

INFORMATION STRATEGY: WORK PLAN 2009-2010

April 2009

INFORMATION STRATEGY WORK PLAN 2009

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Professor Chris Baggoley
Chief Executive Officer

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Abbreviations

AHMAC	Australian Health Ministers' Advisory Council
AHMC	Australian Health Ministers' Conference
AIHW	Australian Institute of Health and Welfare
ASER-NIPS	Australian Safety and Efficacy Register of New Interventional Procedures – Surgical
BIOGRID	BIOGRID AUSTRALIA is a technology built to conduct concurrent interrogation of multiple data sources – a virtual repository
CHADx	Cost of healthcare-associated diagnoses
CIO	Chief Information Officer
CRE-PS	Centre for Research and Evaluation of Patient Safety
EMM	Electronic Medication Management
GP	General Practice/General Practitioner
HAI	Healthcare Associated Infection
IEHR	Individual Electronic Health Record
IJC	Inter Jurisdictional Committee
ISC	Information Strategy Committee
METeOR	Metadata Online Registry
MSAC	Medical Services Advisory Committee
NCRIS	National Collaborative Research Infrastructure Strategy
NEHIPC	National E-Health Information Principles Committee
NEHTA	National E-Health Transition Authority
NHIRF	National Health Information Regulatory Framework
NHISSC	National Health Information Standards and Statistics Committee
NHMRC	National Health and Medical Research Council
NIAG	National Indicators Advisory Group
NPS	National Prescribing Service
OECD	Organisation for Economic Cooperation and Development
RACGP	Royal Australian College of General Practitioners
RCPA	Royal College of Pathologists of Australasia
TGA	Therapeutic Goods Administration

1. Executive Summary

Purpose

The purpose of this document is to report on the:

- Status of the 2007 Information Strategy five priority programs (Sections 3-4);
- Completion, closure or transfer of Information Strategy programs (Section 3);
- Enhancement, extension or modification of Information Strategy programs from the September 2007 base document (Section 4);
- Ongoing work program for 2009 (Section 5); and
- Additional work program (Section 6).

Context

The role of the Australian Commission on Safety and Quality in Health Care (the Commission) includes the responsibilities to:

- Disseminate knowledge and advocate for safety and quality;
- Report publicly on the state of safety and quality including performance against national standards;
- Recommend national data sets for safety and quality, working within current multilateral governmental arrangements for data development, standards, collection and reporting; and
- Provide strategic advice to Health Ministers on best practice thinking to drive quality improvement, including implementation of strategies.

This document, *Information Strategy Work Plan 2009-2010* builds on the Commission's *Information Strategy*¹, issued and endorsed in September 2007. Of particular interest is the strategic element of how the Commission reports on the state of safety and quality in health care. Some of the work has matured and some other programs are being re-considered. New areas of work that have emerged from the Information Strategy programs are outlined in Section 3 of this document.

The revised Information Strategy will build around the original four work streams:

1. Supporting Quality Improvement;
2. Supporting Regulatory Functions and Organisations;
3. National and International Benchmarking; and
4. Improving National Information Infrastructure.

Five priority programs were identified and initiated in 2007. They were:

- Project 1.1 Improving and sharing incident information
- Project 1.2 Information for quality maternity care
- Project 1.3 Australian clinical quality registries
- Project 3.1 National indicators
- Project 4.1 National data sets and standards

¹ A "pocket version" of the Information Strategy is reproduced in Appendix A. The complete *Information Strategy September 2007* is available online at:
<http://www.safetyandquality.gov.au/internet/safety/publishing.nsf/Content/CommissionPubs>

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The next phase of the Information Strategy hinges on a detailed articulation of the Commission's way forward in the area of reporting measures of safety and quality, which is dependent on data standards and data development. Three pieces of work will inform the Commission's approach to reporting nationally on the state of safety and quality in health care:

- The *National Strategic Framework for improving safety and quality in health care*;
- A discussion paper titled *National strategy for reporting on safety and quality in health care*; and
- A commissioned paper titled *Options for data collection and reporting on safety and quality*.

The E-Health agenda sits alongside these documents. The main E-Health focus of the Commission's Information Strategy will continue to be:

- Optimising secondary use of clinical and service information from the E-Health work program; and
- Optimising safety and quality within E-Health clinical information system initiatives.

Summary

This work plan outlines the developments that have taken place from the 2007 Information Strategy to what will be the 2009 Information Strategy. Sections 5 and 6 of the work plan will form the basis for the 2009 Information Strategy. The ongoing and additional work program for 2009 and beyond are summarised below.

Ongoing Work Program:

- Project 1.1 Improving and sharing incident information
- Project 1.3 Australian Clinical Quality Registries
- Project 2.1 Improved information for medication, device and vaccine safety
- Project 3.1 National Safety and Quality Indicators
- Project 4.1 Datasets and standards
- Project 4.4 Safety and Quality in E-Health - Watching brief

Additional Work Program:

- National report on safety and quality in health care 2009
- National mortality measurement forum
- Options paper - data collection and reporting on safety and quality
- Healthcare associated infection (HAI) surveillance – data standards
- Safety and quality in E-Health
- Health Technology Assessment
- Safe ePrescribing in Hospitals
- Quality of health care surveys
- Cost of Healthcare-associated Diagnoses (CHADx)

2. Background Information

The Information Strategy was released in September 2007 and has since provided the direction for the Information Strategy program. The following gives a brief overview about the original structure and contents of the Information Strategy so as to provide context for this work plan.

Four work streams were developed with reference to the understanding of the role of information in health as described in Paterson review. They were intended to be viewed as interrelated not only with each other but also with other safety and quality initiatives internal and external to the Commission. The work streams delineated in the 2007 Information Strategy were:

- Work stream 1: Supporting Quality Improvement
- Work stream 2: Supporting Regulatory Functions and Organisations
- Work stream 3: National and International Benchmarking
- Work stream 4: Improving National Information Infrastructure

These work streams are still relevant for guiding current work and are used to demonstrate where the 2009 additional work programs (Section 6) figure in the broader scope of the Information Strategy.

The projects in the 2007 Information Strategy were also divided by these work streams, as listed below:

Work stream 1: Supporting Quality Improvement

- Project 1.1 Improving and sharing incident information
- Project 1.2 Information for quality maternity care
- Project 1.3 Australian clinical quality registries
- Project 1.4 Primary care information — using and improving what we have

Work stream 2: Supporting Regulatory Functions and Organisations

- Project 2.1 Improved information for medication, device and vaccine safety
- Project 2.2 Watching briefs on key related developments

Work stream 3: National and International Benchmarking

- Project 3.1 National indicators

Work stream 4: Improving National Information Infrastructure

- Project 4.1 National data sets and standards
- Project 4.2 Best-practice statistical methodology
- Project 4.3 Data linkage and reconciliation
- Project 4.4 Safety and quality and E-Health — watching brief

The 2007 Information Strategy described itself as a working document and, as such, is now under review (section 3).

3. Review Process

In September 2008, a review process was initiated to revise the status of the Information Strategy. The steps of the review process are:

- A Round Table with Commission Program Managers (September 2008);
- Information Strategy team planning session (October 2008);
- Delivery of the three papers referred to in the Executive Summary – the *National Strategic Framework for improving Safety and Quality*, *Reporting on safety and quality*, and, *Options for data collection and reporting on safety and quality* (first quarter 2009);
- Information Strategy Committee face-to-face planning and prioritising (March 2009); and
- Issue of Information Strategy 2009.

Program Managers Round Table September 2008

Commission Program Managers were invited to an Information Strategy Round Table on September 8, 2008. Program Managers were asked to consider:

- *Gaps and opportunities in use of national data to support their program, through monitoring and safety and quality improvement;*
- *Needs for technical and E-Health standards to support standardised implementation; and*
- *Priority areas for development of indicators and information standards*
- *Opportunities for Information Strategy to support innovation.*

The outcomes included:

- Decision to commission a paper to scope the benefits and implications of the Commission managing safety and quality data collections title (See Section 6 – *Options paper on data collection and reporting on safety and quality*);
- Broad definition of the scope and shape of the *2009 National Report on Safety and Quality in Health Care*;
- Consideration of the following issues to inform reporting on safety and quality in Australian health care and for incorporation into the 2009 National Report:
 - Analysis of medical indemnity claims
 - Analysis of health care complaints
- A proposal to scope a paper for AHMAC and AHMC to improve screening and post-implementation assessment of new health technologies.

Information Strategy Planning Day October 2008

The Information Strategy team convened on October 3, 2008 to:

- Review progress on the 2007 Information Strategy;
- Outline the work program for 2009 and 2010; and
- Identify strategic and conceptual areas for development as well as resource implications.

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Information Strategy Committee priority

The Information Strategy Committee reviewed and commented on the draft Work Plan in November 2008, and endorsed it in March 2009.

Indicative Timeline

The following timeline outlines the achievements and goals of the Information Strategy's new work plan and *Information Strategy 2009* document from October 2008 to May 2009.

Table 1 – Indicative timeline – Information Strategy

Timeframe	Activity
October 2008	Draft Information Strategy Work Plan 2009
November 2008	Commission internal review: Executive, Program Manager, Senior Medical Advisor, and Commission Sponsor
November 2008	Circulate Information Strategy Work Plan 2009 as Out of Session draft paper to Information Strategy Committee (ISC)
December 2008	Feedback from ISC and Commission 2009/2010 work plan and budget discussions Develop budget and resource plan 2009/2010
March 2009	Information Strategy Committee Meeting ENDORSED
April – May 2009	<i>Information Strategy</i> Work plan 2009-2010 published to website.

4. Status of Information Strategy Initiatives

The following section details the status of each of the Information Strategy initiatives, referencing the Strategy's Work Streams:

Work Stream 1 – Supporting Quality Improvement

Work Stream 2 – Supporting Regulatory Functions and Organisations

Work Stream 3 – National and International Benchmarking

Work Stream 4 – Improving National Information Infrastructure

Table 2 – Status of Priority Information Strategy programs

Priority program	Status
Project 1.1 Improving and sharing incident information	First deliverable due March 2009
Project 1.2 Information for quality maternity care	Transferred
Project 1.3 Australian clinical quality registries	Ongoing
Project 3.1 National indicators	Ongoing
Project 4.1 National data sets and standards	Ongoing

The status of the other Information Strategy programs is outlined below.

Table 3 – Status of other Information Strategy programs

Information Strategy program	Status
Project 1.4 Primary Care Information	Integrate into 3.1
Project 2.1 Improved information for medication, device and vaccine safety	Ongoing
Project 2.2 Watching briefs on key related developments	Discontinued
Project 4.2 Best practice statistical methodology	Integrate into 3.1
Project 4.3 Data linkage and reconciliation	
Project 4.4 Safety and quality in E-Health	Ongoing

It is proposed that projects 4.2 (*Best practice statistical methodology*) and 4.3 (*Data linkage and reconciliation*) no longer be identified and managed as discrete projects. Instead, these elements (linkage and methodology) will be applied within the National Indicators Project 3.1 where pertinent. For example,

- specific recommendation on use of **data linkage** will be made with reference to Mortality rates (*linked 30-day mortality* as a refinement of in-hospital mortality rates);
- specific statistical techniques will be recommended for given indicators; Hospital Standardised Mortality Ratios

Project 1.4 Primary care information

Work Stream 1 - Supporting Quality Improvement

There is a paucity of centrally collated primary care information amenable for use to monitor and improve safety and quality, when compared with clinical and administrative data sources from hospital admissions.

The Australian Institute of Health and Welfare (AIHW) issued for comment the paper *Towards indicators of safety and quality in health care: A focus on primary care*. This paper proposes a set of indicators to support quality improvement in primary care and was circulated for comment in November 2008 as part of project 3.1 (National Indicators).

The AIHW has released its report on primary care data sources², and a number of agencies are developing indicators to support quality improvement in primary care, particularly general practice. It is essential that indicator development projects are engaging national processes, in part to ensure that state system development and collection costs can be ascertained on a consistent basis.

In this context, the Commission's Primary Care Committee may dedicate time to indicator and data review and development, to inform national processes for primary care data development, and support quality and safety analyses and audit initiatives.

A range of organisations (National Prescribing Service, the RACGP, Divisions of General Practice, the Improve Foundation) are working to leverage general practice desktop information to establish audit (self-audit or Divisional peer review) and further quality improvement programs. As national information standards mature, these initiatives are likely to bear fruit and enable an extract-audit-analyse-feedback cycle for general practice quality improvement.

Work to understand and improve non-general practice primary care data for quality and safety purposes, however, is in its infancy. These areas include community nursing, domiciliary palliative care, ambulatory and community-based physiotherapy and aged care, and a range of other services delivered extramurally or from health care facilities.

STATUS: Given the range of activities in the area of primary care information referred to, the Information Strategy will address Primary Care Information within its focus on the National Indicators project (3.1), rather than develop it as a separate work program.

² Australian Institute of Health and Welfare, Review and evaluation of Australian information about primary care: A focus on general practice. Cat no. HWI 103 Canberra AIHW

Project 4.2 Best practice statistical methodology

Work Stream 4 - Improving National Information Infrastructure

The original purpose of 4.2 the *Best practice statistical methodology* project was:
*To enable the Commission to recommend an appropriate strategy
to promote optimal use of data to improve health safety and quality*

It referred to plans for systematic scoping to include:

- An overview of the major analytical methods in use in the safety and quality field, in research, sample studies, surveys and administrative data collections, including the use of statistical process control charts;
- An investigation of the existence of appropriate collected resource materials or other authoritative resource 'hubs' (for example, web-based) relevant to statistical analysts in the field;
- The development of options for a 'data network', possibly web-based; and
- Consideration of the need for professional development, in terms of e-learning, tertiary education or on-the-job training.

STATUS: Further work on statistical methodologies will be deferred until options for reporting on the state of safety and quality are completed.

Project 4.3 Data linkage and reconciliation

Work Stream 3 – National and International Benchmarking
Work Stream 4 – Improving National Information Infrastructure

A proposal regarding data linkage and indicators of safety and quality was put to the Information Strategy Committee in September 2008. The Committee's advice was to reconsider data linkage projects in 2009 once the National Health Information Regulatory Framework (NHIRF) has addressed this area.

Data linkage and reconciliation will not be addressed as a discrete program, but addressed as part of work on national indicators, secondary use of E-Health data, and to answer specific safety and quality questions.

Supplementary note:

Jurisdictions have established or are establishing data linkage units, and work is proceeding through specific and overarching Ethics Committee approvals. It is anticipated that the National Health Information Regulatory Framework (NHIRF) will provide greater clarification on routine health data linkage for quality improvement.

A number of existing and endorsed process and outcome measures of quality and safety would be more meaningful with ongoing data linkage. They include:

- 30-day mortality for a range of procedures and conditions
- Unplanned readmission to hospital after all or a specific set of procedures and conditions

Once an agreed regulatory framework is clear, the benefits would include:

- Commission research, including ethics approval through engagement of custodians of the respective data collections, to generate the linked data sets to establish these measures in one or several jurisdictions; and
- Compare the outcomes with currently available indicators (eg, in-hospital mortality rates and unplanned readmission to the original hospital of treatment) to assess the utility of indicators derived from linked data.

Work of this nature will be considered once clear regulatory processes are established.

5. Ongoing Work Program 2009

The ongoing work program includes the projects identified above in the tables indicating the current status of programs. This section describes the current trajectory of each of the areas of work from the 2007 Information Strategy that will continue in 2009.

Project 1.1 Improving and sharing incident information

<i>Work Stream 1 – Supporting Quality Improvement</i>

The objectives of this project are to:

- Consider the merits and potential for improving and sharing national information on clinical incidents, specifically:
 - whether there is value in harmonising the data items and definitions in clinical incident reporting systems;
 - whether there is value in national collation of clinical incident reports;
- Examine the potential for a number of information sources, including administrative data, incident reporting systems, and shared learnings from root cause analyses, to provide meaningful analysis of clinical incidents; and
- Determine the most cost effective way forward nationally, to ensure that information on clinical incidents is most effectively gathered and used to enhance the safety and quality of health systems.

The Australian Patient Safety Foundation was engaged to conduct a thematic analysis of a set of reports from one jurisdiction's Incident Monitoring and Management System (NSW). Key findings included:

- A lack of detail in the narratives limited the analysis and interpretation of these patient safety incidents.
- Machine learning can be used to automatically identify incidents using free-text narratives. Automatic classification can significantly improve the efficiency of identifying specific types of incidents from within the population of thousands of incidents stored in incident reporting databases.
- The number of principal natural categories – the manifestation of the failure in its clinical context – reaches saturation with analysis of between 300 and 400 incidents. A substantial number of categories are captured with analysis of 200 incidents, particularly for clinical management incidents, which were more uniform in nature.

That report has been received, and will inform future approaches to use of incident information.

In addition,

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- the Commission convened a national workshop on medical devices March 26, 2009, and
- jurisdictional safety and quality leaders met on March 27 to discuss use and classification of incident information, and other issues arising from existing jurisdictional approaches to incident classification.

Project 1.3 Australian Clinical Quality Registries

<i>Work Stream 1 - Supporting Quality Improvement</i>

The Clinical Quality Improvement Registries project has engaged six registries (see below) through issue of a public tender to test and validate the operating and technical standards developed by the NHMRC Centre for Research and Evaluation of Patient Safety (CRE-PS) at Monash University, and the National E-Health Transition Authority (NEHTA).

- Hip Fracture Registry, Flinders University, Musculoskeletal Research Group
- National Cardiac Procedures Registry, Monash University and the Australian Society of Cardiothoracic Surgeons
- Australasian Rehabilitation Outcomes Centre, University of Wollongong
- National Breast Cancer Audit, Royal Australasian College of Surgeons
- Australian Stroke Clinical Registry, National Stroke Research Institute, Stroke Foundation and other entities
- Bi-national Burns Registry, Monash University and the Australian and New Zealand Burn Association

The evaluation of the program will be conducted over calendar year 2009 by an independent consultancy engaged following a Request for Quote through the Commission's Health Information Systems panel contract.

Table 4 – Indicative timeline – Clinical Quality Registries Project

Timeframe	Activity
November 2007	First meeting clinical quality registries advisory group
May 2008	Draft operating and technical standards issued
August 2008	Tender issued for testing and validating of draft operating and technical standards
Sept–Oct 2008	Evaluation of tenders and contract negotiations
November 2008	Announcement of registries contracted to test and validate
November 2008	Issue of contract for project evaluation
November 2008	Revised operating and technical standards posted
November 2009	Final reports from registries
December 2009	Final evaluation report
January 2010	3 rd revision of operating and technical standards Recommendations to Commission
March 2010	Recommendations on national approach to clinical quality registries to AHMAC/AHMC

Project 2.1 Improved information for medication, device and vaccine safety

Work Stream 2 – Supporting Regulatory Functions and Organisations

Following receipt of the *Consultancy Regarding a National Medical Device Tracking System* report, the Commission convened a teleconference involving the Therapeutic Goods Administration (TGA), National E-Health Transition Authority (NEHTA), Medicare Australia, and the Australian Institute of Health and Welfare (AIHW). The Department of Health and Ageing (DoHA) was represented by the Chief Medical Officer. The participants concurred that the issue is of some urgency and a way forward has to be found.

An interagency Working Group comprised of personnel from these agencies was convened to develop an AHMAC paper. The scope of a recall system and the necessary information collection, collation and action required was examined by the working group.

The group drafted the proposal *Towards an implantable device recall system*, proposing the development of a National Device Register to be built and operated by Medicare Australia. This proposal is subject to review by the Chief Executives of the Working Group agencies. This will be followed by review by jurisdictions and private hospitals for consideration and agreement, prior to the submission of a paper to AHMAC.

The expected outcome is the provision of a clear proposal via the Commission to Health Ministers on immediate action for a recall system for high-risk implantable devices, with a view to ensuring any such system is scalable and compatible with E-Health activities and future information availability. Governance arrangements for collection and management of device and personal identifying information will be clearly articulated.

In the area of medical devices, the Commission convened the first national workshop on medical device safety on March 26, 2009.

Project 3.1 National Safety and Quality Indicators

Work Stream 3 - National and International Benchmarking

The National Indicators project is being conducted by the Safety and Quality Unit of the AIHW. A schedule to the Memorandum of Understanding between the Department of Health and Ageing (for the Commission) and the AIHW was signed on 29 November 2007 to complete this work. The timeframe of the project is November 2007 to March 2009.

Excerpt from the schedule:

*“The purpose of the project is to systematically identify and develop information which can be used to monitor Australia’s health performance in safety and quality in health care for **intra-jurisdictional, inter-jurisdictional and international** benchmarking and reporting purposes. The objectives are to:*

- *Recommend indicators for national reporting on safety and quality*
- *Enable the Commission to ‘report publicly on the state of safety and quality’, and*
- *Enable the Commission to advise Ministers on whether existing reporting processes and collections should be continued, enhanced, or replaced.*

*In addition to aligning indicators with national data standards, appropriate indicators will also be suitable for use in high level reporting, **have meaning at a clinical and health service level** and facilitate international benchmarking.*

Concurrent activity:

- In April 2008, the National Health and Hospitals Reform Commission released *Beyond the blame game: Accountability and performance benchmarks for the next Australian Health Care Agreements*³ which describes specific benchmarks for a range of measures of performance, including safety and quality. However, in this year’s *A Healthier Future for all Australians*⁴, the NHHRC amended that view and recommended that a permanent, independent national body – building on the Australian Commission on Safety and Quality in Health Care – identifies and defines a set of national indicators that can be used to monitor the safety and quality of care.
- In June 2008, the COAG Reform Group announced the development of a suite of healthcare performance indicators. In February 2009 these were announced and incorporated into the National Healthcare Agreement⁵ (NHCAs).

³ See <http://www.nhhrc.org.au/internet/nhhrc/publishing.nsf/Content/commission-11p>

⁴ See <http://www.nhhrc.org.au/internet/nhhrc/publishing.nsf/Content/interim-report-december-2008>

⁵ See http://www.coag.gov.au/intergov_agreements/federal_financial_relations/index.cfm

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The *Towards National Indicators of Safety and Quality in Health Care* discussion paper was issued by AIHW in November 2008. The paper included a draft suite of 58 indicators and supporting contextual information on indicator purpose and development. Indicators addressing structure, process and outcomes were included, and each indicator addressed safety or quality in some way. In addition, reports on the three support projects were issued by AIHW and these covered:

- **OECD Patient Safety Indicators** - an analysis of patient safety indicators developed by the Organisation for Economic Cooperation and Development (OECD), assessing their suitability for national and international reporting on patient safety using Australian data;
- **Measuring and Reporting Mortality** - a study to assess the feasibility of national indicators for in-hospital mortality using the routinely collected admitted patient data; and
- **A Focus on Primary Care** - national indicators relating to primary health care which have been proposed, including information on the use of each indicator as well as sources of data and an assessment of the quality of data.

A wide range of government, not-for-profit, expert and clinical expert groups were invited to comment on the indicators. The National Indicators Advisory Group (NIAG) also reviewed the AIHW safety and quality indicators work, on December 16, 2008. Some indicators from the consultation paper were discarded from the list as a result of both feedback and the NIAG review. It was agreed to endorse the safety and quality indicators identified in the NHCA set (See Appendix C), and to focus on refining a fuller, complementary set of safety and quality indicators, to be proposed to Health Ministers in late 2009.

