

4 Taking the indicators forward

This section briefly discusses issues suggested for consideration by the Commission in planning to implement and build upon this indicator set. These suggestions draw on discussions with the Commission and with NIAG, and on feedback from stakeholders through the consultation process.

Section 4.1 provides advice on how to use the indicators, including public reporting, the levels at which indicators should be reported, and possible reporting formats.

Section 4.2 provides information to assist in prioritising work to implement and build upon the recommended indicators, including information on which indicators already have relevant work in progress, health sector reform processes that may impact on indicator work more generally, and gaps in the coverage of the indicator set.

4.1 Reporting of indicators – public reporting, levels and frequency, reporting formats

A key purpose of this project has been to enable the Commission to report publicly on the state of safety and quality in health care. However, the appropriateness and usefulness of public reporting of indicators in the health area remains a contentious issue in Australia. High level national reporting of data on health care safety and quality has been undertaken to a limited extent by the National Health Performance Committee and in publications such as in the AIHW's *Australia's health*. However, Australia has yet to follow the lead of countries such as the United States of America and United Kingdom which have adopted detailed regular public reporting at the provider level.

Reporting of indicators of safety and quality in health arguably could serve two main purposes: to provide transparency and to inform decision-making about overall priorities and system-level strategies for safety and quality improvement; and to inform quality improvement activities of service providers. To achieve these purposes a combination of both national level reporting and reporting at lower levels, for example facility and organisation level, could be required.

Public reporting

Where recommendations are made to provide public reporting as a means of improving quality in health care, a number of assumptions typically underpin this including: that data are accurate; that the public can access, correctly interpret and act upon report contents; that reports motivate hospital clinicians and managers to improve quality of care; and that there are no unintended adverse effects of public reporting (Scott & Ward 2006).

These assumptions are mirrored by a range of areas of concern regarding public reporting including that:

- There is uncertainty whether consumers' views of and decision-making regarding health care are significantly impacted by publicly reported information on health care quality. There is evidence that consumers rate anecdotal evidence from family

and friends more highly than empirical evidence. As discussed by Marshall et al. (2000), the reasons for consumers' lack of interest in and use of such data may include difficulty in understanding the information, disinterest in the nature of the information available, lack of trust in the data, lack of timely access to the information, and lack of choice.

- Similarly, as evident in the feedback received from a number of our stakeholders through the consultation process, there continue to be concerns among some practitioners regarding public reporting on the safety and quality of health care, relating particularly to whether the data are reliable and whether selected indicators provide a valid reflection of the quality of care and outcomes achieved.
- Potential adverse consequences of public reporting in terms of the behaviours and practices of health care providers, as identified by Scott and Ward (2006), may include: gaming, early discharge, avoidance of high risk patients, out-sourcing of high risk patients, adoption of defensive medicine, withdrawal or disengagement, and tunnel vision. The adoption of such behaviours could lead to an inappropriate shift in focus from the needs of patients to meeting reporting requirements.
- It is important to consider risk adjustment in public reporting where comparisons are made between different providers and jurisdictions. A failure to do so may lead to concerns about the validity of the reporting and may diminish its usefulness as a tool to drive quality improvements.

While the question of whether to report publicly, particularly at the facility or organisation level, remains contentious in Australia, evidence suggests this could be the most effective approach (Fung et al. 2008). For example, a study by Hibbard et al. (2003) compared the degree to which performance information stimulated quality improvement activity in hospitals if it was publicly reported or if hospitals received private reports. They reported finding strong evidence that "...making performance information public stimulates quality improvement in the areas where performance is reported to be low. Since quality improvement efforts among the public-report hospitals appear to be significantly greater than in hospitals given only private reports, there is added value to making performance information public."

While public reporting has reportedly been found to stimulate quality improvement activities, the link to improvement in outcomes has yet to be clearly demonstrated, and the effect of public reporting on aspects of safety and quality including effectiveness, safety and responsiveness (patient-centeredness) remains uncertain (Fung et al. 2008).

Similarly, while the impact of public reporting on quality improvement activity at the facility and organisation level has been extensively reviewed, the impact of public reporting at other levels has not. For example, Fung et al. (2008) found no published studies of the effect of public reporting of performance data on quality improvement activity among physicians or physician groups.

In part these findings (or the lack thereof) may reflect the level at which the responsibility and particularly the ability to act on the information lies. For most of the proposed indicators this is mixed in terms of responsibility; however the ability to directly act arguably lies primarily at the facility and organisation level. Governments have responsibility for the health system as a whole and are able to influence quality improvement initiatives and activities through policy and funding (which will to a degree be influenced by indicator reporting). However they are often unable to take direct action to improve safety and quality. Similarly, specific clinician or professional groups and educational institutions have

a level of responsibility in terms of establishing standards of practice; however, they have limited ability to take direct action to improve safety and quality. Within the bounds of these policies, standards and levels of funding, facilities and organisations are able to take action in response to issues identified through indicator reporting, managing and targeting resources and activity within the facility or organisation (including clinicians and other staff) to remedy problems identified and improve practice.

Frequency and levels of reporting

A related issue for consideration is the frequency and timeliness of reporting. National level data for most of the recommended indicators are updated annually (as per Table 3.9), therefore, annual national public reporting may be the most appropriate option. While this may be sufficient in terms of transparency and accountability, and to a degree for driving continuous improvement (as improvement programmes typically take time to develop, implement, and deliver results), it will not suffice at the local level where more timely feedback would be needed to influence changes in practice. It is generally more feasible for local reporting to be undertaken more frequently and with a shorter time lag than national reporting.

It will thus be important that these indicators are not only used for national reporting and monitoring but that they are also used on an ongoing basis at lower levels, particularly facility and organisation level, in order to drive and monitor the progress of continuous improvement activities, and provide timely alerts to enable prompt response to issues as they arise.

All of the proposed indicators in this set are suitable for use at the national level, and most are also suitable for use at lower levels, including by individual facilities and organisations. The indicator specifications in Appendix 1 detail the suggested disaggregations for use of each indicator at each appropriate level. The suggested levels of reporting for each indicator are summarised in Table 4.1.

Table 4.1 Health care safety and quality indicators by level of reporting

	Service category/Indicator	National	Sub-national	Facility/ Organisation
	Primary care and community health services			
1	Enhanced primary care services in general practice	◆	◆	◆
2	General practices with a register and recall system for patients with chronic disease	◆	◆	
3	People with moderate to severe asthma who have a written asthma action plan	◆	◆	◆
4	Management of hypertension in general practice	◆	◆	◆
5	Management of arthritis and musculoskeletal conditions	◆	◆	◆
6	Mental health care plans in general practice	◆	◆	◆
7	Annual cycle of care for people with diabetes mellitus	◆	◆	◆
8	Cervical cancer screening rates	◆	◆	◆
9	Immunisation rates for vaccines in the national schedule	◆	◆	
10	Eye testing for target groups	◆	◆	
11	Quality of community pharmacy services	◆	◆	◆
12	Developmental health checks in children	◆	◆	
13	People receiving a medication review	◆	◆	◆

	Service category/Indicator	National	Sub-national	Facility/Organisation
	Hospitals			
14	Assessment for risk of venous thromboembolism in hospitals	◆	◆	◆
15	Pain assessment in the emergency department	◆	◆	◆
16	Reperfusion for acute myocardial infarction in hospitals	◆	◆	◆
17	Stroke patients treated in a stroke unit	◆	◆	◆
18	Complications of transfusion	◆	◆	◆
19	Health care associated infections acquired in hospital	◆	◆	◆
20	<i>Staphylococcus aureus</i> (including MRSA) bacteraemia in hospitals	◆	◆	◆
21	Adverse drug events in hospitals	◆	◆	◆
22	Intentional self-harm in hospitals	◆	◆	◆
23	Malnutrition in hospitals and residential aged care facilities	◆	◆	◆
24	Pressure ulcers in hospitals and residential aged care facilities	◆	◆	◆
25	Falls resulting in patient harm in hospitals and residential aged care facilities	◆	◆	◆
26	Complications of anaesthesia	◆	◆	◆
27	Accidental puncture/laceration in hospitals	◆	◆	◆
28	Obstetric trauma - third and fourth degree tears	◆	◆	◆
29	Birth trauma – injury to neonate	◆	◆	◆
30	Postoperative haemorrhage	◆	◆	◆
31	Postoperative venous thromboembolism	◆	◆	◆
32	Unplanned return to operating theatre	◆	◆	◆
33	Unplanned re-admission to an intensive care unit	◆	◆	◆
34	Hospital standardised mortality ratio (HSMR)	◆	◆	◆
35	Death in low mortality DRGs	◆	◆	◆
36	Independent peer review of surgical deaths	◆	◆	◆
37	Discharge medication management for acute myocardial infarction	◆	◆	◆
38	Timely transmission of discharge summaries	◆	◆	◆
	Specialised health services			
39	Mental health admitted patients having seclusion	◆	◆	◆
40	Post-discharge community care for mental health patients	◆	◆	◆
41	Quality of palliative care	◆	◆	◆
42	Functional gain achieved in rehabilitation	◆	◆	◆
43	Multi-disciplinary care plans in sub-acute care	◆	◆	◆
(5)	Management of arthritis and musculoskeletal conditions	◆	◆	◆
	Residential aged care			
44	Oral health in residential aged care	◆	◆	◆
(13)	People receiving a medication review	◆	◆	◆
(23)	Malnutrition in hospitals and residential aged care facilities	◆	◆	◆
(24)	Pressure ulcers in hospitals and residential aged care facilities	◆	◆	◆
(25)	Falls resulting in patient harm in hospitals and residential aged care facilities	◆	◆	◆
	Multiple service categories			
45	Unplanned hospital re-admissions	◆	◆	
46	Inappropriate co-prescribing of medicines	◆	◆	◆
47	Selected potentially preventable hospitalisations	◆	◆	
48	End stage kidney disease in people with diabetes	◆		
49	Lower-extremity amputation in people with diabetes	◆		
50	Cancer Survival	◆		
51	Failure to diagnose	◆	◆	◆
52	Potentially avoidable deaths	◆		
	All service categories			
53	Patient experience	◆	◆	◆
54	Presence of appropriate incident monitoring arrangements	◆	◆	
55	Accreditation of health care services	◆	◆	

The indicators which are not suitable for use below the national level are as follows:

- Cancer survival
- End stage kidney disease in people with diabetes
- Lower-extremity amputation in people with diabetes
- Potentially avoidable deaths

These indicators span the health care system over the long term and so generally cannot meaningfully be attributed to specific types of health care service or geographic or administrative area. However, the potentially avoidable deaths indicator may have some meaning at the state/territory level for 'treatable conditions' that may reflect shorter term health care provision.

In addition, some of the indicators are suitable for use at a sub-national level (for example, state and territory, or other relevant geographic or administrative grouping such as Divisions of General Practice), but generally not for reporting down to individual facility and organisation level, as follows:

- Selected potentially preventable hospitalisations
- Unplanned hospital re-admissions.

These indicators are outcome indicators which span the health care system, but reflect service provision over a more recent timeframe so may meaningfully be looked at in relation to current health care service provision within a particular geographic or administrative area.

For use at lower levels, the key difference from use of the indicators for national reporting will be in the disaggregations used. In general, at state and territory level, further comparisons or disaggregations of the indicators could include comparing health service areas and individual facilities or organisations, using the national data as a benchmark. At the facility and organisation level, national and state and territory data should be used for benchmarking, with possible further disaggregation of the data (depending on the indicator) by locations or specialities within the facility, casemix factors, types of procedure or medication, and in some instances comparing individual clinicians.

Related to this, the indicator specifications in Appendix 1 detail the data source to be used for national reporting. For use at lower levels, the relevant feeder or source system should be used, for example practice information systems in general practices, or patient administration systems in hospitals. Similarly, at each level the denominator should be adjusted to reflect the relevant population, for example state and territory residents rather than all Australian residents, separations from an individual hospital rather than all hospitals.

Options for consideration and reporting formats

Taking into account these considerations, two key options for the Commission in respect to public reporting are suggested:

- **Public reporting - full**
 - Public reporting on all of the proposed indicators at national and lower levels (particularly facility and organisation) as appropriate with disaggregations or comparisons: over time; by facility groupings (for example, hospital peer groups, public versus private sector); by administrative, political or geographical groupings (for example, state and territory, division of general practice, health service area); by remoteness; and for individual facilities and organisations.
 - This approach would include not only national public reporting by the Commission (or other appropriate body), but also routine public reporting by states and territories (for example providing comparisons by health service areas, and facilities or organisations) and by individual facilities and organisations.
- **Public reporting - partial**
 - Public reporting is only at the national level with comparisons over time and disaggregations by facility groupings, by state and territory, and remoteness.
 - Under this approach, the same activities in terms of using the indicators at state and territory and facility and organisation levels should still take place (i.e. undertaking ongoing monitoring against the indicators and benchmarking against the national data), however this information would not be made publicly available.

A key issue to be considered relating to these options, reflected in the areas of concern regarding public reporting discussed above, is how the data are actually presented. The following 4 examples of health indicator reporting demonstrate some of the approaches that can be taken to dealing with these issues.

Variable Life Adjusted Display (VLAD) (Queensland)

Queensland is using the VLAD method, whereby indicators provide an alert to potential system issues. The following discussion regarding this approach is drawn from information available on the VLAD website: <<http://www.health.qld.gov.au/quality/vlad.asp>>

VLAD is a screening tool to identify the place to start in examining possible areas of concern (or strength) for safety and quality of care. It does this by flagging certain indicators which warrant further investigation.

The VLAD methodology provides a graphical overview of clinical outcomes over a course of selected time and plots the cumulative difference between expected and actual outcome.

A flag is initiated where the VLAD line meets the lower or upper control limits in the graphical representation. When a VLAD flags at a particular point it is suggesting that over time there have been more patients experiencing the outcome than expected, up until this patient. The suggested way of viewing this is to firstly look for flags and then look backwards from this flagging point to see if there is a change in the trend or not. It is what leads up to the point at which the VLAD line meets the control limit (*the track*) which is most important rather than the actual point itself (*the crossing*).

The VLAD is a quality monitoring tool and must be interpreted as such. The occurrence of a flag should not be immediately interpreted as indicating good or bad performance as there are many possible explanations as to why the VLAD will flag, one reason being simply chance.

Where review is initiated, it has been recommended that the 'pyramid' model of investigation' be adopted. In summary, the pyramid model of investigation suggests a hierarchical approach to identify causation. Under this model, factors at the base of the pyramid are more likely to be causes than factors at the apex – the factors in ascending order (from base upwards) are: data; patient case mix; structure or resource; process of care; professional.

VLADs for each hospital are made available as part of the release of the Annual Public Hospital Performance Report required under the *Health Services Act 1991*. The Report includes the management action plans arising from the results of any hospital reviews conducted.

VLADs do not provide definitive answers about the quality of care. They are used to develop ideas about why variations in reported outcomes occur and suggest possible solutions, be they ways of improving data quality, improving casemix adjustment, or implementing system changes to improve quality of care.

Critical to the approach is that there is not just monitoring – the monitoring is tied in with systems that ensure that investigation, learning and action occur as a result of a flag (Duckett et al. 2007).

Healthcare Commission Annual Health Check reports (UK)

These annual reports are publicly available online at the Healthcare Commission's website, as an example the 2006-7 report is available at http://www.healthcarecommission.org.uk/_db/_documents/Annual_health_check_national_overview_2006-2007.pdf >

These reports provide an overview of the performance of health care service providers across the UK, including relating to safety and quality of care. The annual report includes international comparisons, national summary data and comparisons, comparisons between geographic regions (including using geographic mapping), and comparisons and ratings for health trusts against a range of measures.

Reporting is largely in the form of ratings rather than actual numbers or rates. So, for example, 'quality of services' is rated for each trust as either weak, fair, good, or excellent. This form of presentation provides an indication as to the level of quality of these providers in relation to agreed national standards and targets, but limits the degree to which data could be misinterpreted by users of the report.

Other similar forms of presentation used include star ratings (ranging from 1 to 4 stars) and 'traffic light' style reporting where 'green' indicates good performance, 'amber' indicates that performance is acceptable but borderline so should be reviewed, and 'red' indicates poor performance and that action is required as a priority to address it.

Underpinning this national public reporting is ongoing monitoring of performance within health care trusts and within individual facilities and organisations, including local-level annual public reporting.

Annual Health Indicators reports and web portal (Canada)

Annual health indicator reports are publicly available online at the Canadian Institute of Health Information (CIHI) website, as an example the 2008 report can be downloaded from <http://secure.cihi.ca/cihiweb/products/HealthIndicators2008_ENGweb.pdf>.

These reports provide an overview of the performance of health care service providers across Canada, including relating to safety and quality of care. The annual report includes international comparisons, national summary data and comparisons, and comparisons between health service areas against a range of measures. In contrast to the UK reports, these reports in Canada do include actual rates.

Underpinning this national public reporting is ongoing monitoring of performance within health service areas and within individual facilities and organisations. This is supported by regular feedback from CIHI on some specific measures (for example, HSMRs) and provision of a range of data and analytic tools on the CIHI web portal. This portal is not publicly accessible, instead providing access for health care providers to a data warehouse including data submitted from providers across the country, to facilitate ongoing monitoring, comparisons and benchmarking, and assist in improving data quality. Further detail, including a demonstration of the portal tool is available at <http://secure.cihi.ca/cihiweb/disPage.jsp?cw_page=cihi_portal_e>

Commonwealth Fund (US)

The Commonwealth Fund web site <<http://www.whynotthebest.org>> allows health care providers, researchers, and professionals to conduct side-by-side comparisons of 4,500 hospitals nationwide, track performance over time against benchmarks, and access information to inform improvements in health care quality.

