

Fourth
national report
on health sector
performance
indicators

**By the National Health
Performance Committee
July 2000**

**A report to the Australian
Health Ministers' Conference**

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Further copies of this publication are available from:

Executive Officer
National Health Performance Committee
Locked Bag 961
North Sydney NSW 2059
Ph 02 9391 9802
Fax 02 9391 9994

Or from the NSW Health web site at:
www.health.nsw.gov.au

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ABBREVIATIONS/ACRONYMS

..	not applicable
-	Nil or rounded to zero
ABS	Australian Bureau of Statistics
ACEM	Australasian College of Emergency Medicine
ACHS	Australian Council on Healthcare Standards
AHCA	Australian Health Care Agreement
AHCPR	Agency for Health Care Policy and Research
AHMAC	Australian Health Ministers' Advisory Council
AHMC	Australian Health Ministers' Conference
AIHW	Australian Institute of Health and Welfare
ALOS	Average length of stay
AMI	Australasian Medical Index
AN-DRG	Australian National Diagnosis Related Groups
ANZICS	Australian and New Zealand Intensive Care Society
CDHAC	Commonwealth Department of Health and Aged Care
CPI	Consumer Price Index
DHHS	Department of Health and Human Services (US)
DRG	Diagnosis related group
DVA	Department of Veterans' Affairs
EFQM	European Foundation for Quality Management
EQuIP	(ACHS) Evaluation and Quality Improvement Program
GDP	Gross Domestic Product
GP	General Practice
HACC	Home and Community Care
HASAC	Health and Allied Services Advisory Council
HDWA	Health Department of Western Australia
HFS	Commonwealth Department of Health and Family Services (now CDHAC)
HIC	Health Insurance Commission
ICD-9-CM	International Classification of Diseases, 9th Revision, Clinical Modification
IFRAC	Inpatient fraction
JCAHO	Joint Commission on Accreditation of Health care Organisations
KPI	key performance indicator
MBS	Medicare Benefits Schedule
MFO	Managing for Outcomes
na	Not applicable
NHDD	National Health Data Dictionary
NHIMG	National Health Information Management Group
NHMBWG	National Health Ministers' Benchmarking Working Group
NHMD	National Hospital Morbidity Database
NHPC	National Health Performance Committee
NHS	National Health Service
NLHI	National Library of Health Indicators
NPHEd	National Public Hospital Establishments Database
NPHP	National Public Health Partnership
n.a.	Not available
np	Not provided
NSW Health	New South Wales Department of Health
NZ	New Zealand
OECD	Organisation for Economic Cooperation and Development
PBS	Pharmaceutical Benefits Scheme
RPBS	Repatriation Pharmaceutical Benefits Scheme
SADHS	South Australian Department of Human Services
SCRCSSP	Steering Committee for the Review of Commonwealth/State Service Provision
SLA	Statistical Local Area
TRV	Total replacement value
UK	United Kingdom
US	United States (of America)
Victorian DHS	Victorian Department of Human Services
VMO	Visiting medical officer
WHO	World Health Organisation
Working Group	National Health Ministers' Benchmarking Working Group

EXECUTIVE SUMMARY

This Fourth National Report of Health Sector Performance Indicators has been prepared by the recently formed National Health Performance Committee (NHPC). The NHPC was established by the Australian Health Ministers' Conference to continue the work of the National Health Ministers' Benchmarking Working Group (NHMBWG). The principal aim of this series of reports is to provide information on the performance of the health sector and, in doing so, promote performance measurement activities in Australia.

Within Australia there is extensive work being carried out in the field of benchmarking at all levels – local, regional, state, and national, private and public sectors. Much of that work has focused on developing, validating and assessing specific performance indicators for their reliability and relevance. As a consequence, there is a broadening appreciation of the importance of performance measurement and the value of benchmarking within the health sector. This awareness has been strengthened by the increasing use of performance measures in funding and services delivery arrangements at all levels of the health sector.

The Australian Health Ministers established the National Health Performance Committee in August 1999. The Committee has the responsibility to develop and maintain a national performance measurement framework for the health system, to support benchmarking for health system improvement and to provide information on national health system performance. This information will have direct relevance to the development of future health policy and funding and will guide decisions about where the best investments are made to achieve improved health and wellbeing of the Australian population in the longer term.

The Third National Report on Health Sector Performance Indicators featured information on health services and the acute care hospital sector and hospital performance indicators for 1996-97. An extensive review of national and international activities in health sector performance measurement was presented in the report and highlighted the need for a performance measurement framework to expand to cover all aspects of health, not just the acute hospital sector.

The National Health Performance Committee (NHPC) is currently developing a national health performance framework. The framework is intended to facilitate performance reporting at a national level, but it is also important that it adds value to reporting at a state and local level, as well as for specific target populations or populations at risk. Future reports of the NHPC will use the agreed framework to report on health sector performance on a broader scale.

An update of performance measurement, indicator development and reporting at a national and state level is provided in this Fourth Report. Significant work is also being undertaken by accreditation bodies such as the Australian Council on Healthcare Standards (ACHS), Medical Colleges, and consortia of hospitals to develop appropriate indicators, benchmark and report on performance. These processes have led to improvements in the efficiency and quality in health services.

One of the main purposes of the Fourth Report is to update data presented in the Third Report. Data for 1997-98 is presented in Appendices B and C. Appendix B includes updated information on health status, health determinants and demographics of the Australian population, and the distribution of health services and expenditure.

Appendix C presents updated information for hospital performance indicators based on the performance framework presented in previous reports and reported on in the Report on Government Services 2000. There are still significant gaps and deficiencies with this framework, with some dimensions of performance not having agreed or developed indicators. In some areas within the framework, the information and the indicators being presented require further refinement and agreement. It is imperative that there is an agreed national framework with indicators developed across all dimensions of performance.

Future work of the NHPC will include development of a database of health performance indicators relevant to the dimensions of performance, health priority areas and interventions, health outcomes, health determinants and health system infrastructure. The data sources and method of collection will also be linked. As a preliminary measure, an audit of Australian performance indicators is being undertaken and these are presented in Appendix D.

The Fourth National Report on Health Sector Performance Indicators is the first report of the recently formed National Health Performance Committee and presents an update of health performance measurement in Australia and 1997-98 data for acute care hospitals. Development of a national health performance framework to report on the whole health system is underway and this important work will inform future reports of the Committee.

CHAPTER 1

INTRODUCTION

1.1 Preamble

This Fourth National Report on Health Sector Performance Indicators has been prepared by the recently formed National Health Performance Committee (NHPC). The NHPC was established by the Australian Health Ministers' Conference to continue the work of the National Health Ministers' Benchmarking Working Group (NHMBWG). The principal aim of this series of reports is to provide information on the performance of the health sector and, in doing so, promote performance measurement activities in Australia.

The First National Report on Health Sector Performance Indicators was released in February 1996, the second report in June 1998 and the third report was released in June 1999. These reports focused primarily upon acute health care hospitals.

Within Australia there is extensive work being carried out in the field of benchmarking at all levels – local, regional, state, and national, private and public sectors. Much of that work has focused on developing, validating and assessing specific performance indicators for their reliability and relevance. As a consequence, there is a broadening appreciation of the importance of performance measurement and the value of benchmarking within the health sector. This awareness has been strengthened by the increasing use of performance measures in funding and services delivery arrangements at all levels of the health sector.

Despite these efforts, there remain significant gaps in measurement of health performance. In many areas the process of benchmarking in health is still developmental in nature. The National Report on Health Service Performance Indicators is one strategy through which governments can promote the understanding of performance indicators and to encourage their further development and enhancement.

1.2 Establishment of the National Health Performance Committee

The Australian Health Ministers established the National Health Performance Committee in August 1999. It has replaced the National Health Ministers' Benchmarking Working Group and has the responsibility to develop and maintain a national performance measurement framework for the health system, to support benchmarking for health system improvement and to provide information on national health system performance.

This information will have direct relevance to the development of future health policy and funding and will guide decisions about where the best investments are made to achieve improved health and wellbeing of the Australian population in the longer term. This will assist in achieving a sustainable health system for Australia into the future.

The new committee will continue the work of the National Health Ministers' Benchmarking Working Group, which had initially concentrated on the acute health sector. However the committee has set itself three key goals:

- to extend the national performance indicator framework for services other than acute inpatient services, including developing indicators of the overall health system's performance, but also for services such as community health, general practice and public health
- to establish good links with, and take advantage of, the vast range of work being undertaken on performance indicator development across the nation
- to improve the timeliness of reporting of performance information.

The National Health Performance Committee will focus on setting strategic directions for performance indicator development, and will be supported by working groups dealing with specific issues or areas and providing technical advice.

The membership of the National Health Performance Committee includes representation from each State and Territory and the Commonwealth, together with other national bodies such as the Australian Institute of Health and Welfare, Australian Council for Safety and Quality in Health Care, Australian Private Hospitals Association and Australian Health Insurance Association. The Committee is aware that there is keen interest in its work, and will review its membership in mid 2000, to ensure relevant stakeholders are adequately represented. The current membership of the NHPC is shown at Appendix A.

The vision, mission and terms of reference of the committee, as agreed by Health Ministers, are set out in Box 1.

Box 1

Vision

The vision of the National Health Performance Committee is for a health system that searches for, compares, learns from the best and improves performance through the adoption of benchmarking practices across all levels of the system.

Mission

The National Health Performance Committee will work to foster the use of benchmarking based on national performance measures and indicators to improve the quality of care of health services.

Terms of reference

- Develop and maintain a national performance measurement framework for the health system, primarily to support benchmarking for health system improvement and to provide information on national health system performance.
- Establish and maintain appropriate national performance indicators within the national performance measurement framework.
- Receive and consider input to the national performance measurement framework and on existing and potential performance indicators.
- Facilitate the use of data at the health service unit level for benchmarking purposes.
- Encourage the health industry to work within the national performance measurement framework and use the agreed performance indicators in benchmarking to improve performance.
- Encourage the development of expertise in the use of benchmarking for performance improvement.
- Provide Australian Health Ministers' Conference and other national authorities with a comparative analysis and information of national health system performance.
- Develop and maintain linkages with other relevant national committees.
- Report progress to the Australian Health Ministers' Conference and other national authorities on achieving its mission.

The Committee has agreed to a work program for its first year of operation, which includes:

- publication of this Report which will inform various audiences of the establishment of the National Health Performance Committee and its plan of action, and update the tables prepared in the previous reports of the National Health Ministers' Benchmarking Working Group
- publication of a discussion paper on a national health performance framework
- organisation of a workshop with invited parties to finalise consideration of the proposed national health performance framework
- publication of the Committee's first major report on the performance of the health system (the First Report of the National Health Performance Committee, by December 2000).

1.3 Structure of the Report

The main purpose of the Fourth Report is to update data presented in the previous reports and to provide an update of activities in the development of performance frameworks and indicators at the state and national levels. Information presented in the Third Report in Chapter 2: Health Services and the Acute Care Hospital Sector in Context and Chapter 3: Hospital Performance Indicators 1996-97, have been updated where possible to 1997-98 data. This information is presented in Appendices B and C. The data are reported against the performance indicator framework for acute hospital services (Figure C.1). At this stage the National Health Performance Committee is engaged in a process to review, refine and enhance that framework. A key step in that review was the release of a Discussion Paper in June 2000.

Chapter 2 presents an overview of performance indicator development work in the National Health Priority Areas and in areas such as population health, community health, Aboriginal and Torres Strait Islander health and general practice.

Chapter 3 updates information and highlights activities at a jurisdiction level in data collection, performance measurement and the development of performance indicators.

Chapter 4 presents information on health care and general practice standards, private hospitals, insurance, and hospital benchmarking consortia.

Chapter 5 discusses the future directions for the National Health Performance Committee and its work plan to facilitate a 'health system that searches for, compares, learns from the best and improves performance through the adoption of benchmarking practices across all levels of the system'.

Appendices B and C present updated information on health demographics and 1997-98 data for the acute hospital sector. Appendix D is a preliminary list of performance indicators used for national health strategies, health priorities and health agreements.

CHAPTER 2

UPDATE ON INDICATOR DEVELOPMENT FOR NATIONAL PROGRAMS AND PRIORITY AREAS

2.1 Health Services and the Acute Care Hospital Sector

Information on this sector was reported in Chapters 2 and 3 of the Third Report. An update of tables presented in the previous report, have been updated with 1997-98 data where available. The tables are included in Appendices B and C.

2.2 Population Health

Population health presents some important challenges for the work of the National Health Performance Committee. Not only is population health a diverse area of activity, it has multiple linkages with other parts of the health system and with other sectors. Population health activities include illness prevention, health promotion and protection. This involves understanding and capacity to act on the causes of ill health, what determines and supports good health and how to reduce public exposure to lifestyle and environmental risks. This is characterised by a focus on the health of the population and particular at-risk groups in the population and complements the clinical or individual provision of health care services.

Population health initiatives are typically complex and use a range of interventions to address a population health problem. This can include a mix of activities conducted at national or State or Territory level such as:

- legal and regulatory activities or media campaigns
- interventions directed to the special circumstances of population at-risk groups
- clinical or individual provision of health care services (such as immunisation and screening activities) which form part of a coordinated population health effort.

The National Public Health Partnership Group (NPHPG) auspiced a workshop to provide advice to the National Health Performance Committee on:

- How the performance information and benchmarking framework for the Australian health system can have a population health focus or perspective
- What criteria should be used to select population health indicators
- The development work required to produce and report against selected indicators which will build on the wide range of health outcome and performance indicator development already occurring in population health.

The workshop was held 16 March 2000 in Melbourne with 44 participants from all jurisdictions and from New Zealand to address five questions:

1. What do we want a national performance framework to do for the whole health system?
2. What do we want a performance framework to do for population health?
3. If a population health performance indicator set does nothing else it must...?
4. What criteria should be used to select indicators for the performance framework?
5. What process should take this work forward?

Participants agreed that the main purpose of the performance framework was to improve performance and achieve better health outcomes. The framework needs to identify the things that matter most in the health system and measure performance in a way that leads to more informed decision making and improved accountability to parliaments and the wider community. Definitional problems around terms such as 'health outcome indicator' and 'performance indicator' became immediately apparent. One important role for the new performance framework will be to build consensus around common definitions of key terms.

It was clear that what constitutes the “performance” of population health programs is complex. Most specific issue population health programs (e.g. HIV/AIDS, the National Drug Strategic Framework) have key outcomes that are the joint responsibility of different levels of governments, including those other than health departments. They are also influenced by broader social and economic factors, the private sector and individuals and communities day-to-day actions.

This means the “performance” of population health programs can be explored from multiple perspectives. Indicators may be used to inform policy, for general health system monitoring, to describe health status, to identify gaps and needs in the system, measure performance, or for accountability purposes. The one indicator (for example, breast cancer screening or immunisation rates) could well be used for all these purposes and contexts. It is the context in which an indicator is used and how it is used, rather than an attribute of the indicator itself that makes it a “population health performance indicator” or a “health outcome indicator”.

Workshop participants were provided with a wealth of background material on performance frameworks from Australia and overseas. The Australian material included the National Information Management Group’s Performance Indicator framework (1996) and the more recent Australian Institute of Health and Welfare’s National Public Health Indicator framework (1999a). Material from the United States on ‘leading health indicators’ was also considered (Chrvala and Bulger 1999).

Participants examined these frameworks and noted a strong convergence of views around several key categories of indicators that could potentially provide a strong basis for a performance framework for Australia’s health system. This work built largely on the performance indicators developed by the Canadian Institute for Health Information (CIHI 1999) as part of the Canadian Health Information Roadmap Initiative framework.

Workshop participants identified four categories of indicators and four focus questions that could provide the basic elements of a national health performance framework examining health and health care:

1. Health outcomes - How healthy is Australia as a nation?
2. Determinants of health – Are we trending towards or away from health?
3. Health services performance and quality – Are our interventions effective and efficient and appropriate?
4. Health system infrastructure – Is our system infrastructure sustainable into the future?

When it came to identifying selection criteria for choosing indicators, criteria developed to select the United States Healthy People 2010 ‘Leading Health Indicators’ were picked as the best on offer as a basic model. These criteria emphasise the importance of selecting indicators that are readily understood, that measure things people care about, and provide the basis for action and system change. It was also identified that the cost of data collection and analysis for indicators should be affordable in relation to the cost of interventions.

To take the work forward in the short to medium term, the group agreed that a small taskforce should be formed under auspices of the NHPC and the NPHPG. The immediate task will be to inform the development of an NHPC discussion paper on a performance framework as well as the production of the NHPC’s report in October. The group recognised that there is a very large group of stakeholders that will need to be drawn into the processes of framework refinement, indicator selection and development. A report of the workshop is being prepared by the Evaluation and Research Unit, Population Health Division, Commonwealth Department of Health and Aged Care and will be provided to the NPHPG for endorsement before sending to the NHPC.

One issue the taskforce will explore will be the relationship between the National Health Performance Committee’s ‘whole-of-system’ monitoring activities and more specific performance and accountability process related to issue specific programs and policies. There are at least twenty agreed national population health strategies and programs, all with different monitoring and evaluation frameworks.

Some national public health strategies have agreed national summary indicators that are used principally to track the effectiveness of the programs. Breast Screen Australia, the National Cervical Cancer Screening Program, the National Childhood Immunisation Program and the National HIV/AIDS Strategy have well developed national

indicator sets, with data being reported at least annually. Other national strategies, such as the National Drug Strategic Framework and the Older Persons Immunisation Program, are in the process of revising or further developing their monitoring arrangements.

The Australian Institute of Health and Welfare also holds a wide range of national data bases relevant to population health. These include cardiovascular disease health expenditure, the National Diabetes Register, national injury, child and youth health, and National peri-natal mortality and morbidity. Further studies derived from those collections include the National Public Health Expenditure Project and the National burden of disease and injury study. All these potentially provide a rich store of data for indicator selection and development.

Most population health programs have found that a small number of indicators are not sufficient for the task of strategic management of the particular initiative. Research and evaluation activities are often a core component of understanding the effectiveness, efficiency and quality of specific population health initiatives.

2.3 Community Health Service Sector

The Commonwealth funded a consultancy to report on the community health sector following a request by the Australian Health Ministers' Advisory Council (AHMAC).

The project reports on an overview of the components that make up the community health sector and their interrelationships. This includes:

- describing work currently taking place to measure performance
- describing related work to develop data sets for this sector
- assessing the feasibility of developing and reporting against performance indicators
- developing a workplan for progressing this work.

The report is being presented to AHMAC and, if accepted, will be circulated in 2000 for comment in the sector (CDHAC 1999a).

2.4 General Practice

In early 2000, the Commonwealth funded two consultancies from the General Practice Branch in response to recommendations contained in the General Practice Strategy Review Report "Changing the future through partnerships". The process was overseen by the quality subgroup of the General Practice Partnership Advisory Council, also formed under recommendations of the Review to advise the Minister on key issues around general practice. The first consultancy is to develop and trial a possible set of performance indicators for use in general practices. It is due to report by June 2000. The second consultancy is to develop an implementation strategy for the use of clinical practice guidelines in general practice. This is also due to report by June 2000.

In addition to these two consultancies, work is progressing on the development of performance indicators for Divisions of General Practice, in collaboration with the Australian Divisions of General Practice.

Finally, the RACGP standards for general practice are now well implemented through the practice accreditation program. At present, approximately 75% of practices are registered for accreditation with the vast majority being registered with Australian General Practice Accreditation Limited, a not-for-profit company owned by the profession.

2.5 Aboriginal and Torres Strait Islanders Health

In 1997 the Australian Health Ministers' Conference (AHMC) endorsed an interim set of National Performance Indicators for Aboriginal and Torres Strait Islander health (CDHAC 1998a). The Health Ministers agreed that all jurisdictions would report annually against the interim indicators and targets to AHMAC for referral to the AHMC. AHMAC gave the NHIMG responsibility to compile the reports based on jurisdictional responses.

Currently there are 56 indicators in the performance indicator set and these are arranged in nine categories of (see Appendix D):

- Life expectancy and mortality
- Morbidity
- Access
- Health service impacts
- Workforce development
- Risk factors
- Intersectoral issues
- Community involvement
- Quality of service provision.

The first three reporting rounds have identified major difficulties in reporting primarily due to under-reporting of Indigenous status in administrative systems, the lack of data sources for many of the indicators, and the small indigenous population in some jurisdictions.

Refinement of the indicators is an ongoing process. The interim set of indicators is currently undergoing a technical refinement taking into account their accuracy, validity, usefulness, timeliness, appropriateness and quality. Additionally, new indicators covering mental health are being developed. Endorsement by AHMAC/AHMC of these new indicators and the improved existing 56 indicators will be sought in late 2000.

2.6 National Health Priority Areas

The First Report on National Health Priority Areas (AIHW and CDHFS 1996) documents progress for the five priority areas, cardiovascular health, cancer control, injury prevention and control, mental health and diabetes mellitus. Subsequent releases of reports for the National Health Priority Areas update the data and trends provided in the First Report. These reports are:

- National Health Priority Areas Report on Cancer Control 1997 (CDHFS & AIHW 1998a).
- National Health Priority Areas Report on Injury Prevention and Control 1997 (CDHFS & AIHW 1998b).
- National Health Priority Areas Report Cardiovascular Health 1998 (CDHAC and AIHW 1999b)
- National Health Priority Areas Report: Diabetes Mellitus 1998. (CDHAC and AIHW 1999c)
- National Health Priority Areas Report: Mental Health 1998. (CDHAC and AIHW 1999d).

The Health Ministers endorsed a sixth priority area of asthma, in August 1999. A National Health Priority Areas Report on asthma is being developed in 2000. Information on the key indicators for these National Health Priority Areas is included in these reports and more recent information will be included in Australia's Health, 2000.

The National Health Priority Areas initiative was reviewed in 1999 to assess lessons learned in the process to date. This review commenced in March 1999 and involved extensive consultation with National Health Priority Area stakeholders. The final report was completed in June 1999 (CDHAC 1999e) and work is progressing on future planning.

2.7 Allied Health Sector

A National Allied Health Benchmarking consortium was established in Australia in 1997 with the objective to establish benchmarks in allied health resources at a national level, and develop a framework that links benchmarks with inputs, processes and outcomes of allied health services and activities (Byron and McCathie, 1998).

In July 1998 the Indicators for Intervention and Performance Indicators Project began under the auspices of the National Allied Health Casemix Committee. The Report on the Development of Allied Health Indicators for Intervention and Performance Indicators describes the first stage in the development of performance indicators. The performance dimensions adopted include access, efficiency, safety, effectiveness, continuity, technical proficiency, appropriateness and acceptability. It is suggested that combining the indicators for intervention with the performance

dimensions will provide a series of performance measures that are client focussed and strongly reflect allied health involvement (NAHCC, 1998). At this stage the model for the potential performance indicators has been developed and further work is recommended (NAHCC 2000).

2.8 Australian Council for Safety and Quality in Health Care

In August 1999 the meeting of Australian Health Ministers' Conference agreed to establish the Australian Council for Safety and Quality in Health Care (ACSQHC) to address the need for a national coordination mechanism to improve Australia's health care system and to support action at the local level. The Council functions as a national partnership between governments, health care providers and consumers and will set an agenda for health care safety and quality and provide national leadership to reduce the risk of adverse events occurring.

The Council met for the first time in February 2000, and agreed on a number of action areas for priority consideration. These include:

- development of a national reporting system for errors resulting in serious injury and death of patients
- medication errors
- consumer incident reporting
- support for the National Health Complaints Information Project.

Performance measures will be part of this work program.

2.9 Performance Reporting for Consumers

The Commonwealth Department of Health and Aged Care is currently funding a project to identify from existing Australian and International models of reporting on quality to consumers, the elements and the strategies that contribute to their effectiveness. It is envisaged that further developmental work will be identified to enable implementation of strategies and issues that arise from the review. In the long term, a practical guide may be established to assist service providers introduce effective performance reporting.

2.10 Sentinel Procedures

There has been ongoing discussion in the literature of the reasons underlying the unexplained variation in certain procedures and whether this is a valid indicator of appropriateness of care. In an attempt to inform this discussion the Commonwealth Department of Health and Aged Care supported a study of hysterectomy rates (for non cancer conditions) using the NSW, ACT and Victorian morbidity data collections. The methodology examined the relationship between the intervention and reported diagnosis (coded for hospital episodes of care), age of the women and socio-economic status of the residence of the patient. The analysis revealed that there were marked variations in numbers of interventions for a specified diagnosis when comparing the area of usual residence. This was significant for a particular age group.

Further research is required to identify the reason for the variation across areas of residence (Reid et al 2000). The study explored the use of administrative data sets for analysis of specific geographical areas and sub-populations and found that the methodology used is applicable to the exploration of other diseases and procedures. One of the recommendations from the study is that States and Territories implement the methodology used in the report to produce a relative rate of hysterectomy as an indicator to measure the utilisation of health care resources.

CHAPTER 3

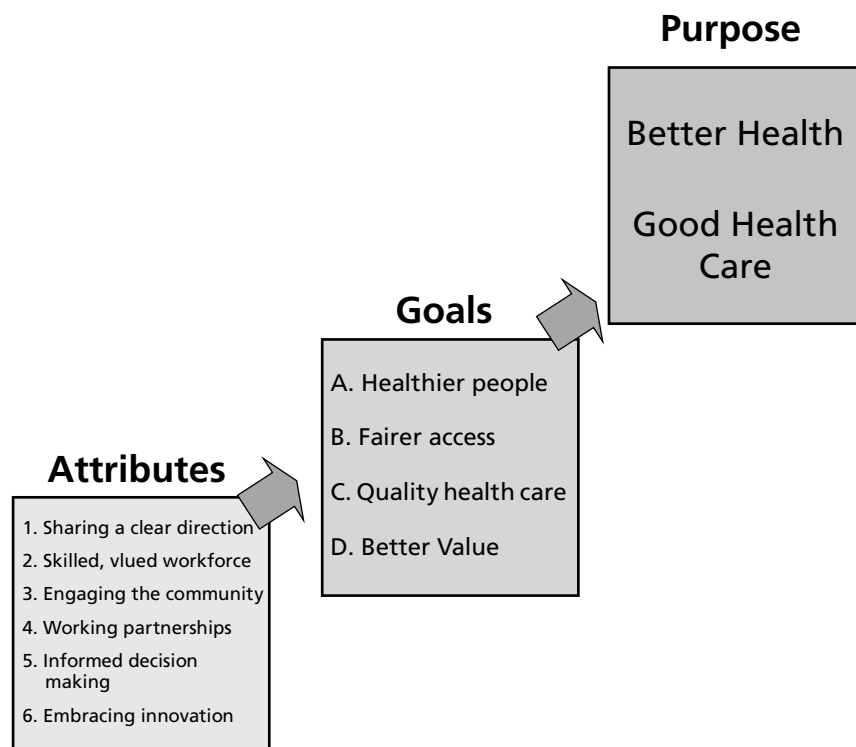
PERFORMANCE MEASUREMENT BY JURISDICTIONS

3.1 New South Wales

Performance measures are used extensively across the NSW Health system and benchmarking of performance occurs through a wide range of both formal and informal processes. This section provides an update on developments in NSW Health.

The broad strategies for NSW are set out in 'Strategic Directions for Health, 1998 – 2003' which is described in Figure 3.1.

Figure 3.1: NSW Health Strategic Directions Conceptual Framework.



The Framework for Managing the Quality of Services in NSW was endorsed by the NSW Minister for Health in February 1999. The NSW Ministerial Advisory Committee on Quality in Health Care oversees implementation of the framework. Under the framework the term “quality” is defined as a broad concept embracing the full range of performance domains, including quality of clinical services. The Framework identifies six dimensions of quality:

- Safety
- Effectiveness
- Appropriateness
- Consumer participation
- Access
- Efficiency.

Five cross-dimensional issues are also identified:

- Competence of providers of health care
- Continuity of care
- Information management to support effective decision making
- Education and training for quality
- Accreditation of health services.

The framework proposed the development of a quality of care indicator set to be implemented over three years. A steering committee has been established to finalise the indicator set, and the Health Services Research Group from the University of Newcastle has been engaged to assist in this process.

The framework identifies how clinical governance is to be introduced in NSW with the key elements being:

1. A recognition and acceptance by Health Service Boards and management that they have a responsibility for the quality of care delivered by the service and that this accountability is shared with the clinicians providing the care.
2. Action by Boards to ensure that an effective system is in place that:
 - provides an environment that fosters quality
 - monitors the quality of care
 - provides a regular report to the Board on the quality of care
 - minimises the risk of and identifies deficiencies in the quality of care
 - effectively addresses these deficiencies.

Key aspects of the framework have been mandated for implementation in each Area Health Service and include the establishment of an Area Quality Council (or Area Quality Committee). Most Areas have appointed an executive officer for the Quality Council and have identified a member of the Area Executive who is responsible for the quality of care, in addition to the Chief Executive Officer.

The second phase of implementation has focussed on strategies and tools required at the clinical level and include:

- facilitated incident monitoring
- peer review
- the effective use of clinical indicators
- retrospective chart review
- adverse drug event management
- sentinel event review.

The Quality Branch in NSW Health, in collaboration with the NSW Ministerial Advisory Committee on Quality in Health Care is assisting Areas in the implementation of the Framework through:

- conducting a comprehensive Clinical Practice Improvement education program for senior clinicians and managers in conjunction with the Centre for Effective Health Care at the University of Sydney and with the Executive Development Support Centre
- collaborating with the NSW Health Services Association to provide education and consultation to the members of AHS Boards in relation to measuring and managing the quality of care, for which they are now responsible
- conducting workshops and seminars on various aspects of the Quality Framework eg “Measuring and Managing Patient Safety” and “Measuring and Managing the Appropriateness of Health Care”.

Performance Reporting

NSW Health is committed to comprehensive and transparent reporting of performance to the Government, the Commonwealth Government and the broader community. Performance reporting occurs via:

- The Annual Reports for the NSW Health Department and all Area Health Services which are submitted to the NSW Parliament in accordance with the Annual Report (Departments) Act, 1985 and the Public Finance and Audit Act, 1983. Annual reports include audited financial statements, authorised by the NSW Auditor General, and information on services delivered
- An annual agreement between NSW Health and NSW Treasury, which includes measures for outputs, efficiency, quality and access, and budget compliance. These are reported on a quarterly basis
- Performance reporting requirements for Commonwealth Agreements, the main one's being the Australian Health Care Agreement and the Public Health Outcomes Funding Agreement
- Two year Performance Agreements for each Health Service. Performance against targets in the Agreements is reviewed each six months and the Director General conducts a formal annual performance review with the Chair of the relevant Health Service Board and the Chief Executive Officer of the Health Service
- Monthly reporting of activity and finances including:

- Financial performance (including variation of cash expenditures, revenue and net cost of service against budget, year to date and projected)
- Staffing levels
- Achievement of activity targets (year to date and projected)
- Emergency department performance (for example, percentage of patients seen with benchmarks, access block and ambulance diversions)
- Elective surgery performance.

Quarterly reports to the Senior Executive Forum (the Executive of the Department and Chief Executive Officers of each Health Service) summarising Health Service and statewide performance in a number of key performance areas. The report includes quantitative measures in areas such as finance, activity, waiting times, workers compensation, immunisation, cervical and breast cancer screening

In addition to these process, performance information is made available publicly through two main reports, the Report of the Chief Health Officer <http://health.nsw.gov.au/public-health/chorep/chorep.html> and the NSW Public Hospitals Comparison Data Book <http://health.nsw.gov.au/iasd/iad/yb9798/>.

The Report of the Chief Health Officer is released every two years. The report provides detailed information on:

- demography
- social determinants of health
- the environment
- health related behaviours
- health of specific populations such as mothers and babies, indigenous people, rural and remote populations and socio-economic groups
- health priority areas.

Information is typically presented to provide trends over time and allow comparisons for the various NSW regions. Since 1997 the Epidemiology and Surveillance Branch of NSW Health has conducted a series of population health surveys (see <http://health.nsw.gov.au/public-health/hs97/index.html>). The results and analysis from these surveys have significantly enhanced the ability to understand differences in health status, determinants of health, and experience of health care services among populations of NSW Health Areas. In each of the years 1997 and 1998, more than 17,000 NSW residents aged 16 years and over (1,000 per Area Health Service) were interviewed. In 1999, a special survey of the health of older people (aged 65 years and over) was conducted.

In 1999, Epidemiology and Surveillance Branch and Performance Management Division produced Area Health Service Health Status Profiles (<http://health.nsw.gov.au/public-health/ahsprof/ahsprof.html>) as companion documents to the 1999/2000-2000/2001 Health Service Performance Agreements. The profiles are surveillance reports on a set of key population health status indicators, produced for each of the seventeen NSW Area Health Services.

Performance of health services is reported through the NSW Public Hospitals Comparison Data Book (to be renamed the NSW Health Services Comparison Data Book). This report provides detailed information for each public hospital in NSW. Data presented includes details of:

- patient activity, including casemix weighted activity, and non-inpatient activity
- appropriateness
- efficiency (for example same day surgery rates, average length of stay, relative stay index, cost per casemix weighted inpatient, cost per outpatient occasion of service)
- waiting times for elective surgery and emergency departments
- expenditures
- staffing.

Hospitals are grouped into Peer Groups to facilitate more appropriate comparison. For 1997-98 a second volume has presented detailed costs at the DRG level for each hospital. The report is being enhanced to provide information within the domains of the **Framework for Managing the Quality of Services in NSW** (1999), and also to provide an analysis of services delivered and funding provided for each of the regions (Area Health Services) of NSW.

In 1999, the NSW Minister for Health released a report of a review of NSW Health conducted by the Independent Pricing and Regulatory Tribunal of NSW (IPART) <http://health.nsw.gov.au/pubs/>. Section 6 of the report presents issues related to appropriate key performance indicators for NSW Health. The Report reviewed the purpose and nature of key performance indicators (KPIs), and current approaches in NSW and other States. IPART recommended the adoption of a limited set of performance indicators. In recommending these KPIs, IPART recognised the need for separate reporting of population health indicators, with the frequency aligned to the availability of necessary data. The Chief Health Officer's Report was recommended as the appropriate avenue through which population health indicators should be reported. The monthly KPIs recommended focus on health service delivery and management issues. The recommended set is outlined in Table 3.1.

Table 3.1: The Monthly Key Performance Indicators for NSW Health proposed by the Independent Pricing and Regulatory Tribunal (IPART)

<p>Cost Indicators</p> <ol style="list-style-type: none"> 1. Cost per case-mix adjusted separation 2. Labour costs by function per case-mix adjusted separation 3. Overheads Indicator (%) <p>Budget indicators</p> <ol style="list-style-type: none"> 4. Net cash position versus budget (%) 5. Total Expenditure versus budget (%) <p>Productivity Indicators</p> <ol style="list-style-type: none"> 6. Weighted average length of stay (ALOS) for 10 selected AN-DRGs. 7. Variation in inpatient activity. 8. Scatter plot (graph: activity vs net cash targets) <p>Quality and Access Indicators</p> <ol style="list-style-type: none"> 9. A patient satisfaction index 10. % of unplanned re-admissions to theatre 11. Number of people waiting over 1 year for selected specific elective surgery 12. Urgent emergency dept attendances (triage 1-3) seen within waiting time benchmarks
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A number of these indicators were already reported monthly, but others have required work to develop and implement, and/or move to a monthly reporting cycle.

Benchmarking

Health services are encouraged to be involved in various benchmarking activities, although many of these activities are voluntary and occur outside of formal Government processes. The State Continuous Improvement Steering Committee was established in 1996 to provide advice on continuous improvement strategies in non-clinical aspects of health service delivery. The committee auspices statewide benchmarking initiatives in collaboration with the State's health services. Through leading these projects, NSW Health provides health service staff with opportunities to participate in benchmarking and guideline development. The projects focus on 'processes' in specific areas of service delivery and culminate in the development of guidelines to promote quality improvement. To date, Better Practice Guidelines have been published and are available on the Department's web site at <http://health.nsw.gov.au/pubs/>:

1. Frontline Complaints Handling (1998)
2. Admission and Discharge of Patients for Elective Procedures (1998)
3. Patient Management (1998)
4. Managing Speech Pathology Non-Admitted Episodes of Care (1999)
5. Managing Appointments in Podiatry Services (1999)
6. Aboriginal and Torres Strait Islander Identification in the NSW Public Health System (1999).

The Committee's current focus is a project aimed at improving the continuity of care for patients with complex/chronic conditions who need ongoing multi-disciplinary health care services. The project aims to improve the care continuum through improving inter-disciplinary communication leading to early identification and referral of patients who need ongoing services. The project is currently in stage two, and involves examining admission, discharge and referral processes, and the principles of teamwork and collaboration in the health care environment. The project will culminate in guidelines to improve teamwork and processes of referral for patients.

The committee also initiated two statewide surveys of benchmarking activities, which were undertaken in 1996 and 1998. The 1996 survey sought to establish the level and extent of benchmarking activity in non-clinical areas within the NSW public health system. The 1998 publication provides guides to help establish a benchmarking project as well as demonstrating how health services continued to embrace benchmarking and continuous improvement activities. The report of the survey, *Benchmarking Activities in the New South Wales Public Health System (1998)* is available on the Department's web site <http://www.health.nsw.gov.au/pubs/>.

3.2 Queensland

The successful adoption of a funder-purchaser-provider structure and accrual-output budget systems facilitates Queensland Health's leveraging of the benefits from our commitment to a health outcomes focus and evidence-based care. From the 2000-2001 financial year the intention is to develop clear linkages between Queensland Health activity (service development-delivery) and achievement in terms of our contribution to improved health outcomes for people and to Government social and economic goals.

A coordinated strategic framework has been developed to better support planning and management for achievement of health outcomes and evidence-based care over the period 2000-2010. This framework defines the main strategic directions for Queensland Health, the principles that underpin our activities, and the strategies that will be implemented. The Strategic Directions for 2000-2010 are:

- A Balanced Investment Across the Spectrum of Health
- Addressing the Burden of Disease
- Improving Indigenous Health.

Performance Reporting

An integrated structure of outcome indicators, output performance and targets measures for both external reporting and internal management purposes, are the major dynamic links between elements of the strategic framework. Performance accountability occurs through:

- Annual budget agreements (including forecasts for three additional financial years) between Queensland Health and Queensland Treasury which includes measures identifying contribution to Government Priorities and health service outputs defined in terms of effectiveness, efficiency (quantity, quality, timeliness and cost), access and equity
- Annual Reports submitted to the Queensland Parliament in accordance with Financial Administration and Audit Act 1977, including audited financial statements endorsed by the Queensland Audit Office and information on services delivered
- Annual review by Parliamentary Estimates Committee of Queensland Health performance for the previous financial year and commitments for the following four financial years
- Periodic (approximately every two years) surveys of consumer health status and satisfaction with health services, undertaken by Queensland Health's Health Information Centre
- Annual review by the Productivity Commission for the Review of Government Service Provision
- Forecast of service efficiency (quantity, quality, timeliness and cost) on a quarterly basis and quarterly reporting of actual performance against forecast including review by Queensland Treasury
- Performance reporting for Commonwealth Agreements including the Australian Health Care Agreement and Public Health Outcomes Funding Agreement
- Annual Service Agreements with Health Service Districts setting out performance requirements in terms of service delivery and infrastructure development-maintenance.

Maintaining the Value in Performance Monitoring

These developments are all aimed at providing Queensland Health with information with which to better assess need, manage resources and provide services to improve the health and well-being of Queenslanders. The various developments are targeted and aim to meet the needs of different levels of the organisation but the indicators used need to be standardised and rationalised to ensure alignment with state and national processes.

The direction planned for the statewide framework for Queensland Health is focusing on the following:

- Using indicators that exist, not replicating work that has already been undertaken
- Using indicators that motivate for improvement in health service delivery
- Using indicators that make sense at various levels of health service delivery
- Establishing a cycle of reporting (annual, mid-year, quarterly) to assess performance and assist managers in the use of reports to initiate changes in practice.

In order to progress the establishment of this framework for reporting, the following activities are being pursued:

- Identification of a limited set of current indicators that reflects national and state priorities and assist managers in decision making
- Consultation with Zonal Management to identify information needs for district health services
- Design of report format for user-friendly and timely reporting against these indicators
- Provision of training in management processes to enable effective use of such reports.

Meeting Public Perceptions and Expectations

The Queensland Health Strategic Plan 2000-2010 and the Annual Business Plans will both be placed as site maps on the Queensland Health internet and intranet sites. They will be linked to all associated plans, performance reports and research documentation and to the Commonwealth's HealthInsite portal.

3.3 Western Australia

Performance Management Framework

Western Australian Government expectations about the health system's delivery of services are communicated in an integrated way with the budget process. This is achieved through the Output Based Management process, by which the Western Australian State Treasury principally funds the Health Department of Western Australia (HDWA) and all other agencies on the basis of outputs.

In turn, the HDWA allocates funding to health services using a purchasing process, in which outputs are purchased from Health Services. Each health service signs a Health Service Agreement with the Minister for Health, which is negotiated on the Minister's behalf by the Contract Management Branch of the Health Department of WA.

Annual Reports are the principal method of reporting performance and financial information to the Minister for Health, and the community. The HDWA publishes an Annual Report, as do each of the individual health services. The HDWA's Annual Report contains a set of indicators on high-level performance indicators on the performance of the Western Australian government health industry as a whole.

The Key Performance Indicators in the Annual Reports of the individual health services focus on outputs. The Key Performance Indicators Working Group coordinates and standardises the reporting of performance indicators between the different health services. This group draws representation from health providers, and technical and policy input from HDWA personnel.

The framework for Annual Report Key Performance Indicators mirrors the framework for the purchasing process (used in the Health Service Agreements) resulting in an integrated approach to performance management.

In addition, there are a number of key WA health system initiatives with respect to performance management and reporting that warrant specific noting:

- The Western Australian Strategic Quality Plan for the health industry
- The formation of the Performance Evaluation Unit within HDWA
- The FTE Benchmarking Review
- Central Agency Reporting.

Annual Report Key Performance Indicators

The Health Department of Western Australia’s Annual Report focuses on high level outcomes, and the performance of the Government Health System as a whole. The performance indicators presented in the Department’s Annual Report have been the subject of the Health System Performance Project, a three-year program of improvement aimed at making the reporting more relevant to its audience; being Parliament and the community.

Among the directions for improvement were:

- Increased emphasis on system-wide performance
- Addressing previous gaps in performance indicator coverage such as overall health status indicators.

Similarly, the Health Service Annual Reports have undergone a continuing program of improvement under the guidance of the Health Service and Board Hospitals Key Performance Indicators Working Group.

The framework for performance indicators used for the Departmental Annual Report, and the health services Annual Reports is the Department’s purchasing framework. This framework was originally put forward in “Foundations for a Healthier Future” as a program model, which was subsequently adopted as a purchasing framework (HDWA 1997). This framework is illustrated in Figure 3.3.1. The framework classifies what is purchased according to three dimensions of:

- the health condition of the client (i.e. the DRG-based specialty grouping)
- the level of intervention
- the demographic characteristics of the client.

Each performance indicator can be classified within a health condition, and an intervention type. This framework is used in conjunction with an approach adapted from that of the Steering Committee for the Review of Commonwealth/State Service Provision (Figure 3.3.2).

Figure 3.3.1: The Health Department of Western Australia Purchasing Framework

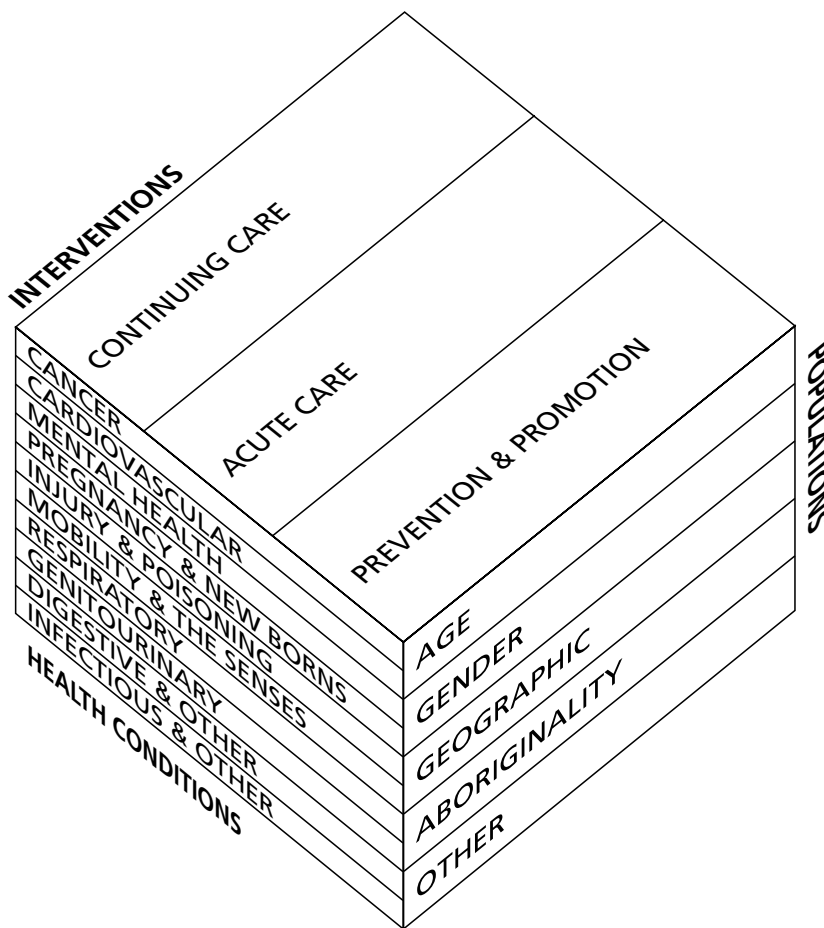
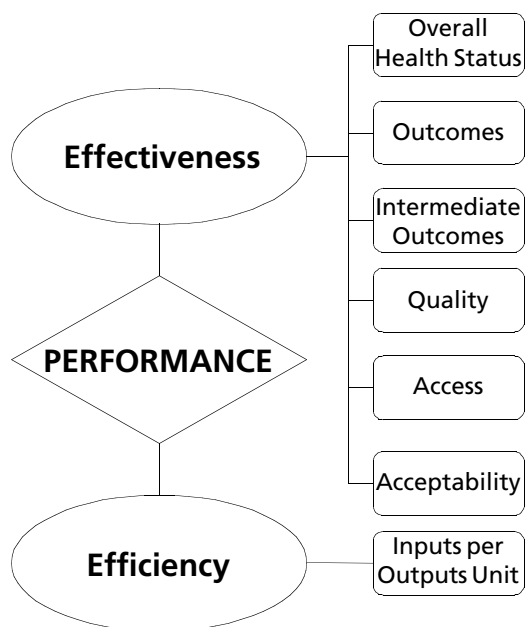


Figure 3.3.2: National Report on Health Sector Performance Indicators Framework



Source: Getting Better All the Time: Health Sector Performance Indicators. Auditor General of Western Australia. Report No 4 – June 1999. Adapted Steering Committee for the Review of Commonwealth/State Service Provision (1999)

Having overseen a considerable program of improvement of Hospital Key Performance Indicators, the Health Service and Board Hospitals KPI Working Group has now set its sights on a similar improvement to the broader health service delivery system. They intend exploring possible improvements to public health, community health, mental health, and ambulatory care indicators.

The improvements in the quality of Key Performance Indicators achieved both by the Health Department and the Health Services in recent years has been noted by Western Australia’s Office of the Auditor General.

“Over recent years considerable progress has been made by health sector agencies in the development and reporting of performance indicators. In particular, the indicators for hospital-based services have improved significantly during this period.

The standard of performance indicators reported by health sector agencies in Western Australia compares favourably with indicators reported interstate and overseas, and they are the only broadly-based indicator set that is subject to comprehensive and regular independent external audit.”

(“Getting Better All the Time: Health Sector Performance Indicators”. Auditor General of Western Australia. Report No 4 – June 1999)

Treasury Budget Statements

With the adoption of output based management by the Western Australian Government, there are output based appropriations of funding to WA Government agencies. To implement this process, agencies are now required to define all of their activity as outputs, with activity levels, cost per unit of activity and total value to be specified for each output. Capital appropriations still exist for the acquisition of major new assets.

The framework for the HDWA’s Treasury Budget Statements is the three levels of intervention from the purchasing framework. Each of these is further disaggregated according to metropolitan versus rural, and medical versus surgical. Further refinement of the indicators will occur next year, such as dissection according to Aboriginality of clients. This framework is represented in figure 3.3.3 below.

Figure 3.3.3: Classification of Outputs for Western Australian Treasury Budget Statements from the Health Department of Western Australia

	Metropolitan / Rural	Medical / Surgical
Prevention and Promotion		
Diagnosis and Treatment		
Continuing Care		

Against each of these performance indicator categories there will be reporting against each of the following characteristics:

- Quantity
- Quality
- Timeliness
- Cost.

Health Service Agreements

In November 1998 the Health Department of Western Australia established its Contract Management Branch, which manages the negotiation of the Health Service Agreements negotiated between the Commissioner of Health (on behalf of Minister for Health) and the individual public health services. These agreements are the principal document underlying the performance management of the public service providers in the health system.

The Contract Management Branch manages the relationship with health service providers as a coordinated single point of the contact with the Department. The Contract Management Branch also contributes to performance management by ensuring purchasing decisions are translated into service delivery. Contracts with private sector providers focus on price, timeliness, quantity, and quality issues.

In the case of contracts with publicly owned health services, the agreement contains a schedule to reflect this public ownership, known as the Accountability Schedule. The Accountability Schedule sets out the annual reporting requirements of Health Services, which include:

- Actual and budgeted maintenance expenditure
- Asset maintenance plan
- All assets and inventories
- New capital purchases
- Accrued leave liability
- Expenditure and time allocated to professional development.

Purchasing Data Analysis

The purchasing component of the performance management system is driven by rigorous data analysis. The General Health Purchasing Division of HDWA obtains data on costings linked to admitted patient episodes from the teaching hospitals, for use in defining the purchasing model. This includes analysis of individual records of exceptional admitted patient episodes of care (long-stay, short-stay, and very expensive or very unusual types) for development of a better understanding of the services purchased. Data has been collected since 1995-96 to enable analysis of trends in costed casemix data.

This provides a substantial database for management of in-patient purchasing and work is now providing an improvement in non-admitted patient services, prevention and promotion, and continuing care. There are also on-going hospital audits and clinical evaluations of exceptional episodes.

The Western Australian Strategic Quality Plan

The Western Australian Strategic Quality Plan focuses on the seven initiatives agreed between the Commonwealth and the States/Territories, and two further initiatives (Risk Management and Supporting Health Workforce Development) developed by the State. This program of interrelated strategic initiatives is grouped into four major areas:

1. Meeting the needs of patients/clients/consumers
2. Organisational change and development. This includes fostering clinical best practice, enhancing innovation, risk management, and supporting development of the health workforce
3. Information management
4. Accountability, including measuring quality and outcomes, strengthening accreditation, and promoting accountability for quality.

This Plan adopts a framework that promotes leadership as the underlying driver of quality improvement. Responsibility for this leadership has to be understood and implemented by staff at the local level. Moreover, the framework presents quality improvement as a continuum, commencing with the goal of attaining minimum standards and moving towards a model of strategic organisational development. Each of the strategic initiatives may be seen to have this continuum of quality.

Quality Council

The establishment process for this council is still proceeding, with issues regarding membership being discussed. This council will provide a leadership role in continuous improvement of quality in health care in WA.

Strengthening the Consumer Voice

The Informed Consent and Disclosure of Material Risk Working Party has been formed to develop a draft document for use by clinicians and consumers. Consumer councils have been established in metropolitan hospitals and are currently being implemented in regional centres.

Clinical Best Practice and Benchmarking

A major new initiative is the Collaborative Training and Education Centre (CTEC), which incorporates the Skills Centre and the Centre for Anaesthesia Skills and Medical Simulation (CASMS). Additionally, other initiatives are being undertaken at a local health service level (eg surgical audit program); or wider level, (eg Quality of Surgical Care project, WA Drugs and Therapeutic Committee). For programs with high numbers of episodes of care (e.g. renal dialysis) or high costs (e.g. cardiac and rehabilitation) committees have been established to consider best practice and funding issues.

Accreditation and Guided Self-Assessment

The majority of WA public hospitals are accredited under the ACHS. Because of cost and other factors (eg perceptions of usefulness), a number of hospitals in metropolitan and rural areas have recently been trialing a model of guided self-assessment. The model under consideration is Australian Quality Council Guided Self Assessment Process.

Promoting Accountability for Quality

Accountability for quality occurs mainly through clinical peer review and quality improvement committees. The Medical Council is exploring issues related to credentialing for clinicians. Endoscopy guidelines are being developed.

Enhancing Innovation

Various innovative models of clinical practice are in progress, eg those that promote continuum of care, particularly with general practitioners. Human Research Ethics Committees are operating within new Australian Health Ethics Committee guidelines (NHMRC 1999).

On a strategic level, the metropolitan health system is organising its management structure into Integrated Clinical Services covering the entire metropolitan area, as set out in the Health 2020 strategic plan (Health 2020: A Plan for Metropolitan Perth. Health Department of Western Australia. 2000).

Supporting Information Systems

Systems have been developed across the spectrum including medical, clinical, nursing, administration, financial, and allied health.

Risk Management

The Metro Health Service Board (MHSB) has recently given approval for the further development of risk management framework on a whole-of-MHSB basis, incorporating clinical incident reporting systems.

A risk management monitoring framework is in place for privately managed public sector providers.

Supporting Health Workforce Development

Professional development programs, including remote exchange for clinical staff are being developed. Greater links are being established with training institutions/agencies.

Performance Evaluation Unit

The Health Department established a Performance Evaluation Unit in December 1998. This Unit has taken on the responsibility for development of the Health Department's key performance indicators for the annual reports. Other key functions of the Unit are undertaking a program of evaluation, and a performance review role for the health system.

The Unit is currently undertaking two evaluations – one on the implementation of the State's Palliative Care Plan, and the other concerning the success of strategies for the attraction and retention of psychiatrists. There has been a performance review relating to accrued leave liability in the public hospitals from a 'return on investment' perspective, which has just been undertaken. Work is currently under way on analysis of maintenance of capital, from a return on investment perspective.

FTE Benchmarking Review.

Health Workforce and Reform Division of HDWA have sponsored this project, which entails a consultant establishing FTE levels for different business units of health services, to compare with national benchmarks for health services of similar sizes. A focus of this work is deriving consistent definitions of business units, to allow meaningful comparison.

Central Agency Reporting

A range of reports is required by State Central Agencies, such as the Minimum Obligatory Information Requirements. A wide range of information on the workforce of Government Agencies is required for the Human Resources Minimum Obligatory Information Requirement. This information is supplied electronically as unnamed individual employee records.

3.4 South Australia

Performance Information Framework for Health in South Australia

The introduction of accrual output budgeting in the State Budget process in 1998 requires all state agencies to report on outputs and performance indicators. This has resulted in a range of outputs being identified, including those within the health sector. This approach has contributed to a significant focus on health related expenditure in the Department of Human Services (DHS) budget and is associated with increasing pressure to contain health costs.

The primary objectives for developing a performance information framework for health are to meet the reporting requirements of both the State and Commonwealth governments and to assess organisational performance in the roles of purchaser and provider of health services. These include community health services and hospital based treatment services.

In achieving these objectives, performance information is being developed to create better alignment with key strategic priorities at the national and state levels and the Department's goals. These strategic priorities include those identified by:

- Australian Health Care Agreement
- National Health Priority Areas initiative
- National Public Health Partnership/Public Health Outcomes Funding Agreement
- Directions South Australia 1999-2000
- State Budget
- Human Services Portfolio Strategic Plan 1999-2001
- Corporate Service Delivery Plans/Divisional Business Plans.

Development of Performance Information

South Australia's Government Management Framework and budget reform processes have influenced the development of performance information in relation to health. The Department currently reports its performance through a number of outputs and measures, covering the full spectrum of care.

Development of health performance indicators has been a continuous and evolving process, supported by planning studies and service delivery reviews. Clinical Service Planning activities and the development of Health Care Networks have led to the initiation of new work in SA on acute care performance indicators around the concepts of access, appropriateness, effectiveness, efficiency, timeliness and quality.

The 'Promotion and Protection of Health and Wellbeing' Output Class supports DHS's focus on primary health care in relation to prevention and early intervention. Against this output class, a number of outputs and performance indicators have been identified and include:

- community support and development
- disease prevention and management
- environmental health management
- health promotion.

These outputs are further developed in business plans, service plans and policy documents. To meet the needs of primary care services within South Australia, partnerships and improved interfaces with community support systems need to occur when deciding on relevant (more meaningful) future performance indicators.

The future focus of health indicators is likely to include service integration and the measurement of effectiveness against service outcomes. These would be more informative, useful and accurate for both external reporting and internal management purposes and are likely to provide better alignment to government priorities and the key strategic directions of the Department.

It is envisaged that separate performance frameworks need to be developed to capture different aspects of health care such as community-based care and hospital based treatment services. This development work will commence in July 2000 as part of a review of outputs, definitions and performance indicators for high level outcomes and outputs in the Human Services Portfolio.

3.5 Victoria

Monitoring and publication of indicators

Public hospitals report financial and operating information to the Department on a monthly basis. In turn, management information derived from these reports is circulated back to the larger hospitals for comparative review and discussion on a monthly basis. The emphasis is on prompt and timely interchange of information - for example, hospitals are required to submit preliminary estimates of key indicators of efficiency and financial viability for each month two weeks into the following month.

The Victorian Department of Human Services is developing its annual Hospital Comparative Data report into a streamlined web based product that will focus on industry performance. Data to be presented for individual public hospitals will include:

- expenditure on acute and sub-acute admitted patient services, admitted patient separations and patient days
- total non-admitted patient total occasions of service
- workforce details including total equivalent full time (EFT) staff and average annual salary by staffing category.

Public hospitals will be grouped according to size, teaching or regional base status and inpatient activity. In metropolitan regions, where network groupings exist, campus level data will be grouped to network level. Similarly, for rural hospitals all campus level data will be grouped to the level of the legally amalgamated hospital.

Data on private hospital and day procedure centre separations, same day separations, registered and average available beds and occupancy rates will be aggregated to the regional level.

Development of quality indicators

Quality has a number of different dimensions. Work is in progress on indicators in the following areas: access to care, acceptability of care, appropriateness, effectiveness and safety, continuity of care, and organisational effectiveness of care. It is intended to commission work on the best ways to report on quality of care to different interested groups and to the public.

Access to care is monitored through the various indicators reported as part of the Hospital Access Program e.g. emergency department and elective surgery waiting times, critical care transfers, occasions of ambulance bypass. Financial incentives are given to hospitals based on their performance against these indicators.

Appropriateness, effectiveness and safety of care: A major project to identify a small set of clinical indicators that could be introduced in 2000 for monitoring at State or hospital level reported to the Department in July 1999. The report comprised of two components. The first part consisted of a comprehensive literature review undertaken by the Monash University Department of Epidemiology and Preventive Medicine. The second component undertaken by Australian Council on Healthcare Standards covered the clinical indicators recommended for statewide monitoring and the current capacity of information systems in the acute health system to gather these.

An example of the type of indicator being considered is the time from arrival at a hospital emergency department with suspected heart attack until an anti clotting agent (proven to be effective in reducing mortality) is given. Meetings of the Project Steering Group to determine how these indicators could be implemented within the acute health care system and what further work should be commissioned were scheduled to take place in early 2000.

The Department helps to fund a national intensive care database and has made a commitment to provide funding to help establish a cardiac surgery database. When fully established both databases should be able to provide specialty-specific information on quality of care. A further expert group is also currently identifying the best system to monitor the effectiveness of infection control.

Acceptability of care is being monitored by surveying patient experience of care. In 1999–2000 the Department will also pilot two indicators relating to the management of patient complaints. The first is an indicator of the effectiveness of complaints management, based upon those complaints which are resolved at the local level and those which are externally referred for investigation and conciliation. The second indicator relates to the provision of data to the Office of the Health Services Commissioner.

Continuity of care indicators are being developed as part of the Discharge Strategy. An audit of patient records to monitor how well discharge practices are recorded in patient notes has just been completed and bonuses are being paid to the top performing hospitals.

Work is also starting on indicators of the effectiveness of quality systems within acute health care organisations. This incorporates work on accreditation processes, complaints management, statutory immunity systems and credentialling of health care professionals.

Non-acute services

In Victoria, performance measurement is also a priority in the context of other non-acute services such as Primary Health, Aged Care and Mental Health.

Within the Department of Human Services, the Aged Community and Mental Health (ACMH) Division has developed a strategy to improve its approach to performance measurement, reporting and data collection. Overall, a staged approach to fundamental improvements in performance measurement and information management is being adopted.

In summary, the strategy involves three stages:

1. Short term confined rationalisation for 2000-01: Substantive housekeeping undertaken whereby performance measures, data requirements, and reporting arrangements are rationalised within the boundaries of existing systems and business protocols. This stage is mostly complete.
2. Medium term improvement throughout 2000-01 for 2001-02: Comprehensive rationalisation of the Division's performance measures, data requirements, reporting arrangements and Chart of Accounts where necessary. Development of a consistent approach to performance measurement and reporting framework.
3. Major reform of performance measures and data for the longer term: Major reform of performance measures, data requirements, reporting arrangements and funding structures to support proposed funding and performance measurement directions.

In combination, all these efforts will focus on:

- improving data collection and reporting procedures
- increasing the use of data
- increasing access and availability of performance data to key stakeholders
- ensuring reporting requirements and performance measures are relevant to key stakeholders
- developing a more balanced approach to performance measurement.

Performance measurement efforts across non-acute services are at different stages and levels of sophistication.

Within the Mental Health area, Victoria has developed a suite of outcome measurements for a select number of Area Mental Health Services, pending full implementation of the new state-wide database for mental health services in Victoria (RAPID). The suite of measures for adult mental health services includes both consumer and service outcome measures. Service outcome measures gauge service activity and responsiveness, as well as consumer and carer satisfaction. Consumer outcomes in Victoria will rely on a number of instruments that emerged from local and national consultation processes as being sufficiently informative to assist clinical decision making, yet appropriately brief to be feasible in routine practice. Further state-wide consultation to also canvass consumer views about outcome measurement in more depth is proposed.

Extensive effort is in progress to ensure appropriate information systems and data is available for Primary and Community Health services. These efforts are largely associated with the implementation of the Primary Care Partnerships strategy.

3.6 Tasmania

The Tasmanian Department of Health and Human Services (DHHS) has portfolio responsibility for public hospitals and the following services: ambulance; mental health; disability support; aged care; rural and community health; palliative care; public and environmental health; alcohol and drug; dental; family, child and youth health; child and family support including youth justice; crisis accommodation and support; cancer screening; and, housing.

DHHS is both a purchaser and provider of services. It purchases community based services from the non-Government sector through service agreements. It is also the major provider of the majority of the services listed above.

The policy/purchasing function and the management responsibility for the provision of services rests with the same executive body within the Department. This is different to many other States where the Department sets the policy and purchasing direction and then funds independent hospital Boards, networks or regional areas to provide services.

The recent development of the Departmental Positioning Document elucidates the policy direction being taken by DHHS over the next three years. The health gain approach will strongly underpin future policy, service planning and development. The following framework has recently been adopted by Tasmania and the four outcomes illustrate the two major themes. One is to ensure that all services contribute to the advancement of the health and wellbeing of Tasmanians and the second is to ensure that the organisation and service system have the capacity to position Tasmania for this challenge.

CURRENT STRATEGIC FRAMEWORK

Vision

Improved health and wellbeing for Tasmanians

Outcomes

Health and wellbeing status which compares favourably with the best in Australia

Quality of life maintained and improved for those who experience illness, injury or disability and those in need personal or social support

Enhanced capacity and increased opportunities for Tasmanians of all ages to contribute to their own health and wellbeing

A strong dynamic organisation that leads the health and human service industry and is responsive to the external environment

Mission

Ensure access to quality health and human services

Goals

Healthier Individuals

... are people who have the capacity to maximise their quality of life.

Stronger Families

... have strong relationships and the capacity to support and sustain each other.

Stronger, Healthier Communities

... activate and use their resources to make or influence decisions that maximise the common good of the community members.

Healthier Organisation

... is outward looking and responsive to the external environment and practices good public sector management to support service delivery and client outcomes.

The Framework recognises that planned interventions are essential to achieving improvement in individual, family and community health and wellbeing. It is based on a health and wellbeing gain approach with a focus on the social, economic, cultural and economic factors that determine health, ill health and social wellbeing.

Current Performance Measurement Framework

Budget Performance Information

The current performance information reported externally in the budget papers can be located at the Tasmanian Department of Treasury and Finance web site. The Budget Estimates Committee forum also provides the opportunity for close scrutiny and review of Departmental performance.

www.tres.tas.gov.au

Annual Reporting Information

The Annual Report which is tabled in Parliament each year also contains a snapshot of performance information and can be located in the publication section of the DHHS web site.

www.dchs.tas.gov.au

Internal Departmental Performance Reporting -Divisional

Each of the five operating Divisions (Hospitals and Ambulance; Community and Rural Health; Housing; Child, Youth and Family Support; and, Health Advancement) have their own performance measurement and reporting mechanisms which are aggregated up into whole of Agency reporting.

In addition, each Division has more specific Divisional reporting requirements, for example, monitoring requirements under Commonwealth/State agreements, including: Residential Aged Care standards, Supported Accommodation and Assistance Program Standards, Disability Standards, Home and Community Care Standards, Mental Health Standards and Palliative Care Standards.

Further, assessment against the Australian Health and Community Services Standards, AHCSS, (Quality Improvement Council) is largely used for service development and accreditation purposes in community-based services.

Participation in the Evaluation and Quality Improvement Program, EQuIP, (Australian Council on Healthcare Standards) is characteristic of all three major hospitals. The major public hospitals also participate in inter-jurisdictional benchmarking consortiums.

Some of the larger operating Divisions have other specific performance and quality mechanisms in place such as the Statewide Hospitals and Ambulance Service Quality Council and the Community and Rural Health Quality Improvement Strategic Framework.

Whole of Agency

Divisional reporting information is aggregated up on a monthly basis and monitored by the senior executive body of the Department. The information includes measures of financial, human and asset resource management, activity/volume measures, and Ministerial measures (implementation of policy). They generally fall into the measures of efficiency and effectiveness. Measures such as safety, access and consumer satisfaction are reported at the Divisional level with exceptional reporting at the executive level where required.

The need for a broader focus on performance has been recognised and there is considerable work occurring at a corporate level to develop a more integrated and whole of system performance measurement framework.

Draft Quality and Performance Framework

While Tasmania has recently completed a draft Quality and Performance Framework for wide circulation to stakeholders for comment, the recently developed draft national performance framework will influence further local development. The national development is timely and the broader whole of system view taken by the national draft framework will enhance the Tasmanian framework.

The Tasmanian focus had initially been on the performance of the health system, and while that is also a component of the draft national framework, it is likely the Tasmanian model will take the broader approach being adopted nationally when gaining Agency and Treasury endorsement for its' performance framework.

Clearly, when the work commences to populate the new Tasmanian framework with performance measures, it will be the health system performance that will be the initial focus.

Currently, Tasmania is proposing that performance be measured against key areas or dimensions of quality, that is: safety, access, efficiency, effectiveness and participation/collaboration. Other cross-dimensional areas of performance may include, for example, appropriateness, acceptability, continuity and capability. More specific or operational performance elements (standards, benchmarks, targets and indicators) will be developed at sub-dimensional level over time and through collaboration with business units, clinical and service staff.

The Tasmanian Department of Health and Human Services has regard to and works within other national frameworks and agreements, including:

- Australian Health Care Agreement
- National Health Priorities
- Tasmanian Treasury requirements in relation to an Outputs and Outcomes focus in inner-Budget Agencies
- Agency and Divisional Business Plans The Review of Commonwealth/State Service Provision
- AIHW national minimum data sets
- National Health Performance Committee
- National Public Health Partnership/Public Health Outcomes Funding Agreement

3.7 ACT

Health performance information is made available through a number of sources to meet reporting requirements of the ACT and Commonwealth Governments and to inform the community generally.

The broad directions for the Department of Health and Community Care and the health portfolio are guided by two key documents, *Setting the Agenda* and the Department's Strategic Plan.

Setting the Agenda and Strategic Plan

Setting the Agenda, the Government's blueprint for health, released by the Minister in August 1998, provides clear directions for the health and community care. The document establishes a vision for Canberra as a healthy society and recognises the need to promote and improve the health of all members of our society with a particular focus on those who are most vulnerable and with the poorest health status.

The action areas in *Setting the Agenda* cover health for all in the ACT, a healthy city, community and home-based primary care, reforming the hospital system, timely and effective hospital treatment, using evidence to achieve better outcomes, empowering our customers, a clever health service and partnering our people.

The Department has formulated a new strategic plan which describes the key areas of the ACT health system on which it will focus through to 2002. The key result areas on which action is planned are:

- Integrated health services will focus on the health and wellbeing of the population
- Provision of leadership in health services delivery through primary health care
- Acute care services will be effective, efficient and accessible
- Quality information drives effective decision making
- Good management and improved organisational capabilities deliver performance objectives.

Quality and Safety

The ACT Healthcare Services Quality Enhancement Plan is being developed in response to a commitment under the 1998-2003 Australian Health Care Agreement. The ACT Quality Forum has been formed to oversight the Plan and for developing the ACT agenda around quality and safety in health services.

The Department, Calvary Hospital and The Canberra Hospital are working together on the proposed introduction of the Australian Incident Monitoring System (AIMS) to the ACT's public hospital system.

ACT Community Care is investigating a framework that enables the routine collection of outcomes data. The investigation will examine whether a relationship between health outcomes and process indicators exists and whether process indicators can be used as a proxy for health outcomes reporting.

The Clinical Health Improvement Program has been initiated to improve outcomes including:

- Clinical outcomes (physical and mental, including status eg. SF36 measures)
- Services outcomes (consumer/patient satisfaction, provider satisfaction)
- Cost outcomes (the cost of services is the sum of the cost of processes, including the cost of adverse events, waste and duplication, while the overall cost includes the cost of the burden of disease).

The program is designed to support clinicians in improving the quality of services provided across the ACT and will include:

- Measurement of practice variation (against an agreed tool ie. clinical pathway)
- Feedback on variance to the peer group (to examine why there are differences, what is best care, what is the evidence)
- Action (change the pathway, fix the measurement system, change clinical practice, or agree that the variation was random and does not warrant any further response).

The ACT's two public hospitals and ACT Community Care's Community Health Program and Disability Program are fully accredited through the Australian Council on Healthcare Standards Evaluation and Quality Improvement Program.

Benchmarking

The Clinical Best Practice Review is a benchmarking project being undertaken at The Canberra Hospital with the aim of promoting best practice in an environment of financial restraint, in both a management and a clinical sense, by developing a comprehensive understanding of associated practices and costs.

The review has commenced in four clinical areas and working groups established for each. The clinical areas are:

- cardiology
- renal
- gastroenterology
- obstetrics and gynaecology.

During 1999-2000 the working groups have collected information and statistics for their clinical activities including data about use of clinical pathways, lengths of stay, clinical practice, admission and discharge services, clinical quality and service costs. The working groups have identified peer hospitals around Australia and approached their counterparts at these hospitals to seek their participation in exchanging information as a benchmarking partner.

It is planned to use the benchmarking process on an ongoing basis to examine all clinical and non-clinical areas with a phased process of implementation across the Hospital.

The Canberra Hospital continues to take part in the South East Australasian Hospital Benchmarking Consortium (SEAHBC) and the individual benchmarking undertaken within this group. For example, a recent benchmarking project in which The Canberra Hospital participated examined theatre utilisation and management and gave the Hospital a valuable insight into theatre management practices by other hospitals in the group.

The Canberra Hospital also provides data to the Benchmarking Consortium for use in the publication of the Casemix Review which compares data for AN-DRGs and Clinical Service Groups between hospitals in the Group. A "Report Card" in the Report indicates direct comparisons at an AN-DRG level allowing the Hospital to compare its practices with better performing hospitals or to act as a mentor for those hospitals not performing as well.

Recently, The Canberra Hospital drafted a set of performance indicators covering quality, access, service efficiency and cost efficiency measures and submitted these to the SEAHBC Group for adoption and inter-hospital data comparisons.

Reporting

The ACT introduced output based funding and accrual budgeting and accounting across the public sector in 1996-97. These reforms were designed to increase public sector efficiency and promote the delivery of high quality services to the community at less cost. The Department reports progress against a Purchase Agreement on a quarterly basis.

The ACT's performance information framework is designed to meet reporting requirements to the Commonwealth including under the Australian Health Care Agreements, National Mental Health Strategy, Aboriginal and Torres Strait Islanders and Public Health Outcomes Funding Agreement. There has been a continuing process of refining and improving the performance indicators specified in its purchase agreements with health care providers to better meet these national reporting obligations.

The first Chief Health Officer's report on the health and wellbeing of the people of the Australian Capital Territory was released in October 1999. This first report was for the two year period ending on 30 June 1998 and brought together data and health indicators from a wide range of sources. Recognising that many of the causes of ill health are outside the domain of direct medical intervention, where possible the report profiled the social, environmental, educational and economic factors which impact on health status and risk levels associated with ill health.

3.8 Northern Territory

Territory Health Services' (THS) strategic intent is to create and enhance a Territory-wide network of services, which delivers continuing improvement in the health status and well-being of all Territorians.

The Corporate Plan relates to the NT Government's Future Directions strategy which emphasises:

- preserving and enhancing the lifestyle of all Territorians
- fostering partnerships in Aboriginal development
- diversifying the economy through service industry growth
- encouraging strong Territory communities and regions.

This approach required a shift in the balance of THS's core business from a focus on sickness to individual and community health delivered by a network of quality health care providers. Additionally, the Corporate Plan places emphasis on the development of a funder, purchaser and provider framework across the Department based on performance measures. To support this approach, the organisation has increased its capacity to more accurately define services and the desired outcomes of these services with measured performance.

Health Gains

In line with Corporate directions Territory Health Services is developing a Health and Wellbeing Information Framework which is based on the Health Benefit Groups/Health Resource Groups model developed in the United Kingdom. The base information framework links data and information from a range of services across the health care sector. The model will enable analysis of health gain across the spectrum of health care providers. The implementation of a Client Master Index in the Northern Territory, a national first, will aid study of information across numerous providers in order to quantify consumer health gain relating to specific interventions.

Quality Framework

In July 1999 Territory Health Services Executive Management Group established the Quality Improvement and Best Practice Standing Committee to:

- provide strategic advice to Executive on national developments and priority areas for the advancement of quality/best practice and risk management initiatives
- develop a policy framework to assist in moving THS towards acknowledgment as a best practice model for quality improvement and safety.

A consultant has been engaged to develop the quality policy framework taking into account the following future directions:

- To increase consumer involvement/participation in the planning, development and improvement of health services
- To further develop and implement an integrated risk management program
- To continue to develop integrated comprehensive information management systems that are supported by education and training in their application and use
- To develop strategies that will improve strategic workforce planning.

The Territory Health Services Quality Framework will work within other agreements and priority areas, such as:

- Australian Health Care Agreement
- National Health Priorities
- National Aboriginal Health Strategy
- National Aboriginal Health Performance Indicators
- Northern Territory Governments “Foundations for the Future”

Safety and Quality

The Australian Incident Monitoring System (AIMS) is now in place in all five public hospitals. This system provides valuable information on safety and quality and because it is a national system it can be used to benchmarking like organisations.

Royal Darwin Hospital, the major teaching hospital is fully accredited through the Australian Council of Health Care Standards (ACHS) Quality Improvement Program. The four remaining hospitals are all working towards the establishment of quality systems and performance monitoring and reporting in preparation for survey by ACHS.

Performance Reporting

External Reporting

In accordance with the provisions of Section 28 of the Public Sector Employment and Management Act an Annual Report on the activities and operations of Territory Health Services is tabled in parliament. The Report includes both financial and output/outcome based performance indicators.

In line with other Government agencies, Territory Health Services contributes to the annual review by the Productivity Commission for the Review of Government Service Provision.

Territory Health Services also contributes to the Australian Institute of Health and Welfare, and Commonwealth Department of Health and Aged Care National Morbidity Databases and National Elective Surgery Waiting Times data collections.

Internal reporting

Performance reporting is a key component of the Service Level Agreements between Territory Health Services and the five public hospitals. The performance indicators are reported under the following categories:

- access
- effectiveness
- appropriateness
- quantity
- quality and
- consumer participation.

These measures of performance are reported quarterly to THS Executive with additional snapshot information on areas of strategic importance. Whilst particular attention is paid to reporting major performance indicators the report also provides trends which diverge significantly from planned or anticipated directions.

The Community Care Sector is currently focusing on reporting of National Minimum Data Set (NMDS) items for Aged Care, Home and Community Care, Mental Health and Disability Services. Performance reporting and development will follow on from this.

Program Evaluation

Consistent with government policy, the Attorney General's Department monitors how effective Territory Health Services Executive has been in evaluating its programs. These programs are evaluated against the following criteria:

- efficiency
- effectiveness
- appropriateness

CHAPTER 4

BENCHMARKING ORGANISATIONS

4.1 Australian Council on Healthcare Standards

The Australian Council on Healthcare Standards (ACHS) Performance and Outcomes Service has a primary role of developing objective measures of the management and outcomes of patient care in Australian health care organisations (ACHS 1996). This has been achieved through collaboration with the various Australian Medical Colleges and associations by developing clinical indicators. This service was previously known as the Care Evaluation Program (CEP).

Clinical Indicators

Clinical indicators are defined as measures of the clinical management and outcome of patient care. They are not exact standards against which hospitals must measure their clinical performance, but rather are designed as flags that can alert to possible problems or opportunities to improve patient care. Clinical indicators are a measurement tool to assist in assessing whether or not a standard in patient care is being met.

The ACHS Performance and Outcomes Service (POS) has identified three basic requirements when developing clinical indicators:

- that they be relevant to clinical practice
- that the relevant data are available
- that the performance goal is achievable.

The ACHS have developed 18 sets of indicators to date and include:

- Adverse drug reactions
- Anaesthetics
- Day Procedures
- Dermatology
- Emergency Medicine
- Hospital Wide Medical Indicators
- Intensive Care
- Internal Medicine
- Obstetrics and Gynaecology
- Ophthalmology
- Paediatric
- Pathology
- Psychiatry
- Radiation Oncology
- Radiology
- Rehabilitation Medicine
- Surgery
- Hospital in the Home.

Each of the sets contain indicators that address a variety of clinical issues relevant to the specific medical discipline. Some of the indicators measure outcomes, such as morbidity from particular procedures, while others measure processes, such as compliance with criteria for management of a particular condition. The sets of indicators are reviewed annually. The ACHS propose to develop performance measures which underpin Evaluation and Quality Improvement Program (EQUIP) and are reflective of the core business of health care organisations, both clinical and organisation wide.

Each of the sets of indicators has been formally introduced into the ACHS process of hospital accreditation, the EQUIP, and are intended for use during the survey process to demonstrate the level of patient care and performance improvement within the hospital. Health care organisations that submit indicator data to the ACHS are provided with comparative information in relation to their performance against other like organisations.

For further information:

www.achs.org.au

phone 02 9281 9955 or email pos@achs.org.au

4.2 The Royal Australian College of General Practitioners

The Royal Australian College of General Practitioners (RACGP) is widely recognised as the arbiter of standards for general practice. As well as setting the standards for general practice training, assessment of competence, and quality assurance, the RACGP also sets the standards for general practices, embodied in *Standards for General Practices*, 2nd edition (in print).

History of Standards Development

The RACGP began developing standards for accreditation of general practices in 1992 with a grant from the Commonwealth of Australia. After successive drafts and the initial pilot, a national Field Test was conducted in 1994, involving 199 randomly selected practices, and over 700 general practitioners. The Field Test demonstrated high levels of validity, reliability, acceptability and achievability of the standards. An additional 500 practices participated in further evaluation of the standards through a program of Demonstration Trials, conducted by the Commonwealth through Divisions of General Practice.

Data and feedback from the Field Test and the Demonstration Trials were used to refine the draft standards. This final draft was circulated for comment in early 1996, leading to the eventual publication of the *Entry Standards for General Practices* (1996).

The RACGP National Practice Standards Committee (NPSC) oversees continuing development and monitoring of the standards and the accreditation process. This committee recently completed revision of the standards based on findings from survey visits, and feedback from general practitioners. *Standards for General Practices*, 2nd edition, is expected in May 2000.

The Standards

Fifteen standards grouped into five main areas describe the qualities of practice activities and facilities required for accreditation. Each standard is preceded by a short statement of the principle and philosophy behind the standard and is followed by more specific criteria which separate each standard into several components. Practices must meet every standard to be accredited.

All criteria for a specific standard must be met for the standard to be met. Each criterion is followed by a number of indicators that assist surveyors in deciding if the criterion is met. It is these indicators that are actually assessed or measured.

1. Practice services

- Standard 1.1 All patients are able to obtain timely care and advice appropriate to their needs.
- Standard 1.2 The practice provides the opportunity for patients to communicate their health problems and concerns and to receive sufficient information to enable them to make informed decisions regarding their care.
- Standard 1.3 In order to promote high standards of care the practice reaches broad agreement on approaches to diagnosis, management and outcomes which are consistent with relevant clinical practice guidelines, based on the best available evidence.
- Standard 1.4 Patient medical records contain sufficient information to identify the patient and to document assessment, management, progress and outcomes.
- Standard 1.5 The practice works with a range of other health and community services in its area to improve individual patient care.
- Standard 1.6 The practice provides health promotion and disease prevention services. These are based on scientifically validated guidelines.
- Standard 1.7 The practice makes all reasonable provisions for continuity of care.

2. Rights and needs of patients

- Standard 2.1 The practice ensures that the doctor(s) and staff respect the rights and needs of patients.

3. Quality assurance and education

- Standard 3.1 The practice is committed to quality assurance and continuing education.

4. Practice Administration

- Standard 4.1 Practice staff deal with patients in a helpful and competent way, and can identify emergencies and deal with complaints.
- Standard 4.2 Patient medical records are readily accessible for individual patient care, health promotion, audit and research, with due regard to confidentiality and patient rights.
- Standard 4.3 The practice ensures that all general practitioners in the practice, either individually or collectively, can exercise full autonomy in decisions that affect clinical care.

5. Physical Factors

- Standard 5.1 The practice has facilities which are appropriate for General Practice and which promote the health, safety and comfort of staff and people who use the practice.
- Standard 5.2 Medical equipment and resources are appropriate and adequate to ensure comprehensive primary care and resuscitation.
- Standard 5.3 The practice services are physically accessible.

Accreditation of general practices

These standards are applied so that accreditation of general practices should:

1. aim to attain the highest quality of general practice in an achievable and gradual manner
2. provide a publicly recognisable measure of quality in general practice
3. be voluntary, but should have tangible benefits
4. be for a defined period
5. be an educational and developmental process and not a punitive one
6. be in the hands of the profession.

At present accreditation of general practices is performed by two organisations: Australian General Practice Association Limited (AGPAL) and General Practice Accreditation (GPA).

AGPAL is a not-for-profit company limited by guarantee, which is governed by a board whose foundation members included representatives of the RACGP, Australian Medical Association (AMA), Australian Association of General Practitioners (AAGP), Australian Divisions of General Practice (ADGP), Consumers' Health Forum and the Commonwealth Government. Three new members were accepted in 1999: The Australian College of Rural and Remote Medicine (ACRRM), National Association of Deputising Australia (NAMDS) and the Australian Association of Practice Managers (AAPM). At the time of writing AGPAL had trained over 250 surveyors and has 62% of Australian general practices registered for accreditation. AGPAL has conducted over 1200 visits and has accredited 900 general practices.

The standards are assessed by peers during a practice visit. The main elements of the visit are:

- Interviewing the Principal doctor
- Interviewing other medical staff
- Interviewing non-medical staff
- Directly observing the practice operations and facilities
- Reviewing medical records
- Reviewing results of patient feedback
- Reviewing practice held data and documents such as appointment schedules and policy and procedure manuals
- Reviewing Health Insurance Commission (HIC) data.

General Practice Accreditation is a private company which has recently begun surveying practices for accreditation.

For further information, contact:

1. Director, Assessment and Practice Standards, The Royal Australian College of General Practitioners, 1 Palmerston Crescent, South Melbourne, 3205. Website: www.racgp.org.au
2. General Manager, AGPAL, PO Box 2058, Milton, 4064. Website: www.agpal.com.au

4.3 Australian Private Hospitals Association

Australian Council on Healthcare Standards (ACHS) accredits the vast majority of private hospitals (78%). By comparison, only 52% of public hospitals are similarly accredited. Therefore private hospitals are reporting on indicators established by the ACHS.

Health insurance funds are now using the ACHS information to inform their purchasing decisions. This is an issue with private hospitals, as the quality or clinical indicators reported on for the ACHS were intended to be used by facilities to improve care outcomes. Where hospitals are at risk of not being contracted by a major insurer unless, for example, unplanned readmissions to theatre figures are 'good', there is the real risk of data manipulation so as to present the best face to a potential purchaser. This, of course, degrades the potential for outcomes data to be used for its primary, care improvement, purpose.

Private hospitals have therefore resisted the provision of clinical, quality and/or outcomes data to non-provider agencies. Consequently there are no standardised outcomes data collections in the private sector.

4.4 Australian Health Insurance Association

Health insurance funds use a variety of performance indicators to inform their decision making process in relation to hospital contracting. While some funds use, or seek, more sophisticated data than others, most compare data such as cost, readmission rates and average length of stay, and other material drawn from the Hospital Casemix Protocol to allow them to benchmark and compare hospitals. Accreditation by ACHS is used by many funds to determine benefit levels, etc.

Health funds are anxious to obtain more data about hospital performance particularly in relation to outcomes. Private hospitals have been less than enthusiastic about supplying such data, and indeed have opposed any attempt by funds to tie payments to outcome or similar data.

Health insurers believe the provision of quality data is an important component of their funding strategies. This interest in developing systems which promote improved quality in the private hospital sector with a view to encouraging “health gain” and assist hospitals in improving their own performance is expected to continue. Some progress has been made in discussions relating to psychiatric care, where a committee involving the medical profession, private hospitals, insurers and consumers have agreed on a model for collecting and analysing data relating to outcome measures.

4.5 Hospital Benchmarking Roundtables and Consortia

Objectives

The Health Roundtable Limited is a membership organisation structured as a not-for-profit company limited by guarantee. The aims of the organisation are:

- To provide opportunities for health executives to learn how to achieve Best Practice in their organisations
- To collect, analyse and publish information comparing organisations and identifying ways to improve operational practices
- To promote interstate and international collaboration and networking amongst health organisation executives.

Members

Membership in The Health Roundtable is by invitation to hospital Chief Executives only. The Chief Executives are invited to become personal members, and their hospitals are then invited to become organisational members. Members are organised into “Chapters” to facilitate ongoing small-group discussions. