations, other healthcare providers and other sites are complex.

5.2 Patient-centred primary health care

Patient-centred care is an approach to the planning, delivery and evaluation of health care that is grounded in mutually beneficial partnerships among healthcare providers, patients and families. [19] Increasingly, 'patient-centred care has become internationally recognised as a dimension of the broader concept of high-quality health care'. [11]

The literature review highlighted this focus on patient-centred care and the importance in gaining the perspective of the patients when determining quality and safety of care. [20, 21, 22] It has been suggested that measurement of quality should encompass the entire patient journey to include prevention, quality of life and satisfaction with health care. [23]

The World Health Organization (WHO) states that:

The service delivery reforms advocated by the PHC [Primary Health Care] movement aim to put people at the centre of health care, so as to make services more effective, efficient and equitable. Health services that do this start from a close and direct relationship between individuals and communities and their caregivers. This, then, provides the basis for person-centredness, continuity, comprehensiveness and integration, which constitute the distinctive features of primary care. [24]

See Table 2, below, [25] for the WHO summary of differences between people-centred primary health care and conventional health care in clinics or outpatient departments and disease control programs.

Table 2: Aspects of care that distinguish conventional health care from people-centred primary health care

Conventional ambulatory medical care in clinics or outpatient departments	Disease control programs	People-centred primary care
Focus on illness and cure	Focus on priority diseases	Focus on health needs
Relationship limited to the moment of consultation	Relationship limited to program implementation	Enduring personal relationship
Episodic curative care	Program-defined disease control interventions	Comprehensive, continuous and person-centred care
Responsibility limited to effective and safe advice to the patient at the moment of consultation	Responsibility for disease-control targets among the target population	Responsibility for the health of all in the community along the life cycle; responsibility for tackling determinants of ill-health
Users are consumers of the care they purchase	Population groups are targets of disease-control interventions	People are partners in managing their own health and that of their community

5.3 Coordination and continuity of care

A review of literature between 2003 and 2008 found that the primary care process is determined by four dimensions: access, continuity of care, coordination of care and comprehensiveness of care. [2] Coordination of care has been defined as ‘health care being smoothly organised across providers and institutions’ while continuity of care ‘addresses the extent to which health care for specified users, over time, is smoothly organised within providers and institutions’. [26]

Coordination and continuity of care, and the communications among healthcare providers involved in a patient’s care, were issues evident during the initial consultation with primary healthcare professionals. Evans et al argue that many of the opportunities to improve healthcare quality are at the boundaries (interfaces) between sectors. [27]

Starfield et al defined primary care as ‘the provision of integrated, accessible healthcare services by clinicians who are accountable for addressing a large majority of personal health care needs, developing a sustained partnership with patients, and practicing in the context of family and community’. They found that continuity of care and coordination of care are core dimensions of a strong primary care system. [10]

A recent study on the key components of cancer care coordination identified seven components [28]:

- organisation of patient care
- access to and navigation through the healthcare system
- the allocation of a ‘key contact’ person
- effective communication and cooperation among the multidisciplinary team and other health service providers
- delivery of services in a complementary and timely manner
- sufficient and timely information to the patient
- needs assessment.

Many of these components have been reflected in the candidate indicator set.

5.4 Clinical governance

Clinical governance is a key driver of successful primary health care quality in Australia. Good clinical governance brings together quality improvement activities in a more consistent and effective way. [29]

Throughout the literature, it is evident that one of the current drivers of the use of indicators of safety and quality is the introduction and implementation of clinical governance frameworks. According to Sir Liam Donaldson, former Chief Medical Officer of the United Kingdom's National Health Service (NHS), clinical governance is a 'framework through which health organisations are accountable for continuously improving the quality of their services and safeguarding high standards of care by creating an environment in which excellence in clinical care will flourish'. [30] This definition has been refined for the Australian setting in a number of ways, one of which is 'the responsibility of governing bodies to demonstrate sound strategic and policy leadership in clinical safety and quality, to ensure appropriate safety and quality systems are in place, and to ensure organisational accountability for safety and quality'. [30]

Australia has embraced the clinical governance model; however, to date most of the work in this area has occurred in hospitals, health organisations or jurisdictions. More recently, there has been interest in clinical governance as it pertains to primary health care. The initial focus was on general practice rather than the whole primary healthcare sector. [31, 32] Many primary healthcare organisations now have quality systems in place, including accreditation and governance arrangements.

5.5 Quality improvement

A quality improvement approach refers to a deliberate and organised set of actions within a practice or organisation involving planning, implementation and assessment designed to improve the safety and quality of care. [33]

A key element is access to a reliable flow of useful information to support monitoring and improvement in safety and quality across all levels of a healthcare organisation. [34] Quality improvement processes usually rely on:

- information from a number of sources, including quality indicators generated from routinely collected datasets, and practice audits and case reviews
- qualitative approaches to collecting information and feedback.

This information allows health-service managers and individuals providing care to understand the reasons for variations in quality, and to identify where quality can be improved. [7]

Scobie et al believe that many clinicians today are accustomed to clinical data assessment, through exposure to clinical research and education. However, they recommend that to engage clinicians in quality improvement activities, the information provided must be accurate, relevant, impartial and methodologically sound. [35] When confronted by evidence of poor quality in their own practices and organisations, clinicians and administrators respond quickly to solve the problem. [36]

It is evident that there are significant linkages between change-management practices and continuous quality improvement. [37] Most quality improvement approaches include analysis and redesign of clinical work processes, collection and integration of information about patient needs to inform clinical design/redesign, and testing and implementing improvements. [38]

Hudelson et al highlight that quality improvement initiatives require more than individual involvement, with the need for structural reorganisation and systems reform, along with a culture that supports quality improvement reform. [39] 'Quality must be defined as a system property and not as a characteristic of individuals who work in a system'. [40]

Smallwood, and Arah and Klazinga argue that successful quality improvement initiatives need to have support from management and clinicians, in order for the effort to become part of the structure and culture of the organisation. [41, 42] It has been found that quality improvement at the practice level is linked to the role of human relationships in the practice and that these can influence the quality of care delivered. [43] Campbell et al recommend that implementation of quality improvement needs to occur simultaneously at both an individual and organisational level. [44]

5.6 Measures of safety and quality

Chassin et al state that quality measures are important tools that drive the improvement of clinical processes, having reviewed the lessons learned from a decade of quality improvement activities in the United States in nearly all hospitals, and more recent efforts beyond acute care. [45] The use of well-designed quality indicators can provide information about the quality of health care to support quality improvement. [46]

Mainz concludes a methodological review of clinical indicators for quality improvement in health care by stating that 'monitoring health care quality is impossible without the use of clinical indicators. They create the basis for quality improvement and prioritisation in the health care system. To ensure that reliable and valid clinical indicators are used, they must be designed, defined, and implemented with scientific rigour'. This review emphasises that indicators should be based on standards of care and the best available evidence, and that indicators are not direct measures of quality. Just as quality is multidimensional, the understanding and evaluation of quality requires a range of measures. [47]

Scobie et al also argue that measurement of health safety and quality is essential, and that a variety of measures are needed to understand what the problems are and whether change has been effective. 'An indicator is not an absolute measure of quality or safety, but rather can act as a screen to determine or identify areas for further local analysis'. They emphasise the need for local review to investigate and explain the reasons for a particular result. 'By developing measures that are timely, can be replicated, and inform understanding of the quality of care, local change initiatives can lead to dramatic improvements in care'. [48]

Involving key stakeholders in determining future directions for quality measures is essential to balance potentially divergent interests. Willis et al argue that the first step in developing quality measures is to establish purpose and from whose perspective measurement is occurring. 'From a management perspective, quality may be best measured through outcomes at an organisational or systems level, while clinicians typically focus on processes of care for individual patients'. [49]

Lester and Campbell identified seven ideal attributes of a quality indicator, as described in Table 3.

Table 3: Attributes of a quality indicator [50]

Attribute	Explanation
Acceptability	Is acceptable to both those being assessed and those undertaking the assessment.
Attributable	Achievement of the aspect of care defined by an indicator should be 100% under the control of those being assessed.
Feasibility	Valid and reliable consistent data are available and collectable.
Reliability	Minimal measurement error, reproducible findings
Sensitivity to change	Has the capacity to detect changes in quality of care, to discriminate between and within subjects.
Predictive value	Has the capacity to predict quality of care outcomes.
Relevance	Is in an area where there is a recognised gap between actual and potential performance.

Thus, practice-level indicators of safety and quality should be able to be easily collected, from existing datasets (preferably), evidence based, clearly defined, achievable in primary health care practice, attributable to actions in primary health care and free from obvious unintended consequences. [50]

Addington et al demonstrated that it is possible to successfully implement quality measures; however, success depends on the interaction of multiple factors, including measure characteristics, promotional messages, implementation strategies, resources, the intended adopters, and the intra-organisational and inter-organisational contexts, as detailed in Table 4 below. [51]

Table 4: Facilitators and barriers to successful implementation of quality measures [51]

Category	Facilitators	Barriers
Indicator characteristics	<ul style="list-style-type: none"> • Well-recognised definitions • Clear definitions • Evidence based • Inclusive (cover important areas) • Reflect current knowledge • Based on reliable, complete data • Represent an open agenda 	<ul style="list-style-type: none"> • Lack precision
Promotional strategies	<ul style="list-style-type: none"> • Focus on services endorsed by a government task force • Can be used to demonstrate clinical competence • Credible indicators • Indicators linked to performance incentives • Existence of a product champion to enthuse and educate • Develops capacity to monitor care 	<ul style="list-style-type: none"> • Viewing indicators as a threat to autonomy • Viewing indicators as not credible • Viewing indicators as tools to penalise bad performance • Financial penalties based on performance areas beyond the scope of professional control
Implementation strategies	<ul style="list-style-type: none"> • Assessors have medical or research expertise • Indicators selected sparingly • Indicator information is part of documenting care • Documentation method is user-friendly and guides care delivery • Documented data are computer-ready • Previously developed tools are used • Audit tools are used • There is an implementation plan • There is a multidisciplinary quality improvement team 	<ul style="list-style-type: none"> • Using government-associated assessors • Lack of definitive diagnoses in charts • Difficult-to-define intervention thresholds
Resources	<ul style="list-style-type: none"> • Information technology is current or resources available for upgrading • Time is available for interpreting and acting on indicator data • Practical support for data entry • Capital available for extra costs 	<ul style="list-style-type: none"> • Incompatible computer systems • Generating indicators is costly • Labour intensive • Requirement for external staff • Lack of computer training • Increased workload
Individual level factors	<ul style="list-style-type: none"> • Staff are competent in documentation • Staff have good communication and collaboration skills • Indicators are a personal interest or responsibility • Staff have good computer skills 	<ul style="list-style-type: none"> • Staff have limited computer skills • Difficulties understanding indicator-related terminology or concepts • Reduced professional autonomy and trust • Short-term expectations of improved quality of care
Organisational level factors	<ul style="list-style-type: none"> • Multi-stakeholder involvement • Board members are aligned with implementation plan • Team agreement on purpose, benefits, and importance of indicators 	<ul style="list-style-type: none"> • Some services not recorded in medical record or are difficult to find • No clear responsibility for data entry • Perceived lack of time to plan • Lack of team approach to change • Limited inter-professional communication
External factors	<ul style="list-style-type: none"> • Access to expert advice about clinical issues • Indicators 'fit in' with local initiatives and policies 	<ul style="list-style-type: none"> • Competition between practices

6 BEST PRACTICE IN PRIMARY HEALTH CARE

The Commission's research and consultation process identified some elements of best practice in primary health care, which suggests that these should be measured in practice-level quality improvement activities, where practicable. These elements include, but are not limited to the following:

- Health professionals should use the best evidence available to inform their clinical practice (NSQHS Standard 1).
- Care provided by the clinical workforce is guided by current best practice, as agreed by the appropriate body (NSQHS Standard 1).
- Over time, the characteristics and social determinants of health of the local community/service population should be identified, reported and analysed to inform service planning and quality improvement.
- The service is able to demonstrate effectiveness of clinical treatment using outcome measures.
- The service is able to demonstrate evidence of providing appropriate coordinated care to ensure that patients are guided through the correct care pathway, and attend the most appropriate service providers in the most appropriate timeframe.
- Patient safety incidents are recognised, reported and analysed, and this information is used to improve safety systems (NSQHS Standard 1).
- Patient rights are respected and their engagement in their care is supported (NSQHS Standard 1).
- Patients and carers are supported by the health service organisation to actively participate in the improvement of the patient experience and patient health outcomes (NSQHS Standard 2).
- The service should support a collaborative approach to service delivery.
- Patients should receive a complete assessment, considering all relevant health issues, at the beginning of every episode of care and this should be reviewed each year.
- Care plans and care coordinators should be in place for all patients with multiple or complex needs, such as chronic conditions.
- Strategies for the prevention and control of healthcare associated infection care are developed and implemented (NSQHS Standard 3).
- The clinical workforce accurately records a patient's medication history and this history is available throughout the episode of care (NSQHS Standard 4).
- Referral processes and transfer of information between health professionals and services should support effective continuity and follow-up of care.

These elements of best practice have guided the selection of the candidate indicator set. Some elements are already included in the National Safety and Quality Health Service Standards (as noted), and to avoid duplication, were not included in the candidate set. Other elements have been incorporated in the candidate set of indicators for primary health care (set out in Section 7).

7 Candidate indicators

The candidate indicators listed in Table 5 below were identified during the scan of Australian and international quality and safety indicator sets, and during the consultation processes. [5, 6, 52, 53, 54, 55, 56, 57] The candidate indicators are suggested for inclusion in the national set of practice-level indicators of safety and quality for primary health care.

Responses to this consultation paper will inform the design of the final set of practice-level indicators of safety and quality to be presented to a national forum for endorsement. Services will be able to select a 'local bundle' of indicators from the nationally agreed set, depending on local circumstances and priorities for quality improvement.

The framework for the candidate indicator set has been adapted from ISO FDIS 21667 Health Indicators Conceptual Framework [1], and also incorporates some process and outcome dimensions of primary health care as defined by Kringos et al [2] (see Appendix 2).

The candidate indicators are categorised in the following dimensions:

- accessibility
- appropriateness
- acceptability/patient participation
- effectiveness
- coordination of care
- continuity of care
- safety.

Table 5: Candidate practice-level indicators of safety and quality for primary health care

Dimension	Candidate indicators	Description	#
Accessibility	First contact to service wait time	The proportion of patients whose wait from first contact to first service is within the locally agreed timeframe	1
	First contact to service wait time for high-priority patients	The proportion of patients who are high priority according to locally agreed criteria, and whose wait from first contact to first service is within the locally agreed timeframe	2
	Eligible patients who received a service	The proportion of eligible patients requesting a service who received a service	3
	Non-attendance at booked service	The proportion of patients who did not attend a booked service	4
Appropriateness	Health summary	The proportion of regular patients with a comprehensive health summary, including information on allergies, current/past medical history, medications and risk factors, which was updated within the previous 12 months	5
	Patient assessment	The proportion of patients assessed, using a validated assessment tool appropriate to the scope of the practice and patient's needs	6
	Timely initial needs identification	The proportion of patients whose initial needs identification was conducted, within the locally agreed timeframe	7
	Complete care plan	The proportion of patients with multiple or complex needs who have a complete care plan	8
	Recalls and reminders	The proportion of patients with a complete care plan who were given recalls or reminders as recommended in the care plan	9

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Dimension	Candidate indicators	Description	#
	Adherence to clinical guidelines	The proportion of patients with complete care plans that are in accordance with agreed clinical guidelines	10
	Timely review of care plan	The proportion of patients with a recorded care plan that is reviewed by the planned review date	11
	Medication review	The proportion of regular patients whose medication list was reviewed by a clinician within the previous 12 months	12
	Interpreter services	The proportion of patients who indicated their need for an interpreter and who were provided with interpreter services at the first service	13
	Aboriginal and Torres Strait Islander awareness/sensitivity	The proportion of Aboriginal and Torres Strait Islander patients who have received communications that are culturally appropriate	14
	Cultural and linguistic diversity awareness/sensitivity	The proportion of patients who have received communications that are culturally and linguistically appropriate	15
Acceptability/patient participation	Self-rated health	The proportion of regular patients who have completed a validated self-rated health status instrument that informs care and service improvement	16
	Patient experience survey	The proportion of regular patients who have been given the patient experience survey within the previous 12 months (using a standard patient experience instrument)	17
	Patient experience survey response rate	The proportion of regular patients who have provided feedback about their patient experience within the previous 12 months (using a standard patient experience instrument)	18
	Satisfaction with patient experience	The proportion of regular patients who are very satisfied with specified elements of their patient experience within the previous 12 months (using a standard patient experience instrument)	19
	Patient complaints response	The proportion of patient complaints responded to within the service's nominated timeframe from receipt of complaint	20
	Informed consent for treatment	The proportion of patients (and/or carers) who have had information about the purpose, treatment options, benefits, risks and costs of care discussed with them	21
Effectiveness	Patient improvement	The proportion of regular patients whose condition has improved, measured using a validated tool or clinical guideline (for conditions where improvement is expected, e.g. diabetes, weight reduction, smoking cessation)	22
	Goals of care attainment	The proportion of goals met in the timeframe stated for attainment of each goal for patients with a care plan	23
	Goals of care partially attained	The proportion of goals partially met in the timeframe stated for attainment of each goal, or appropriately renegotiated, for patients with a care plan	23
Coordination of care	Referral process	The proportion of practice referrals that are issued in accordance with the practice's policy for referral processes (for appropriateness and timeliness)	25
	Referral content	The proportion of practice referrals that contained appropriate identifying, clinical and contact information and a current medication list	26
	Allocation of a 'key contact' person/case manager	The proportion of patients with multiple or complex needs who are allocated a 'key contact person' or care coordinator, and are given their contact details	27
	Timely communication to GP/specialist doctor	The proportion of patients where timely reporting of care assessments or outcomes was communicated to the patient's GP or specialist doctor	28
Continuity of care	Timely review and	The proportion of patients whose diagnostic results were	29

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Dimension	Candidate indicators	Description	#
	follow-up of diagnostic results	reviewed by a clinician and acted on in a timely manner in accordance with agreed clinical guidelines	
	Medication reconciliation	The proportion of patients whose medication list has been reconciled against the service's patient health record	30
Safety	Adverse drug reactions and medication allergies	The proportion of patients whose known adverse drug reactions and medication allergies are documented in the service's patient health record	31
	Patient safety incidents investigations	The proportion of the service's documented patient safety incidents (i.e. near misses or errors, and adverse events that result in harm) where an investigation has been completed in accordance with local policy	32
	Patient safety incidents follow-up	The proportion of the service's documented patient safety incidents (i.e. near misses or errors, and adverse events that result in harm) where action is taken to reduce risks identified through the investigation	33
	Infection control	The proportion of the service's eligible workforce who have received infection control training within the previous 12 months	34

Notes: In this table, the term 'patient' has been used to denote 'patient/client/consumer' for ease of presentation.

'The definition of a regular client can vary depending on the context and/or collection in which the term is being applied, but generally involves a minimum number of visits to an organisation or agency or uses of a facility, occurring over a specific period of time. For example, in the primary health care context, a regular client may be someone who has visited a particular primary health care provider three or more times in the past two years'.

Reference: *Person – regular client indicator, yes / no code N METeOR identifier 436639* (Accessed 9 September 2011, at <http://meteor.aihw.gov.au/content/index.phtml/itemId/181162>)

8 Considerations for use

Practice-level indicators of safety and quality for primary health care are designed for voluntary inclusion in quality improvement strategies at the local service level.

A service's choice of a local bundle of practice-level indicators will depend on local circumstances, priorities for quality improvement, patient needs and the service's scope of practice.

Services may choose to focus on a particular group of patients; for example, patients who have multiple needs or have a chronic illness. Services may have concerns or uncertainty about the quality of a particular aspect of service; for example, referrals or care planning, which will also influence the selection of indicators.

It is likely that the local bundle will consist of a small number of indicators. Services may:

- use the same local bundle to monitor trends over time, or
- cycle periodically through a range of local bundles of indicators, or
- select some indicators initially, and add others as part of the quality improvement strategy for subsequent years.

Some indicators may be collected each year for the practice population; for example, to measure patient experience. The service may decide to use a sample of data at a point in time (e.g. collecting data for a particular month from a small proportion of patient records) to measure recalls and reminders.

Table 6 provides a worked example of a local bundle of quality indicators that could be used by services in assessing their standard of quality in caring for patients with diabetes. A balanced set of indicators allows the service to measure different aspects of diabetes care across a range of quality dimensions throughout the patient journey.

Table 6: Worked example — assessing quality of care for patients with diabetes

Quality dimension	Candidate indicators	Description	#
Appropriateness	Patient assessment	The proportion of patients with diabetes assessed, using a validated assessment tool appropriate to the scope of the practice and patient's needs (e.g. HbA1c \leq 7%, blood pressure \leq 130/80 mm Hg ^A , body mass index $<$ 25 kg/m ²), where appropriate) [58]	6
Appropriateness	Complete care plan	The proportion of patients with diabetes, who have a complete care plan	8
Coordination of care	Timely communication to GP/specialist doctor	The proportion of the practice's patients with diabetes, where timely reporting of care assessments or outcomes was communicated to the patient's GP or specialist doctor	28
Effectiveness	Patient improvement	The proportion of regular patients with diabetes, whose condition has improved, measured using a validated tool or clinical guideline (e.g. HbA1c, blood pressure, total cholesterol, LDL-C, or body mass index) [58]	22
Acceptability/patient participation	Patient experience survey response rate	The proportion of regular patients with diabetes, who have provided feedback about their patient experience within the previous 12 months (using a standard patient experience instrument)	18

9 REQUEST FOR SUBMISSIONS

The Commission is seeking comment from interested organisations and individuals on the candidate set of indicators, their relevance and usefulness for local quality improvement at the service or practice-level, and whether there are any gaps in the candidate set.

Responses will inform the development of the final set of practice-level indicators of safety and quality to be presented at a national forum.

Submissions may respond to other issues and comments raised in the paper.

All submissions are welcome and will be accepted up to 25 October 2011.

Submissions marked 'Practice-level indicators for primary health care' should be forwarded to:

Australian Commission on Safety and Quality in Health Care

GPO Box 5480

SYDNEY NSW 2001

or emailed to:

mail@safetyandquality.gov.au

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 or organisations making the submission. The Commission will consider requests to withhold the contents of any submissions made in whole or in part.