The website provides functionality enabling users to:

- Find the top-performing hospitals in the country on 24 nationally recognised measures of health care quality, including care provided for heart attack, heart failure, and pneumonia, and prevention of surgical infection
- Compare a hospital against its peers and measure performance against top performers and state and national averages
- Access case studies of high-performing hospitals and a library of tools offering lessons and strategies on ways to improve care.

4.2 Priorities for further development

This section provides information to assist in prioritising work to implement and build upon the recommended indicators. This includes information on which indicators require further work, which of these relate to work already planned or in progress, health sector reform processes that may impact on indicator work more generally, and what gaps in the coverage of the indicator set remain to be resolved.

Development required and related work in progress

The indicator summaries in Appendix 1 include discussion of further development suggested or required for each of the recommended indicators. This section summarises these recommendations.

The recommended indicators have been categorised into four groups based on whether they are able to be reported immediately and what further development work may be required as follows:

- Currently reportable – as per recommended specification
 - The proposed numerator and denominator for these indicators can currently be collected and reported nationally. Future data development work may be proposed to enhance the collection and/or reporting of some of the indicators, but is not an immediate priority.
- Currently reportable – data development required to meet recommended specification
 - These indicators can be reported with data that is currently available, but to report exactly as per the recommended specification some data development is required. Data development suggested for indicators in this category may involve refinement of data items in data collections or linkage with other data collections, to address gaps in data availability (for example, for identification of specific population groups), or to enable consistent/comprehensive national reporting.
- Not currently reportable – indicator and/or data development required
 - Indicators in this category are generally clearly defined, however a suitable data source is not currently available, has yet to be identified, and/or substantial development is required in order to operationalise the indicator. This may include the development of new data items within existing data collections, or development of new data collections. In some cases there are identified issues to be resolved regarding the indicator definition.
- Concept proposed for further development
 - These are areas that are considered of importance in terms of health care safety and quality, but where a suitable indicator has yet to be identified and/or developed, and where there are a number of potential means of measurement depending on the indicator specification agreed upon. Further development work is required to identify a suitable indicator(s) and to enhance existing data collections or develop new ones to enable data collection and reporting.

The distribution of the indicators according to these categories is summarised below:

Category	Category description	Indicators
A	Currently reportable – as per recommended specification	19
B	Currently reportable – data development required to meet recommended specification	21
C	Not currently reportable – indicator and/or data development required	7
D	Concept proposed for further development	8

The following table specifies the category for each indicator and which indicators reflect performance indicators in the National Healthcare Agreement (NHA). For category B, C and D indicators, the table also shows whether or not there is related work known to be already in progress and for which separate development work is expected to occur.

Table 4.2 Health care safety and quality indicators measurability category and related work

Service category/indicator		Category	NHA	Other related work in progress	No related work known to be in progress
Primary care and community health services					
1	Enhanced primary care services in general practice	A			
2	General practices with a register and recall system for patients with chronic disease	B		◆	
3	People with moderate to severe asthma who have a written asthma action plan	B	◆		
4	Management of hypertension in general practice	B		◆	
5	Management of arthritis and musculoskeletal conditions	D			◆
6	Mental health care plans in general practice	A	◆		
7	Annual cycle of care for people with diabetes mellitus	A	◆		
8	Cervical cancer screening rates	A	◆		
9	Immunisation rates for vaccines in the national schedule	A	◆		
10	Eye testing for target groups	B			◆
11	Quality of community pharmacy services	D			◆
12	Developmental health checks in children	B	◆		
13	People receiving a medication review	B		◆	
Hospitals					
14	Assessment for risk of venous thromboembolism in hospitals	C		◆	
15	Pain assessment in the emergency department	C		◆	
16	Reperfusion for acute myocardial infarction in hospitals	B			◆
17	Stroke patients treated in a stroke unit	B		◆	
18	Complications of transfusion	C		◆	
19	Health care associated infections acquired in hospital	B		◆	
20	<i>Staphylococcus aureus</i> (including MRSA) bacteraemia in hospitals	B	◆		
21	Adverse drug events in hospitals	B	◆		
22	Intentional self-harm in hospitals	B	◆		
23	Malnutrition in hospitals and residential aged care facilities	B			◆
24	Pressure ulcers in hospitals and residential aged care facilities	B	◆		
25	Falls resulting in patient harm in hospitals and residential aged care facilities	B	◆		
26	Complications of anaesthesia	A			
27	Accidental puncture/laceration in hospitals	A			
28	Obstetric trauma - third and fourth degree tears	A			
29	Birth trauma – injury to neonate	A			
30	Postoperative haemorrhage	A			
31	Postoperative venous thromboembolism	A			
32	Unplanned return to operating theatre	B			◆
33	Unplanned re-admission to an intensive care unit	B			◆
34	Hospital standardised mortality ratio (HSMR)	A			
35	Death in low mortality DRGs	B		◆	
36	Independent peer review of surgical deaths	C		◆	
37	Discharge medication management for acute myocardial infarction	C		◆	
38	Timely transmission of discharge summaries	D			◆

Service category/indicator		Category	NHA	Other related work in progress	No related work known to be in progress
Specialised health services					
39	Mental health admitted patients having seclusion	B			◆
40	Post-discharge community care for mental health patients	A			
41	Quality of palliative care	D		◆	
42	Functional gain achieved in rehabilitation	B		◆	
43	Multi-disciplinary care plans in sub-acute care	D			◆
(5)	Management of arthritis and musculoskeletal conditions	D			◆
Residential aged care					
44	Oral health in residential aged care	C		◆	
(13)	People receiving a medication review	B		◆	
(23)	Malnutrition in hospitals and residential aged care facilities	B			◆
(24)	Pressure ulcers in hospitals and residential aged care facilities	B	◆		
(25)	Falls resulting in patient harm in hospitals and residential aged care facilities	B	◆		
Multiple service categories					
45	Unplanned hospital re-admissions	B	◆		
46	Inappropriate co-prescribing of medicines	D		◆	
47	Selected potentially preventable hospitalisations	A	◆		
48	End stage kidney disease in people with diabetes	A			
49	Lower-extremity amputation in people with diabetes	A			
50	Cancer Survival	A	◆		
51	Failure to diagnose	D			◆
52	Potentially avoidable deaths	A	◆		
All service categories					
53	Patient experience	D	◆		
54	Presence of appropriate incident monitoring arrangements	C		◆	
55	Accreditation of health care services	A			

Some data developments required to enable reporting (or improved reporting) for some of the proposed indicators have already taken place, but it will take time for their utility to be realised (e.g., through the availability of multiple years of data to enable time-series comparisons of the indicators). For example:

- The Condition onset flag data element in the National Minimum Data Set (NMDS) for Admitted Patient Care has been flagged for use in calculating a number of the recommended indicators. Mandatory reporting of the Condition onset flag for all hospitals commenced 1 July 2008, so the first full year of data available will be for the 2008–09 reporting year.
- For the indicator ‘Developmental health checks in children’, Medicare items for these checks have been introduced from 1 July 2008, so the first full year of data available will be for the 2008–09 reporting year.

Also of relevance are a number of key reform processes in the health care sector, including:

- National Healthcare Agreements
- National Partnership Agreement on Hospital and Health Workforce Reform
- National Primary Health Care Strategy

- Consideration of the final report of the National Health and Hospitals Reform Commission

The findings and recommendations of these various reform processes, and in particular the policy responses by the Commonwealth and State and Territory authorities, will need to be considered in the implementation of the National safety and quality indicators. Following is an overview of four papers released through these processes.

The National Healthcare Agreements and the National Partnership Agreements on Hospital and Health Workforce Reform have had a direct influence on the selection of indicators and their specifications.

The National Primary Care Strategy and the National Health and Hospitals Reform Commission, have recently released reports. Other reform processes presently underway, may or may not have an impact on the development of the National safety and quality indicators. These include:

- Preventative Health Taskforce
- Review of Maternity Services
- National eHealth Strategy
- A review of the MBS is being undertaken by the Department of Health and Ageing

National Healthcare Agreement

The National Healthcare Agreement (NHA) aims to improve health outcomes for all Australians and the sustainability of the Australian health system. The identified long-term objectives of the NHA are:

- Prevention – Australians are born healthy and remain healthy
- Primary and community health – Australians receive appropriate health quality and affordable primary and community health services
- Hospital and related care – Australians receive appropriate high quality and affordable hospital and hospital related care
- Aged care – Older Australians receive appropriate high quality and affordable health and aged care services
- Patient experience – Australians have positive health and aged care experiences which take account of individual circumstances and care needs
- Social inclusion and Indigenous health – Australia's health system promotes social inclusion and reduces disadvantage, especially for Indigenous Australians
- Sustainability - Australians have a sustainable health system

A parallel process to the national indicators project was the development of a set of indicators as part of the National Healthcare Agreements (NHA). The indicators developed as part of the NHA informed the indicator selection process for the national indicators of safety and quality. As a result, there are 16 indicators which are included in both the NHA set and the National safety and quality indicators set (as noted in Table 4.2):

- People with moderate to severe asthma who have a written asthma action plan
- Mental health care plans in general practice
- Annual cycle of care for people with diabetes mellitus
- Cervical cancer screening rates

- Immunisation rates for vaccines in the national schedule
- Developmental health checks in children
- *Staphylococcus aureus* (including MRSA) bacteraemia in hospitals
- Adverse drug events in hospital
- Intentional self-harm in hospitals
- Falls resulting in patient harm in hospitals and residential aged care facilities
- Pressure ulcers in hospitals and residential aged care facilities
- Unplanned hospital re-admissions
- Selected potentially preventable hospitalisations
- Cancer survival
- Potentially avoidable deaths
- Patient experience

Further details can be found at:

<http://www.coag.gov.au/intergov_agreements/federal_financial_relations/docs/IGA_FF_R_ScheduleF_National_Healthcare_Agreement.pdf>

National Partnership Agreement on Hospital and Health Workforce Reform

In November 2008 the Council of Australian Governments (COAG) agreed to a National Partnership (NP) which is aimed at improving the efficiency and capacity of public hospitals.

The objectives of the NP are to reform and improve:

- The efficiency of public hospital services
- Health workforce capability and supply
- The volume and quality of sub-acute services
- The functioning of emergency departments

And thereby support an efficient and effective public hospital system which delivers high quality and safe services to patients. The NP is aimed at contributing to a range of outcomes and objectives. Those of relevance to the National indicators project include:

- Improved health outcomes and patient experience and satisfaction
- A hospital system which is better integrated with other health services; will provide the right services in the right place at the right time; and smooth patients' transitions between health settings through assessment, referral and follow up at key points in patients' health journeys
- Increased supply, capacity and quality of subacute services
- Better outcomes for patients in emergency departments

Further details can be found at:

<http://www.coag.gov.au/intergov_agreements/federal_financial_relations/docs/national_partnership/national_partnership_on_hospital_and_health_workforce_reform.pdf>

National Health and Hospitals Reform Commission (NHHRC) Final Report

The final report was released on 30 June 2009. Key issues discussed in this final report of relevance to the National Indicators Project are as follows:

- The report recommends a nationally consistent approach to the collection and comparative reporting of indicators which monitor safety and quality of healthcare. This should include 'clinical quality' measures. In addition the report recommends the development and conduct of regular national patient experience surveys and reporting on patient-reported outcome measures.
- The NHHRC recommends public reporting by hospitals, primary health care services, and residential aged care services, through accreditation requirements on how they are progressing with quality improvement activities and research.
- More broadly, there are numerous references to a need for improved information, including regarding safety and quality issues, and the future role of electronic patient records

In addition, the report proposes the following key reform directions of relevance to health care safety and quality information:

“19 - We recommend embedding a strong focus on quality and health outcomes across all primary health care services. This requires the development of sound patient outcomes data for primary health care. We also want to see the development of performance payments for prevention, timeliness and quality care.

13 - To support people's decision making and management of their own health we recommend that, by 2012, every Australian should be able to have a personal electronic health record that will at all times be owned and controlled by that person.

29 - We recommend there be financial incentives to reward good performance in outcomes and timeliness of care. One element of this should be for timely provision of suitable clinical information (such as discharge information) including details of any follow-up care required.

32 - To support quality improvement, we recommend that data on quality and safety should be collated, compared and provided back to hospitals, clinical units and clinicians in a timely fashion to expedite quality and quality improvement cycles. Hospitals should also be required to report on their strategies to improve safety and quality of care and actions taken in response to identified safety issues.

33 - To improve accountability, we recommend that public and private hospitals be required to report publicly on performance against a national set of indicators which measure access, efficiency and quality of care provided.

34 - To better understand people's use of health services and health outcomes across different care settings, we recommend that public and private hospital episode data should be collected nationally and linked to MBS and PBS data using a patient's Medicare card number.

88.9 - The Commonwealth, state and territory governments would agree to establish national approaches to health workforce planning and education, professional registration, patient safety and quality (including service accreditation), e-health, performance reporting (including the provision of publicly available data on the performance of all aspects of the health system), prevention and health promotion, private hospital regulation, and health intervention and technology assessment.

95 - We believe that incentives for improved outcomes and efficiency should be strengthened in health care funding arrangements.”

Towards a national primary care strategy, Discussion paper

The Draft National Primary Health Care Strategy, which was released in August 2009, provides a guide to future policy and practice in primary health care in Australia. The accompanying report draws attention to a lack of good quality information and performance measures which can be used to support primary healthcare professionals, consumers, funders and policy makers.

The issues discussed which are relevant to the National Indicators Project and the future development of safety and quality indicators for primary healthcare include:

- Key Priority Area 2: Better management of chronic conditions.
 - Indicators of potentially preventable hospital admissions and other evidence-based clinical indicators of quality chronic disease management have been proposed to monitor the impact of a recommended new approach to improve the continuity and coordination of care for individuals with chronic disease.
- Key Priority Area 4: Improving quality, safety, performance and accountability.
 - The report proposes that the incidence of avoidable errors which are attributable to safety and quality issues be measured. This would be a component of a recommended framework for safety and quality in primary healthcare, which is based on improved information and quality assurance systems.

Further detail can be found at:

[www.yourhealth.gov.au/internet/yourhealth/publishing.nsf/Content/nphc-draft-report-toc/\\$FILE/NPHC-Draft.pdf](http://www.yourhealth.gov.au/internet/yourhealth/publishing.nsf/Content/nphc-draft-report-toc/$FILE/NPHC-Draft.pdf)

and

[www.yourhealth.gov.au/internet/yourhealth/publishing.nsf/Content/nphc-draftreportsupp-toc/\\$FILE/NPHC-supp.pdf](http://www.yourhealth.gov.au/internet/yourhealth/publishing.nsf/Content/nphc-draftreportsupp-toc/$FILE/NPHC-supp.pdf)

Identified gaps in coverage

Reviewing the alignment of the indicators with the framework, as discussed in section 3.2, the following areas appear to be under-represented:

- Dental services and oral health: third highest area of health expenditure (6.6%), and second largest major disease and injury group contributing to health expenditure (10.1%) - one indicator
- Neurological and sense disorders: 11.9% of burden of disease - one indicator
- Mental health: 7.8% of major disease and injury groups contributing to health expenditure, 13.3% of burden of disease, and one of the seven national health priority areas - three indicators
- Arthritis and musculoskeletal conditions: 7.5% of major disease and injury groups contributing to health expenditure, and one of the 7 national health priority areas - one indicator
- Cancer: largest burden of disease area (19%), 7.2% of major disease and injury groups contributing to health expenditure, and one of the seven national health priority areas - two indicators

In part this is a reflection of the scope of this indicator set, which has specifically excluded most aspects of public health. As such, indicators relating to health promotion and

preventative activities such as population-wide health education programmes (e.g. smoking cessation) have not been included.

More importantly however, under-representation of these areas reflects a key gap in the current set of indicators, namely the limited coverage of health care delivered by allied health providers and specialised health providers. For each of the above areas, a significant proportion of health care delivery will be through allied health providers (e.g. physiotherapists, chiropractors, and a range of others are typically involved in treatment/management of musculoskeletal conditions) and/or specialised health providers (including the private practice activities of psychologists, psychiatrists, oncologists, rheumatologists, orthodontists, and other specialists).

Under-representation of these types of health care reflects a combination of factors, in particular the scarcity of data available from these areas of health provision, the diverse range of practitioners involved, and of their service delivery models. In terms of the differing service delivery models, a particular issue in these areas of health care delivery is the greater reliance on private funding and user-pays service provision.

In the absence of the type of funding and political levers that are available to drive data collection, reporting and quality improvement activities in other areas of health provision such as hospital-based care, alternative approaches in these areas will need to be investigated. This may include, for example:

- Joint work with private health insurers who have various levels of involvement with these health care providers both directly (e.g. through contractual arrangements giving 'approved provider' status) and indirectly through rebates paid to health insurance holders for their use of these services
- Joint work with relevant professional or clinical groups to develop and implement agreed standards of practice (if these do not already exist), and accompanying appropriate data collection and reporting arrangements