The AIHW will deliver its final report in May 2009. This will include quantitative data on some of the endorsed safety and quality indicators. Indicators will fall into the following categories:

- Indicators for which data is available and which can be reported from existing data collections;
- Indicators which can be generated for some sectors within the Australian healthcare system;
- Indicators for which some work needs to be done to generate data from existing sources;
- Indicators for which only small samples of data are available; and
- Indicators that are endorsed as meaningful or useful measures of safety and quality, but for which data is not yet available.

Areas for clarification in the next phase include:

- A more explicit statement of the *purpose and form* of indicator reporting, articulating how the reporting of indicators can drive improvements in safety and quality;
- Identifying the agencies responsible for *generating* agreed indicators;
- Developing appropriate forms of presentation, and levels of disaggregation, of the agreed indicators; and
- Resources for further data development.

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The Commission's focus will remain on:

- National reporting on the state of safety and quality; and
- Identifying how to use reporting to improve safety and quality.

Once the final report from the AIHW recommending national indicators is received:

- Commission staff will prepare its recommended approach on national indicators on safety and quality in health care;
- The Commission's Private Hospital Sector, Primary Care and Inter-Jurisdictional Committees will review this proposal;
- Commissioners will review and endorse the recommendations in the form of an AHMAC paper; and
- The Commission will provide the paper to AHMAC in the second half of 2009.

Table 5 – Indicative timeline – National Indicators Project

Timeframe	Activity
February – April 2008	Members of the AIHW Safety and Quality Unit conducted stakeholder consultations to engage people from various organisations around Australia
March 2008	National Indicator Advisory Group (NIAG) established
April – July 2008	The AIHW conducted an environmental scan of Australian and international performance, safety, quality, and clinical indicators
May 2008	Second NIAG meeting
July 2008	Draft literature review Hospital Standardised Mortality Rates (HSMR)
July 2008	Draft paper <i>Procedure volume</i>
July 2008	Draft national suite of safety and quality indicators
July 2008	Draft OECD indicators paper
July 2008	NIAG review of draft indicator suite and sub-project papers
October 2008	Revised HSMR report Discussion paper national suite of indicators Primary care indicators report
November 2008	Targeted consultation – national indicators
December 2008	NIAG review of indicators and collated comments; assessment of indicators for usefulness
May 2009	Final report from AIHW on National Indicators on Safety and Quality
April – June 2009	Preparation of paper on national indicators of safety and quality in health care, for presentation to AHMAC in the second half of the year, informed and reviewed by Inter-Jurisdictional, Private Hospital Sector and Primary Care Committees.

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Project 4.1 Datasets and standards

The purpose of the project is to improve national capacity to measure and monitor safety and quality in health care by enhancing data quality and consistency.

The aim of this project is to improve the quality and consistency of national data relevant to safety and quality. It will enable the Commission to 'recommend national data sets for safety and quality, working within current multilateral governmental arrangements for data development, standards, collection and reporting'.

Project deliverables are:

- A structured inventory of existing data sources of national significance relevant to safety and quality in health care, published as a web resource;
- A framework or information model for safety and quality data sets and standards to enable information needs and data sources to be mapped in a logical structured way, published as a web resource; and
- A proposal for a collaborative, ongoing process for identifying and developing new data sets and standards relevant to safety and quality in health care.

The National Data Sets and Standards Project is being conducted by the AIHW. A contract was signed with AIHW on 29 November 2007, and the discussion paper - *Towards safety and quality information infrastructure for Australia 2009* - was received in January 2009.

Table 6 – Indicative timeline – National data sets and standards project

Timeframe	Activity
August 2008	Completed assessment and analysis of identified data sources
August 2008	Feedback from AIHW unit heads and collaborating units
October 2008	Completion of criteria for each data source
July-December 2008	Contact with data custodians for information on data sources
January 2009	Completed development of website
February 2009	Receipt of AIHW report on the framework and process for development of national safety and quality data sets and standards.
March 2009	Review of the AIHW proposal by Information Strategy Committee and Commission.

Discussion on integration of safety and quality data standards into the NHISSC processes, and the national framework for improving safety and quality in health care, is ongoing. It is likely that the Commission will recommend application of the existing national health information processes for dataset and data standard development, and work through its Committees and stakeholders to promote and facilitate adherence to that process.

Project 4.4 Safety and Quality in E-Health - Watching brief

The main elements of the E-Health agenda where the Commission has a role are:

- The secondary use of information agenda – optimising the analyses of safety and quality data available from clinical systems and the IEHR, to further drive improvements in safety and quality; and
- Optimising safety and quality within the transition to clinical systems rollout and integration, including elements of the Individual Electronic Health Record (IEHR), discharge summary and medications management programs.

The Commission Information Strategy staff have been actively engaged in the national E-Health agenda, and:

- Have reviewed and informed the National E-Health Information Principles Committee (NEHIPC) E-Health Strategy proposals and recommendations for AHMAC/AHMC;
- Participate in the NEHTA Stakeholder Reference Forum series;
- Are members of the Medication, Continuity of Care, Diagnostics and Patient Identification Work Package Expert Reference Groups;
- Participated in the AIHW/NEHTA *E-Health and Statistics and Analysis workshop series*;
- Engaged NEHTA and the Primary Care Committee to review the electronic discharge summary standard for useability and appropriateness;
- Engaged NEHTA, jurisdictional CIOs and NPS with a view to establishing the collaborative development of a *Safe ePrescribing for Hospitals* project (See Section 3);
- Led the High-Risk Implantable Devices Working Group.

The relationship between the Commission and the agencies developing and effecting Australia's E-Health strategy has developed. The Commission will continue to monitor initiatives in this area, while strengthening its active role in embedding safety and quality within the E-Health agenda.

Given the breadth, scope and complexity of Australia's E-Health agenda and work program, it is preferable the Commission's limited resources be focused on adding value within a small number of projects, while maintaining an advisory and watching brief on E-Health as a whole. (See *Safety and Quality in E-Health*, below)

6. Additional work program

The following additional work program elements are under way or will commence in 2009. These projects are all based within ongoing work streams of the Information Strategy, as described in Section 2.

- National Report on Safety and Quality in Health Care 2009
- Developing a National Strategy for Reporting on Safety and Quality in Health
- Options paper – data collection and management for reporting on safety and quality
- HAI surveillance data collection
- Safety and quality in the national E-Health program
- Health technology assessment
- National workshop on mortality measurement
- Safe ePrescribing in hospitals
- Quality of Health Care surveys
- Cost of healthcare-associated diagnoses (CHADx)

Some of this work comprises an extension of existing Information Strategy programs. For example - the mortality measures workshop builds on the *3.1 – National Indicators project*.

Other proposals comprise work done to support existing Commission work programs. For instance, the Safe ePrescribing initiative is part of the *Medications Program*; HAI surveillance data collection standards development supports the *Health Care Associated Infection Program*.

INFORMATION STRATEGY WORK PLAN 2009

National report on safety and quality in health care 2009

Work Stream 1 - Supporting Quality Improvement
Work Stream 3 - National and International Benchmarking

Overview

The Commission is required to report annually on the state of safety and quality in health care. The 2009 National Report will build on the 2008 Report, *Windows into Safety and Quality in Health Care 2008*, and is expected to:

- Include more health care data and use of indicators; and
- Identify future directions for reporting.

Purpose

To report publicly on the state of safety and quality in health care, with a view to supporting and driving improvements in safety and quality.

Principles

- The 2009 national report will build upon the 2008 national report. It will be developed utilising a similar structure, layout and approach and target the same audience (i.e. educated lay readers as well as health professionals and managers);
- We will ensure that the material to be presented is new material and is not the re-packaging of previously announced or released material;
- Development of individual chapters is to be led by Commission staff. External partners, co-authors, etc. will be considered where beneficial; and
- Publication is scheduled for late 2009 – which could allow for integration of further material, e.g. Commonwealth Fund data, sentinel events data for 07/08 and 08/09, etc.

Expected outcome

The publication of the 2009 National report on Safety and Quality in Health Care.

Table 7 – Indicative timeline – National Report 2009

Timeframe	Activity
November 2008	<ul style="list-style-type: none"> • Editorial Committee established • High level identification of chapter and contents • External partners identified
November – December 2008	<ul style="list-style-type: none"> • Scope of work and approaches to external partners
January – July 2009	<ul style="list-style-type: none"> • Development of chapters • Development, capture and review of data and reports
August 2009	<ul style="list-style-type: none"> • Draft report for Commission review
September 2009	<ul style="list-style-type: none"> • Editing and layout • Proofing
October – November 2009	<ul style="list-style-type: none"> • Launch and publication

National mortality measurement forum

Work Stream 3 - National and International Benchmarking

Overview

Data is routinely available for generating in-hospital and health care amenable mortality. A report on hospital standardised mortality rates (HSMR) work was developed as a sub-project of 3.1 – National Indicators. The NSW Clinical Excellence Commission (CEC) then approached the Commission to work together in the area of reviewing approaches to hospital standardised mortality ratios (HSMRs) and healthcare amenable, age-standardised mortality rates. HSMRs are published in some countries as a tool for driving quality and safety improvement in hospitals⁶. Age-standardised, health care amenable mortality rates have been used to compare and rank countries health system performance⁷, and track changes over time in NSW⁸. In addition:

- Queensland Health use five specific in-hospital mortality rates as Variable Life-Adjusted Displays (VLADs).
- *Death in low mortality DRGs* is also likely to be proposed as a national indicator of safety and quality in health care

The Commission and the CEC NSW convened a national forum on *Use of Mortality Measures to Monitor and Improve Health Care* on March 19, 2009. The forum brought together national and international experts, jurisdictional and private sector representatives and health services researchers to identify a consolidated national approach to leverage existing mortality data.

Achieved Outcomes

- A one-day national forum March 19, 2009 *Measuring Mortality*; followed by a technical and statistical workshop (March 20, 2009) which identified methodological and data issues, and barriers arising from recommendations of the Measuring Mortality workshop.
- Consensus from meeting to support the use of HSMRs as one of a suite of measures to support safety and quality improvement in hospitals.
- Agreement to support healthcare amenable mortality as a whole-of-system indicator to monitor Australia's performance internationally and over time, and to identify significant variance by region or disease group.

Expected outcomes

- An agreed approach to reporting and interpreting HSMRs to improve health care, together with a *model and process* for responding to significant variations, and identification of areas for refinement. This work will be managed through the National Indicators process (see Project 3.1).

⁶ See for example, Canada's public report HSMR: A New Approach for Measuring Hospital Mortality Trends in Canada 2007 ISBN 978-1-55465-184-9 (PDF)

⁷ Nolte E, McKee M, Measuring The Health Of Nations: Updating An Earlier Analysis Health Affairs 27:1 Jan/Feb 2008, pp.58-71

⁸ See NSW Chief Health Officer's report, http://www.health.nsw.gov.au/public-health/chorep/ses/ses_lomidhiavodth.htm

INFORMATION STRATEGY WORK PLAN 2009

- Establishment of a Technical Working Group to support and oversee the national reporting of healthcare amenable mortality rates (expressed in the National Health Care Agreements⁹ as *Potentially Avoidable Deaths*)

Table 8 – Indicative timeline – Mortality Measurement

Timeframe	Activity
November 2008	<ul style="list-style-type: none"> • AIHW paper on HSMRs released • Partnership with NSW Clinical Excellence Commission • Draft agenda, identification of national and international speakers.
December 2008	<ul style="list-style-type: none"> • Partners identified
19-20 March 2009	<ul style="list-style-type: none"> • National forum, statistical and technical workshop
April – June 2009	<ul style="list-style-type: none"> • Review of outcomes by Information Strategy Committee, Commissions and jurisdictions
May 2009	<ul style="list-style-type: none"> • Paper on Use of mortality measurement to improve safety and quality in health care to inform National Indicators proposal • Establishment of Technical Working Group to support healthcare amenable mortality reporting, and HSMR technical issue resolution
Second half 2009	<ul style="list-style-type: none"> • Formal proposal to Health Ministers of HSMR measurement as part of National Indicators process

⁹ see Council of Australian Government - Intergovernmental Agreement on Federal Financial Relations, Schedule F – National Healthcare Agreement, at http://www.coag.gov.au/intergov_agreements/federal_financial_relations/index.cfm

INFORMATION STRATEGY WORK PLAN 2009

Options paper - data collection and reporting on safety and quality

Work Stream 3 - National and International Benchmarking

Overview

The Commission requires the preparation of an options paper to present and analyse the benefits, risks, implications, barriers and resource requirements for central, outsourced, disseminated and other approaches to management of safety and quality data collections.

Purpose

The intent is to provide clarity and understand benefits, barriers and implications of data collection management by the Commission to report publicly on the state of safety and quality. An options paper will look at the benefits and implications of aggregation of granular data centrally, in comparison with a more simple reporting approach of outputs from states and private sector providers. It will include

- The benefits and burden of central data collection or collation;
- Structural and resource implications;
- Arms-length, and outsourced approaches; and
- Collation of reports from states and private providers.

It is important to clearly define the Commission's role and capacity in the area of reporting, as well as costs, benefits and barriers. The risks of overlap and duplication with existing jurisdictions' work, and the issues of alignment (or otherwise) of standards, will be explored. It is also important to assess the capacity and appropriateness of existing reporting agencies fulfilling this role for the Commission.

Outcomes

An options paper¹⁰ has been prepared to inform the Commission, the Review of the Commission, and deliberations on a permanent national safety and quality body.

Table 9 – Indicative timeline – options paper

Timeframe	Activity
November 2008	<ul style="list-style-type: none">• Scoping paper• Issue of RFQ
December 2008	<ul style="list-style-type: none">• evaluation of RFQ responses
January 2009	<ul style="list-style-type: none">• Contract issued• Preliminary meetings
February 2009	<ul style="list-style-type: none">• Environmental scan and expert consultation
March 2009	<ul style="list-style-type: none">• Draft reviewed by Information Strategy Committee
May 2009	<ul style="list-style-type: none">• Final paper

¹⁰ See *Options paper on the Management of Safety and Quality Data Collection*, prepared by Health Policy Analysis Pty Ltd, April 2009

INFORMATION STRATEGY WORK PLAN 2009

Healthcare associated infection (HAI) surveillance – data standards

Work Stream 1 – Supporting Quality Improvement
Work Stream 3 - National and International Benchmarking

Overview

Health Ministers endorsed a national program of healthcare associated infection surveillance (HAI) in December 2008. The Information Strategy will support the HAI program through development of the data dictionary for *Staphylococcus aureus* bacteraemia and *Clostridium difficile* surveillance datasets, and passage of the surveillance data standards through the NHISSC and their lodgement on the AIHW METeOR¹¹ program.

Purpose

- To document the data set and standard for HAI surveillance
- To promulgate HAI surveillance data standards through NHISSC and METeOR

Expected outcomes

- An HAI surveillance data dictionary with standards and domains in the national standard format. The first datasets will address *Staphylococcus bacteraemia* and *Clostridium difficile*
- A template for developing further HAI datasets, including Ventilator-acquired pneumonia (VAP), respiratory syncytial virus, some surgical site infections (SSIs), and dialysis- and ICU-acquired infections.
- Endorsement of the HAI surveillance dataset through NHISSC and METeOR

Comment

Consideration will be given to working through the Royal College of Pathologists of Australasia (RCPA) and NEHTA on structured requesting and reporting standards for healthcare-associated infections.

Table 10 – Indicative timeline – data standards for HAI surveillance

Timeframe	Activity
November 2008	<ul style="list-style-type: none"> • Scoping
January 2009	<ul style="list-style-type: none"> • Identification of resource to develop the data dictionary
February 2009	<ul style="list-style-type: none"> • Presentation of HAI proposal to NHISSC • Identification of jurisdictional sponsor
April 2009	<ul style="list-style-type: none"> • Consultation and research on dataset; lodgement on METeOR
May 2009	<ul style="list-style-type: none"> • Draft data standards drafting of HAI surveillance data dictionary
June 2009	<ul style="list-style-type: none"> • Review and revision
July 2009	<ul style="list-style-type: none"> • Lodgement of HAI surveillance data standards with NHISSC
TBD 2009	<ul style="list-style-type: none"> • Finalisation in METeOR

¹¹ METeOR is Australia's repository for national data standards for health, housing and community services statistics and information, see <http://meteor.aihw.gov.au/content/index.phtml/itemId/181162>

Safety and quality in E-Health

Work Stream 2 – Supporting Regulatory Functions and Organisations

Overview

Building on the *Watching brief on E-Health* (Section 3, Project 4.4), the Commission will work through the National E-Health and Information Principal Committee of AHMAC, NEHTA, the National Health CIO Forum and other pertinent national bodies to promote the safety and quality agenda within planning and implementation of clinical systems.

Purpose

- To ensure safety and quality are embedded within the national E-Health agenda and rollout of clinical systems;
- To provide expert safety and quality review within specific E-Health initiatives;
- To optimise the secondary uses of electronic health information to improve safety and quality, within the National Health Information Regulatory Framework (NHIRF).

Expected outcomes

- Constructive partnership with NEHTA on the Individual Electronic Health Record (IEHR) work program, with a particular focus on medication safety;
- Coordination of expert clinical review to optimise safety and quality aspects of specific E-Health information standards initiatives, starting with the electronic discharge summary/referral work package (Continuity of Care);
- Improved secondary use of electronic clinical data to analyse and improve safety and quality in health care.

Table 11 – Indicative timeline – Safety and quality in E-Health

Timeframe	Activity
July – December 2008	Commission participation in the NEHTA Stakeholder Reference Forum
September – December 2008	Renewed discussions with NEHTA on clinical and quality/safety review of electronic discharge summary
November 2008	COAG resolution of National E-Health Strategy and IEHR work program
February – March 2009	Safety/quality review of rendered discharge summary sample
Ongoing	Participation via NEHIPC in NEHTA/AIHW secondary use of health information program
Ongoing	Identification of key safety and quality review points in the E-Health work program, via national Work Package reference groups for: <ul style="list-style-type: none"> - Identification and Authentication - Medication - Continuity of Care - Diagnostics

Health Technology Assessment

Work Stream 2 – Supporting Regulatory Functions and Organisations

Overview

The premise of this work is that there is

- No *systematic* requirement for new invasive healthcare procedures to be subject to expert and literature review, notwithstanding ASER-NIPS' rigorous work to evaluate certain technologies in this area; and
- No *systematic* surveillance of new procedures and technologies after implementation, ideally of a cohort of the first x procedures with clearly defined measures of effort, complications and outcomes, enabling both a serious safety assessment and the generation of local evidence and lessons on new procedure efficacy, safety and best-practice implementation lessons.

Routine surveillance should enable more focussed safety assessments, and the generation of local evidence and lessons on new procedure efficacy, safety and best-practice implementation lessons.

Purpose

To recommend a national approach to systematic screening and post-implementation monitoring of new invasive healthcare procedures, building on the ASER-NIPS and TGA/MSAC work.

Note

The Departments of Health & Ageing (DOHA) and Finance and Deregulation announced a national review of Health Technology Assessment December 18, 2008. A call for submission was issued in April 2009. The Commission will provide a submission to the review, and consider the need for a Commission AHMAC paper based on the progress and outcomes of the review.

Expected outcomes

A paper that distils the key issues, constraints and risks in the current situation, and recommends an enhanced national framework and approach to screening and monitoring of new invasive healthcare procedures.

Table 12 – Indicative timeline – Health Technology Assessment

Timeframe	Activity
December 2008	Review literature and issues, including current approach ASER-NIPS, TGA, gaps
March 2009	Terms of Reference and call for submissions, national review of Health Technology Assessment
March – May 2009	Consultation and preparation of submission

Safe ePrescribing in Hospitals

Work Stream 1 - Supporting Quality Improvement

Work Stream 2 – Supporting Regulatory Functions and Organisations

Overview

The Medications Program's National Inpatient Medication Chart (NIMC) embeds best prescribing practice in a format for national uptake that improves patient safety through:

- Consistent use of terms and units;
- A specific approach to warfarin prescribing, "once-only", *prn* and nurse-initiated medication; and
- Research-based look-and-feel that supports safe prescribing.

It is envisaged that National Paediatric, Diabetic and GP Charts will follow, building on similar processes. However, attention is currently on the emergence of prescribing systems that further optimise safety and quality.

There is a need for a comprehensive, best-practice standard set of safe procurement and implementation guidelines for facilities and Areas or states moving toward ePrescribing and medication management. It is assumed and supported that electronic prescribing can improve safety¹² and quality^{13,14}. At the same time, there is potential to increase harm through poorly designed or implemented systems in hospitals^{15,16}.

Part of the risk lies in under-resourced specification and procurement; another risk lies in inadequate implementation planning, risk and change management. Finally, the ePrescribing clinical workforce will need specific and different training to optimise benefits and minimise error.

The Commission's 'space' in this area is neither to fund systems nor to 'pick winners', but to:

- Lead and coordinate improvements in safety and quality;
- Disseminate knowledge and advocate for safety and quality; and

¹² See ARCHI website: Della Fiorentina S, et al, Reduction in Chemotherapy Prescribing Errors through New Chemotherapy Charts, October 2005, http://www.archi.net.au/e-library/awards/baxter05/safety/chemo_prescribing

¹³ Kohn LT, Corrigan JM, Donaldson MS, editors. Committee on Quality of health care in America. To err is human: building a safer health system. Washington DC: National Academy Press; 2000.

¹⁴ Durieux P, Trinquart L, Colombet I, Niès J, Walton RT, Rajeswaran A, Rège Walther M, Harvey E, Burnand B. Computerized advice on drug dosage to improve prescribing practice. *Cochrane Database of Systematic Reviews* 2008, Issue 3. Art. No.: CD002894. DOI: 10.1002/14651858.CD002894.pub2.

¹⁵ Ross Koppel, PhD, Joshua P. Metlay, MD, PhD, Abigail Cohen, PhD, Brian Abaluck, BS, A. Russell Localio, JD, MPH, MS, Stephen E. Kimmel, MD, MSCE, Brian L. Strom, MD, MPH
Role of Computerized Physician Order Entry Systems in Facilitating Medication Errors *JAMA*. 2005;293:1197-1203

¹⁶ Yong Y. Han, Joseph A. Carcillo, Shekhar T. Venkataraman, Robert S.B. Clark, R. Scott Watson, Trung C. Nguyen, Hülya Bayir and Richard A. Orr, Unexpected Increased Mortality After Implementation of a Commercially Sold Computerized Physician Order Entry System *Pediatrics* 2005;116:1506-1512

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- Recommend nationally agreed standards for safety and quality improvement.

Purpose

To propose the collaborative development of best practice guides for safe ePrescribing (procurement, implementation and practice) in hospitals, for consideration by Private Hospital Sector and Inter-jurisdictional Committees, and the Commission.

Expected outcomes

- User requirements and procurement guide for hospital ePrescribing and electronic medication management (EMM) systems;
- Implementation requirements for ePrescribing and EMM in hospitals, including safe ePrescribing and EMM practice; and
- Optimal look-and-feel user interface, building on the learnings of the National Inpatient Medication Chart¹⁷, as well as the standard terms, abbreviations and units¹⁸.

Table 13 – Indicative timeline – Safe ePrescribing in Hospitals

MILESTONE	DATE
Initial discussion with DOHA eHealth branch	16 September 2008
Initial discussion with NPS	6 November 2008
National Health CIO Forum appraised	17 December 2008
ACSQHC consultation – jurisdictions, private hospital sector	January 2009
Partnership agreement finalised NEHTA-ACSQHC	March-April 2009
Formation of Steering Group	April 2009
Issue of Request for Quote	May 2009
Evaluation of responses, contract finalised	June 2009
Deliverable 1 - DRAFT User requirements and procurement guide	September 2009
Deliverable 2 - DRAFT Implementation toolkit	November 2009
Deliverable 3 - DRAFT user interface standard	November 2009
Revision and release comment	November 2009
Review of guidelines (Steering Group)	December 2010
Final document issued	December 2010

¹⁷ More detail on the National Inpatient Medication Chart can be found on the Commission's website at http://www.safetyandquality.gov.au/internet/safety/publishing.nsf/Content/NIMC_001

¹⁸ See Appendix A – National Standardised Terminologies and Abbreviations, also available at [http://www.safetyandquality.gov.au/internet/safety/publishing.nsf/Content/D0DABD9912D44A14CA257516000FDABB/\\$File/18202.pdf](http://www.safetyandquality.gov.au/internet/safety/publishing.nsf/Content/D0DABD9912D44A14CA257516000FDABB/$File/18202.pdf)

Quality of health care surveys

Work Stream 1 - Supporting Quality Improvement
Work Stream 3 - National and International Benchmarking

Purpose

To assess patient experience and perceptions of care providers, dimensions of quality of care.

Overview

Consideration has been given to the feasibility of conducting a national survey of patient experience. The Commonwealth Fund conducts an annual international health policy survey¹⁹. The focus of this survey changes each year according to a regular cycle. The surveys focus on either

- The general population;
- A specific sub-population (such as people with chronic illness); or
- Healthcare providers.

The next survey of general population is not until 2010. In 2009 the Commonwealth Fund is conducting a survey of primary care physicians. The Commission is partnering the Commonwealth Fund on this survey. Specific advantages of partnering with Commonwealth Fund on this survey include:

- Enhancing the Commission's work in primary care;
- Obtaining detailed information about quality of care and practice systems to support quality and safety in primary care not easily obtainable elsewhere;
- Enabling the Commission to report publicly on safety and quality; and
- Participating in a robust and internationally well respected process.

The current draft survey contains questions on many issues of interest to the Commission including:

- Use of electronic medical record systems;
- Sharing of information between providers;
- Tracking errors;
- Coordination of care across different providers and sites;
- Engagement in quality improvement and use of feedback;
- Management of patients with chronic illness;
- How self-management is supported; and
- Use of incentives to promote quality.

To allow meaningful breakdown or comparisons within this sample of differences between providers in urban and rural locations, the Commonwealth Fund has agreed to increase the sample size from 500 to 1000 participants in Australia.

Indicative timeline

To be determined; survey planned for first half of 2009

¹⁹ See <http://www.commonwealthfund.org/Surveys.aspx>

Cost of Healthcare-associated Diagnoses (CHADx)

<p><i>Work Stream 1</i> - Supporting Quality Improvement <i>Work Stream 3</i> - National and International Benchmarking <i>Work Stream 4</i> – National Information Infrastructure</p>
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Purpose

This work is based on the validation of the grouping system to characterise the majority of in-hospital complications to assist in measurement of the economic cost of patient injury or illness. It will enable appropriate prioritisation of patient safety programs through development of a tool for monitoring the impact of patient safety interventions. This will enable use of patient-level cost data to estimate relative economic priorities for hospital inpatient safety efforts.

Overview

Data on patient safety performance is an important tool for use by hospitals and others in reducing the rate of hospital-acquired illness and injury. But prospective collection of such data, or even undertaking retrospective chart review, is very costly. This project was designed to develop a pragmatic method of quantifying the cost of unsafe and poor quality health services to admitted patients in Australian hospitals. UniQuest (at the University of Queensland) has been contracted to undertake this work. As UniQuest noted in its tender proposal:

Economics is the science of scarcity. When resources are used in a particular way, they are not available for use in other ways. When we use scarce healthcare funding to remedy unintended patient injury, these funds cannot be used to treat additional patients or treat the same patients more intensively.

The analysis was able to take advantage of the early adoption in Victoria and QLD of the now nationally agreed “present on admission” flag in administrative data to develop a costing method of national utility. The costing method that has been developed through the ‘Economic Costs of Patient Injury’ research has the potential for both savings and safety improvement, as it could allow hospitals to track both the incidence and costs of hospital acquired diagnoses. This potential cannot be confirmed without piloting.

The Commission submitted an NHMRC partnership proposal with the Flinders and Queensland Universities, health departments in Western Australia, Queensland and the ACT, and BIOGRID, to develop and pilot a tool to use hospital data to improve patient safety.

Indicative cost

The cost of the Commission’s commitment to the project will be determined by the success or otherwise of the NHMRC Partnerships grant application.

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Table 14 – Indicative timeline – CHADx

Timeframe	Activity
At start date	Create user-friendly interface for CHADx
Ongoing	Tracking Safety Improvement at a state level
Ongoing	Tracking Safety Improvement at the hospital level (which includes the phases below)
At start date	Development of baseline measurement processes
3 months from start	Recruitment of intervention and control hospitals
11 months from start	Pilot of CHADx
15 months from start	Sustainability phase
18 months from start	Evaluation phase

APPENDIX A – Information Strategy 2007²⁰

Why an Information Strategy?

Improving safety and quality, in any area of the health system, relies on relevant and reliable evidence. Ministers recognised the nexus between information and safety and quality improvement when they established the Commission, and asked it to undertake key work on national information.

National action requires a strategic and coordinated approach to the development and analysis of relevant information. Australia has many rich sources of health data. The task for the Commission is to:

- Use existing information to best advantage to inform policy directions and evaluate progress;
- Enhance available data where there are important gaps or inconsistencies;
- Support best practice among key practitioners, in terms of data quality, governance and management, analysis and constructive application of results.

The Information Strategy outlines the means by which the Commission will lead and coordinate national improvements to the evidence base for safety and quality.

What are the goals of the Information Strategy?

The Information Strategy aims to provide national leadership in the development, analysis and reporting of information that enhances the safety and quality of health care.

Information relevant to safety and quality can take many forms — for instance, information on adverse events to highlight priority areas for improvement, on clinical outcomes to inform practice improvement, on patterns of medication use to indicate adherence to best practice prescribing patterns. The Strategy embraces all these types of information and spans the spectrum of health care.

The Strategy sets out four high level goals:

1. Support quality improvement of specific areas of clinical practice and the implementation of evidence based practice
2. Improve safety and quality in health care through the better use of information by regulatory organisations and better availability of information to those affected by regulation
3. Support national and international benchmarking by developing summary information capable of monitoring Australia's performance in safety and quality
4. Improve national information infrastructure.

A work program has been developed to achieve each of these four goals. Early consultation with stakeholders has confirmed the direction of the Strategy, and AHMAC's National E-Health Information Management Principal Committee adopted its main components into its strategic plan for 2007–08.

²⁰ Please note this "pocket" version and the full Information Strategy (September 2007) are on the ACSQHC website at: <http://www.safetyandquality.gov.au/internet/safety/publishing.nsf/Content/CommissionPubs>

What will the Information Strategy achieve?

High priority projects already commencing illustrate what the Strategy will achieve:

- National indicators: Ministers requested that the Commission develop a public reporting capacity. While surveys of hospitals have been used in the past to attempt to estimate numbers of adverse events, it is important to develop a national monitoring system based on routinely collected data. This project involves the careful development of and consultation on key high level indicators for public reporting purposes, across the spectrum of care. Regular statistical reports will then inform senior policy makers and the public whether or not Australia's performance is improving and identify areas where action is needed. (*IS Project 3.1*).
- Australian clinical quality registries: The Commission will develop and validate national operating standards for clinical quality registries. Such registries are usually created and governed by clinicians so as to be able to pool data on patterns of care and its outcomes, with the aim of improving their individual and collective clinical practice. This project supports these efforts by creating a model for best practice, including standards for governance, ethics, the use of national data standards, clinical use of information and technical design for key components of registries. The model is being tested and validated in consultation with the field, and via funding a small number of registries to test the standards by implementing them. (*IS Project 1.3*).
- Improving and sharing incident information: The first national sentinel events report, published in mid 2007, resulted from a request by Ministers that a national report be compiled on eight defined 'sentinel' events seen to be key events leading to patient harm. The resulting report was seen to be of limited utility. The Commission is developing options to discuss with stakeholders and to enable recommendations to be made about the next steps. Incident management is an area of active work across the country and at all levels of the health system, and these developments will be considered in planning the path forward. Work in progress to analyse a subset of incident reporting will result in decisions on how best to learn from the array of information being gathered on incidents and adverse events, and what national mechanisms for sharing information will add value to what already exists. (*IS Project 1.1*).
- Core maternity indicators: This project involves establishing and enabling the use of maternity indicators to improve the quality of maternity care. A draft set of indicators has been developed by a multi-disciplinary group, including obstetricians, midwives, general practitioners, experts in maternity policy, epidemiology, data definition, and consumers. The work was fostered in 2002 by health ministers and the first phase funded by the former Council. The next phase of the work will involve calculating and using the indicators to improve practice, as well as developing mechanisms to collect important missing information. (*IS Project 1.2*).
- National data sets and standards: Ministers asked the Commission to 'recommend national data sets for safety and quality, working within current multi-lateral governmental arrangements for data development, standards, collection and reporting'. This project creates a mechanism for this to happen. It will result in: a data inventory of existing sources; a framework or information model in which to map and assess information needs and information sources; modules of data standards developed in collaboration with expert groups specifying information needs and national health information committees. This work will enhance the completeness, quality and consistency of national data relevant to safety and quality. (*IS Project 4.1*).

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As work on the Commission's other priority programs progresses—for instance in the area of accreditation—plans will be developed to support their information needs.

Further detail on all the projects of the Information Strategy can be found on the Commission's web site.

How will the Commission work on the Information Strategy?

The Commission's role is to lead and coordinate improvement to national safety and quality information. In doing so it will:

- Focus on practical priorities, ensuring that information meets a priority need, has a clear purpose and use;
- Build on what has been done, including using existing data where possible;
- Communicate and collaborate, including:
 - Feeding information back to those who have provided it and those who need to act on it
 - Forming strategic partnerships and appropriate advisory structures
 - Working with existing national structures for health information, including the National Health Information Management Principal Committee and related committees. The Australian institute of Health and Welfare will be a key partner on some projects.
- Ensure quality in information; and
- Generally coordinate and facilitate projects rather than carrying out work in-house.

APPENDIX B – Information Strategy Committee

Dr Andrew Child (Commissioner) CHAIR	Director	Women's and Children's Hospital Executive Unit Royal Prince Alfred Hospital
Mr Greg Coombs	Assistant Secretary	Department of Health and Ageing
Dr Stephen Duckett	Executive Director Reform and Development	Queensland Health
Dr David Filby PSM	Executive Director Policy and Intergovernment Relations	Department of Health South Australia
Professor Clifford Hughes	CEO	Clinical Excellence Commission
Mr George Neale	Managing Director	George Neale & Associates
Professor David Roder AM	Group Executive	Cancer Council SA
Dr Shiong Tan (Commissioner)	Clinical Advisor	Department of Health WA
Mr Bill Lawrence	Deputy Chief Executive	Australian Commission on Safety and Quality in Health Care
Dr Christine Jorm	Senior Medical Advisor	Australian Commission on Safety and Quality in Health Care

Terms of Reference

Purpose

- To guide the implementation of the Information Strategy of the Commission;
- To make recommendations to the Commission;
- To monitor project progress and provide progress reports to the Commission, and;
- To provide a mechanism for the expertise of Commissioners to be utilised for the implementation of the information strategy.

Reports to: Commission Chairman

Meeting Frequency: As determined by Committee Chairman

Committee

Chairman: Commission member – preferably with expertise in information management
Up to two other Commission members
Up to two other delegates as determined by the Chairman

Commission staff will provide support as required by the Sub-Committee Chairman

Timeframe: Information Strategy Committee and Terms of Reference to be reviewed by Commission early 2008

APPENDIX C – Performance indicators from the National Health Care Agreement

The list of indicators is taken from the National Healthcare Agreement (NHCAs) *Intergovernmental Agreement on Federal Financial Relations*, Schedule F²¹.

National Healthcare Agreement

Intergovernmental Agreement on Federal Financial Relations

Outcome	Progress Measure	Output
Prevention		
Children are born and remain healthy. Australians have access to the support, care and education they need to make healthy choices. Australians manage the key risk factors that contribute to ill health.	Proportion of babies born of low birth weight. Incidence/prevalence of important preventable diseases. Risk factor prevalence.	Immunisation rates for vaccines in the national schedule. Cancer screening rates (breast, cervical, bowel). Proportion of children with 4 th year developmental health check.
Primary and community health		
The primary healthcare needs of all Australians are met effectively through timely and quality care in the community. People with complex care needs can access comprehensive, integrated and coordinated services.	Access to general practitioners, dental and other primary healthcare professionals. Proportion of diabetics with HbA1c below 7 per cent. Life expectancy (including the gap between Indigenous and non-Indigenous). Infant/young child mortality rate (including the gap between Indigenous and non-Indigenous). Potentially avoidable deaths. Treated prevalence rates for mental illness. Selected potentially preventable hospitalisations. Selected potentially avoidable general practitioner type presentations to emergency departments.	Number of primary care services per 1,000 population (by location). Number of mental health services. Proportion of people with selected chronic disease whose care is planned (asthma, diabetes, mental health). Number of women with at least one antenatal visit in the first trimester of pregnancy.
Hospital and related care		
Australians receive high quality hospital and hospital related care that is appropriate and timely.	Waiting times for services. Selected adverse events in acute and sub-acute care settings.	Rates of services provided by public and private hospitals per 1000 weighted population by patient type.

²¹ See http://www.coag.gov.au/intergov_agreements/federal_financial_relations/index.cfm

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Hospital and related care		
	Unplanned/unexpected readmissions within 28 days of selected surgical admissions. Survival of people diagnosed with cancer (5 year relative rate).	
Aged care		
Older Australians receive high quality, affordable health and aged care services that are appropriate to their needs and enable choice and seamless, timely transitions within and across sectors.	Residential and community aged care services per 1,000 population aged 70+ years. Selected adverse events in residential care.	Number of older people receiving aged care services by type (in the community and residential settings). Number aged care assessments conducted. Number of younger people with disabilities using residential, CACP and EACH aged care services. Number of people 65+ receiving sub-acute and rehabilitation services. Number hospital patient days by those eligible and waiting for residential aged care.
Patient Experience		
All Australians experience best practice care suited to their needs and circumstances informed by high quality health information. Patients experience seamless and safe care when transferring between settings.	Nationally comparative information that indicates levels of patient satisfaction around key aspects of care they received.	
Social Inclusion and Indigenous Health		
Indigenous Australians and those living in rural and remote areas or on low incomes achieve health outcomes comparable to the broader population.	Age standardised mortality. Access to services by type of service compared to need. Teenage birth rate. Hospitalisation for injury and poisoning. Children's hearing loss.	Indigenous Australians in the health workforce.
Sustainability		
Australians have a sustainable health system that can respond and adapt to future needs.	Net growth in health workforce (doctors, nurses, midwives, dental practitioners, pharmacists). Allocation of health and aged care expenditure. Cost per case mix-adjusted separation for both acute and non acute care episodes.	Number of accredited/filled clinical training positions.