REFERENCES

1. ISO/FDIS 21667:2010 (E) *Health informatics — Health indicators conceptual framework*.
2. Kringos DS, Boerma W, Hutchinson A, van der Zee J, Groenewegen PP. The breadth of primary care: a systematic review of its core dimensions. *BMC Health Services Research* 2010;10:65.
3. Institute of Medicine of the National Academies. *Crossing the quality chasm: a new health system for the twenty-first century*. Washington: National Academy Press, 2001.
4. Australian Commission on Safety and Quality in Health Care. *Developing a safety and quality framework for Australia*. Sydney: ACSQHC, 2009.
5. eHealth Services Research Group University of Tasmania. 'Report on practice level indicators of safety and quality in primary health care including a literature review and environmental scan'. Report to the Australian Commission on Safety and Quality in Health Care, not published.
6. Australian Institute of Health and Welfare. *Towards national indicators of safety and quality in health care support project: a focus on primary health care*. Canberra: AIHW. 2009.
7. Goodwin N, Dixon A, Poole T, Raleigh V. *Improving the quality of care in general practice: report of an independent inquiry commissioned by The King's Fund*. London: The King's Fund, 2011. (Accessed 31 May 2011, at www.kingsfund.org.uk/publications/gp_inquiry_report.html)
8. Australian Commission on Safety and Quality in Health Care. *The Australian Safety and Quality Framework for Healthcare*. Sydney: ACSQHC, 2010. (Accessed 1 September 2011, at www.health.gov.au/internet/safety/publishing.nsf/Content/NSQF)
9. Australian Government. National health priorities. (Accessed 30 April 2011, at www.health.gov.au/internet/main/publishing.nsf/Content/chronic#nat)
10. Starfield B, Shi L, Macinko J. Contribution of primary care to health systems and health. *Milbank Q* 2005;83:457–502.
11. Australian Commission on Safety and Quality in Health Care. *Patient centred care: improving quality and safety through partnerships with patients and consumers*. Sydney: ACSQHC, 2011.
12. Australian Government. *Improving primary health care for all Australians*. Canberra: Australian Government, 2011.
13. Sweet M. Australia makes a start on primary healthcare reform, at last. *British Medical Journal* 2011;342:d1341.
14. Australian Government Department of Health and Ageing. *Building a 21st century – primary health care system – Australia's first national primary health care strategy*. Canberra, DoHA, 2010. (Accessed 30 April 2011, at [www.health.gov.au/internet/yourhealth/publishing.nsf/Content/report-primaryhealth/\\$File/NPHCS-Keypriorities.pdf](http://www.health.gov.au/internet/yourhealth/publishing.nsf/Content/report-primaryhealth/$File/NPHCS-Keypriorities.pdf))
15. Australian Government Department of Health and Ageing. *Primary health care reform in Australia — report to support Australia's first national primary health care strategy*. (Accessed 30 April 2011, at www.yourhealth.gov.au/internet/yourhealth/publishing.nsf/Content/nphc-draftreportsupp-toc-nphc-draftreportsupp-ch2)
16. Australian Institute of Health and Welfare. *Australia's health 2010*. Cat. no. AUS 122. Canberra: AIHW, 2010, pp. 355, 356.
17. Australian Bureau of Statistics. *National Health Survey: summary of results 2004–05*. Canberra: ABS, 2006 in Australian Commission on Safety and Quality in Health Care. *Patient safety in primary health care*. Sydney: ACSQHC, 2010. (Accessed 30 April 2011 at [www.safetyandquality.gov.au/internet/safety/publishing.nsf/Content/B9CBDD0DA7EC8C88CA2573210022C464/\\$File/38689-DiscussionPaper.pdf](http://www.safetyandquality.gov.au/internet/safety/publishing.nsf/Content/B9CBDD0DA7EC8C88CA2573210022C464/$File/38689-DiscussionPaper.pdf))
18. Definition developed by the Australian Primary Health Care Research Institute for ADGP Primary Health Care Position Statement 2005, also included in the Australian Medical Association Primary Health Care position paper, 2006. (Accessed 30 April 2011, at www.yourhealth.gov.au/internet/yourhealth/publishing.nsf/Content/nphc-draftreportsupp-toc-nphc-draftreportsupp-ch3-nphc-draftreportsupp-ch3-def)
19. Institute for Patient- and Family-Centred Care (IPFCC) website. (Accessed 7 July 2010, at www.ipfcc.org)

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20. Michiels E, Deschepper R, Van Der Kelen G, Bernheim J, Mortier F, Vander Stichele R, Deliens, L. The role of general practitioners in continuity of care at the end of life: a qualitative study of terminally ill patients and their next of kin. *Palliative Medicine* 2007;21:409.
21. Stevenson K, Sinfield P, Ion V, Merry M. Involving patients to improve service quality in primary care. *International Journal of Health Care Quality Assurance* 2004;17:275.
22. Kerssens JJ, Groenewegen PP, Sixma HJ, Boerma WGW, van der Eijk I. Comparison of patient evaluations of health care quality in relation to WHO measures of achievement in 12 European countries. *Bulletin of the World Health Organization* 2004;82:106.
23. Mainz J. Defining and classifying clinical indicators for quality improvement. *International Journal for Quality in Health Care* 2003;15:523–530.
24. World Health Organization. Declaration of Alma Ata, International conference on PHC, *Alma-Ata*, USSR, 6–12 September 1978. (Accessed 30 June 2009, at www.who.int/hpr/NPH/docs/declaration_almaata.pdf).
25. World Health Organization *The world health report 2008: primary health care now more than ever*. Geneva: WHO, 2008, p.43
26. Arah O, Westert G, Hurst J, Klazinga N. A conceptual framework for the OECD Health Care Quality Indicators Project. *International Journal for Quality in Health Care* 2006;September:5–13.
27. Evans SM, Lowinger JS, Sprivilis PC, Copnell B, Cameron PA. Prioritizing quality indicator development across the healthcare system: identifying what to measure. *Internal Medicine Journal* 2009;39:648–54.
28. Walsh J, Young JM, Harrison JD, Butow PN, Solomon MJ, Masya L, White K. What is important in cancer care coordination? A qualitative investigation *European Journal of Cancer Care* 2010;20:220–227.
29. Australian Commission on Safety and Quality in Health Care. *Patient safety in primary health care discussion paper*. Sydney: ACSQHC, 2010
30. Victorian Healthcare Association. *Clinical governance in community health project*, Victorian Healthcare Association. Melbourne: VHA, 2009. (Accessed 30 April 2011, at www.vha.org.au/clinicalgovernance.html)
31. Braithwaite J, Travaglia J. An overview of clinical governance policies, practices and procedures. *Australian Health Review* 2008;32:10–22.
32. Phillips CB, Pearce CM, Hall S, Travaglia J, de Lusignan S, Love T, Kljakovic M. Can clinical governance deliver quality improvement in Australian general practice and primary care? A systematic review of the evidence. *Medical Journal of Australia* 2010;193:602–607.
33. Riley WJ, Moran JW, Corso LC, Beitsch LM, Bialek R, Cofsky A. Defining quality improvement. *Public Health Journal of Public Health Management & Practice* 2010;16(1):5–7.
34. Baker GR. *High performing healthcare systems*. Toronto: Longwoods, 2008, p. 17.
35. Scobie S, Thomson R, McNeil J, Phillips P. Measurement of the safety and quality of health care. *Medical Journal of Australia* 2006;184(10):S51–S55.
36. Baker GR. *High performing healthcare systems*. Toronto: Longwoods, 2008, p. 9.
37. Brand C, Lam SK, Roberts C, Gorelik A, Amatya B, Smallwood D, Russell D. Measuring performance to drive improvement: development of a clinical indicator set for general medicine. *Internal Medicine Journal* 2009;39:361–369.
38. Baker GR. *High performing healthcare systems*. Toronto: Longwoods, 2008, p. 15.
39. Hudelson P, Cleopas A, Kolly V, Chopard P, Perneger T. What is quality and how is it achieved? Practitioners' views versus quality models. *Quality and Safety in Health Care* 2008;17:31–36.
40. Baker GR *High performing healthcare systems*. Toronto: Longwoods, 2008, p. 13.
41. Smallwood RA. The safety and quality of health care: from Council to Commission. *Medical Journal of Australia* 2006;184:S39–S40.
42. Arah OA, Klazinga NS. How safe is the safety paradigm? *Quality and Safety in Health Care* 2004;13:226–232.
43. Lanham HJ, McDaniel RR Jr, Crabtree BF, Miller WL, Stange KC, Tallia AF, Nutting P. How improving practice relationships among clinicians and nonclinicians can improve quality in primary care. *Joint Commission Journal on Quality Patient Safety* 2009; 35(9):457–466.
44. Campbell SM, Braspenning J, Hutchinson A, Marshall M. Research methods used in developing and applying quality indicators in primary care. *Quality and Safety in Health Care* 2002;11:358–364.

AUSTRALIAN COMMISSION ON SAFETY AND QUALITY IN HEALTH CARE
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45. Chassin MR, Loeb JM, Schmaltz SP, Wachter RM. Accountability measures — using measurement to promote quality improvement. *New England Journal of Medicine* 2010;363:7.
46. Evans SM, Lowinger JS, Sprivulis PC, Copnell B, Cameron PA. Prioritizing quality indicator development across the healthcare system: identifying what to measure. *Internal Medicine Journal* 2009;39:648–654.
47. Mainz J. Defining and classifying clinical indicators for quality improvement. *International Journal for Quality in Health Care* 2003;15:523–530.
48. Scobie S, Thomson R, McNeil J, Phillips P. Measurement of the safety and quality of health care. *Medical Journal of Australia* 2006;184(10):S51–S55.
49. Willis CD, Evans SM, Stoelwinder JU, Cameron PA. Measuring quality. *Australian Health Review* 2007;31:276–281.
50. Lester H, Campbell S. Developing quality and outcomes framework (QOF) indicators and the concept of 'QOFability'. *Quality in Primary Care* 2010;18:103–109.
51. Addington D, Kyle T, Desai S, Wang J. Facilitators and barriers to implementing quality measurement in primary mental health care. *Canadian Family Physician* 2010;56:1322–1331.
52. Australian Commission on Safety and Quality in Health Care. *National Safety and Quality Health Service Standards*. Sydney: ACSQHC, June 2011.
53. National Health Service. *Demonstrating and measuring achievement: community indicators for quality improvement*. London: NHS, 2011.
54. National Health Service. *The NHS Outcomes Framework 2011/12*. London: NHS, 2010.
55. OECD. Health care quality indicators.
(www.oecd.org/document/34/0,3746,en_2649_37407_37088930_1_1_1_37407_00.html)
56. The Royal Australian College of General Practitioners. *Standards for general practice, 4th edition*. Melbourne: RACGP, 2010
57. Victorian Healthcare Association. *Discussion paper: development of clinical governance indicators for benchmarking in Victorian community health services*. Melbourne: VHA, 2010.
58. Diabetes Australia and the Royal College of General Practitioners. Goals for optimum diabetes management. In: *Diabetes management in general practice — guidelines for type 2 diabetes*, 15th ed 2009/10. Canberra: DA, 2009. (www.racgp.org.au/Content/NavigationMenu/ClinicalResources/RACGPGuidelines/Diabetesmanagement/200910diabetesmanagementingeneralpractice.pdf)
59. Donabedian A. The quality of care. How can it be assessed? *Journal of the American Medical Association* 1998;260:1743–1748.
60. Sidorenkov G, Haaijer-Ruskamp F, de Zeeuw D, Bilo H, Denig P. Relation between quality-of-care indicators for diabetes and patient outcomes: a systematic literature review. *Medical Care Research Review* 2011;68:263.
61. Mainz J. Defining and classifying clinical indicators for quality improvement. *International Journal for Quality in Health Care* 2003;15:523–530.

APPENDIX 1 — INDICATOR DEVELOPMENT PROCESS

The Commission will follow a consistent process to identify and select suites of national safety and quality indicators, as set out below.

1. Identify quality-related issues of importance to consumers, expert clinical groups, healthcare providers and policy experts.
2. Undertake an environmental scan of national and international literature, indicator sets and issues in quality indicator development for the particular clinical domain/s of interest.
3. Review and refine a candidate set of indicators derived from the scan through workshop/s with experts including clinicians, policy makers and healthcare providers.
 - a) Evaluate the potential indicators for rationale and importance against strategic dimensions; for example
 - health expenditure
 - disease burden (i.e. domains that represent a significant burden of incidence and provision of care)
 - compliance with ministerial, legislative and policy obligations.
 - b) Evaluate the potential indicators against the criteria for selection of quality indicators. Effective indicators that will engage clinicians and health service managers in quality improvement should have a number of consistently agreed characteristics. They should be [26]:
 - definable, based on definitions that are not ambiguous
 - supported by a clear rationale for collection and reporting
 - relevant to clinicians, health service managers and stakeholders
 - feasible to collect, minimising the burden of data collection
 - reliable (i.e. results are reproducible)
 - valid (i.e. measures what it is intended to measure)
 - responsive (i.e. signals action)
 - comparable
 - sensitive.
 - c) Evaluate the potential indicators for feasibility of data availability, as well as the likely administrative and financial burden to collect and report the data.
4. Develop technical specifications using the standard indicator template to document the selected set, including, where appropriate, rationale, definition, numerator, denominator, computation, risk adjustment, disaggregation, presentation and data source.
5. Undertake consultation processes (online and national workshop) on the draft indicator set (similar to that used by colleges, the Australian Council on Healthcare Standards and jurisdictions in development of clinical indicator sets).
6. Review and finalise indicator specifications.

APPENDIX 2 — RELEVANT INDICATOR FRAMEWORKS

An initial aim of this project was to categorise and define primary health care clinical domains to assist the development of the national set of practice-level indicators of safety and quality for primary health care.

The intention was to provide a framework for the candidate indicator set that reflects both the nature of primary health care and the health needs of primary care patients, as well as the dimensions of quality (appropriateness, effectiveness, accessibility, consumer participation, efficiency and safety), and the commonly used classification for quality indicators consisting of structure, process or outcome, as first developed by Donabedian. [59]

‘A conceptual health indicator framework can inform the selection and interpretation of meaningful health indicators. Such a framework identifies what information is needed to address questions about health and health care, how these pieces fit together and the inter-relationships between them’. [1]

As background information, this section provides an overview of several frameworks for conceptualising primary health care, health indicators and quality indicators.

1 Dimensions of primary care

Kringos et al have identified ten core dimensions of primary care within Donabedian’s classification for indicators: structure, process and outcome (see Table A below). The aim of the Kringos study was to explore the breadth of primary care, identify its core dimensions, and assess their interrelations and relevance to outcomes at system level. [2]

Table A: Dimensions of primary care

DIMENSIONS	SUB-DIMENSIONS			
STRUCTURE	Governance	Economic conditions	Workforce development	
PROCESS	Access	Continuity of care	Coordination of care	Comprehensiveness of care
OUTCOME	Quality of care	Efficiency of care	Equity in health	

Structure indicators include organisational aspects of health care and the ‘attributes of the settings in which care occurs’. Process indicators reflect actions of healthcare professionals and organisations (i.e. what is ‘done in giving and receiving care’). Process indicators may be based on recommended actions in clinical guidelines, professional experience or scientific literature. Outcome indicators describe the results or ‘effects of care’ on the health of patients and populations. [60, 61] Donabedian argued that the most important markers of quality care were healthcare outcomes, ‘but that these outcomes were more likely to be realised if structural arrangements and processes of care met quality standards’. [7]

2 ISO/FDIS 21667:2010 — Health Indicators Conceptual Framework

This Standard provides a comprehensive and broad (high-level) classification (see Table B) which was developed by the ISO Technical Committee for Health Informatics (TC 215), to describe all of the factors related to health outcomes and health system performance and

use. The Standard allows for operation in different ways by individual jurisdictions, and supports flexibility for the selection of specific indicators and future inclusion of new indicators. [1]

Table B: Health indicators conceptual framework [1]

DIMENSIONS	SUB-DIMENSIONS				
HEALTH STATUS	Wellbeing	Health conditions	Human function	Deaths	
DETERMINANTS OF HEALTH	Health behaviours	Socioeconomic factors	Social and community factors	Environmental factors	Genetic factors
HEALTH SYSTEM PERFORMANCE	Acceptability	Accessibility	Appropriateness	Competence	
	Continuity of care	Effectiveness	Efficiency	Safety	
COMMUNITY AND HEALTH SYSTEM CHARACTERISTICS	Resources	Population	Health system characteristics		

3 OECD conceptual framework for health care quality indicators

The OECD's Health Care Quality Indicator (HCQI) Project proposed a framework that embeds health care within the broader health system as well as within the economic, social, and political contexts of member countries. It has four tiers:

- Health: broad measures of health influenced by factors related to health care as well as other factors.
- Non-healthcare determinants: societal factors that influence health.
- Healthcare system performance: measures of the processes, efficiency and equity of healthcare systems (see Table C [26]).
- Health system design and context: measures to account for national policies and health delivery systems that affect costs, expenditures and use.

Table C: Dimensions of healthcare performance [26]

Healthcare needs	Quality			Access	Cost/expenditure
	Effectiveness	Safety	Responsiveness /patient-centredness	Accessibility	
Staying healthy					
Getting better					
Living with illness or disability					
Coping with end-of-life					

3 Clinical governance indicators for community health

The Victorian Healthcare Association (VHA) has developed indicators for benchmarking in Victorian community health services (for examples, see Table D).

Table D: Indicators for community health [57]

DIMENSIONS	INDICATORS			
ENTRY	% of clients with initial needs identification (INI)	% of clients with INI commenced within no more than 7 working days of initial contact	Average length of wait for high-priority category clients to mandated services	% of clients requiring interpreter receiving interpreter
CARE	Complete care plans	Incomplete care plans	Objectives	Care plan review
	Reason for incomplete care plans	Goals attainment	Goals of care partially attained	
CONTINUITY OF CARE	Communication to GP			

Note: VHA have also developed a Diabetes Care Indicator Set, an Oral Health Indicator Set, an Incident Set and indicators related to consent for disclosure, staff and complaints.

4 Royal Australian College of General Practitioners (RACGP) Standards

The RACGP have developed *Standards for General Practice* (see Table E [56]), which are supported by criteria and indicators. These Standards provide a framework for the continuing development of well-performing practice teams to enable them to focus on quality care and risk management.

Table E: Standards for general practice [56]

DIMENSIONS	Standard and criteria			
PRACTICE SERVICES	Access to care: scheduling care in opening hours; telephone and electronic communications; home and other visits; care outside normal opening hours	Information about the practice: practice information; informed patient decisions; interpreter and other communication services; costs associated with care initiated by the practice	Health promotion and prevention of disease: health promotion and preventive care	Diagnosis and management of health problems: consistent evidence-based practice; clinical autonomy for general practitioners
	Continuity of care: continuity of comprehensive care and the therapeutic relationship; clinical handover; system for follow-up of tests and results	Coordination of care: engaging with other services; referral documents	Content of patient health record: patient health records; health summaries; consultation notes	
RIGHTS AND NEEDS OF PATIENTS	Collaborating with patients: respectful and culturally appropriate care; patient feedback (experience); presence of a third party			
SAFETY, QUALITY IMPROVEMENT AND EDUCATION	Safety and quality: quality improvement activities; clinical risk management systems; clinical governance; patient identification	Education and training: qualifications of general practitioners; qualifications of clinical staff other than medical practitioners; training of administrative staff		
PRACTICE MANAGEMENT	Practice systems: human resource system; occupational health and safety	Management of health information: confidentiality and privacy of health information; information security		
PHYSICAL FACTORS	Facilities and access: practice facilities; physical conditions conducive to confidentiality and privacy; physical access	Equipment for comprehensive care: practice equipment; doctor's bag	Clinical support processes: safe and quality use of medicines; vaccine potency; healthcare associated infections	

5 Framework for practice-level indicators of safety and quality for primary health care

The framework for the candidate indicator set has been adapted from the ISO Health Indicators Conceptual Framework, and also incorporates the process and outcome dimensions of primary health care as defined by Kringos et al. Examples in the framework in Table F have been drawn from the research and consultations.

Table F: Framework for practice-level indicators of safety and quality for primary health care

DIMENSIONS			
<i>Coordination of care</i> e.g. referrals, communication to general practitioner	<i>Accessibility</i> e.g. time to appointment/treatment, % of target group attending for screening	<i>Appropriateness</i> e.g. interpreter services, complete care plan	<i>Acceptability/ consumer participation</i> e.g. patient experience
<i>Continuity of care</i> e.g. medication review, review and follow-up of diagnostic results	<i>Effectiveness</i> e.g. smoking cessation during pregnancy, patient improvement	<i>Safety</i> e.g. infection control training, patient identification, adverse drug reactions	

APPENDIX 3 — National Safety and Quality Health Service Standards

The National Safety and Quality Health Service (NSQHS) Standards focus on areas that are essential to improving the safety and quality of care for patients. The NSQHS Standards aim to protect the public from harm and to improve the quality of health service provision. [52]

The ten National Safety and Quality Health Service Standards are:

1. **Governance for safety and quality in health service organisations**, which describes the quality framework required for health service organisations to implement safe systems.
2. **Partnering with consumers**, which describes the systems and strategies to create a consumer-centred health system by including consumers in the development and design of quality health care.
3. **Preventing and controlling healthcare associated infection**, which describes the systems and strategies to prevent infection of patients within the healthcare system and to manage infections effectively when they occur to minimise the consequences.
4. **Medication safety**, which describes the systems and strategies to ensure clinicians safely prescribe, dispense and administer appropriate medicines to informed patients.
5. **Patient identification and procedure matching**, which describes the systems and strategies to identify patients and correctly match their identity with the correct treatment.
6. **Clinical handover**, which describes the systems and strategies for effective clinical communication whenever accountability and responsibility for a patient's care is transferred.
7. **Blood and blood products**, which describes the systems and strategies for the safe, effective and appropriate management of blood and blood products so the patients receiving blood are safe.
8. **Preventing and managing pressure injuries**, which describes the systems and strategies to prevent patients developing pressure ulcers and best practice management when pressure injuries occur.
9. **Recognising and responding to clinical deterioration in acute health care**, which describes the systems and processes to be implemented by health service organisations to respond effectively to patients when their clinical condition deteriorates.
10. **Preventing falls and harm from falls**, which describes the systems and strategies to reduce the incidence of patient falls in health service organisations and best practice management when falls do occur.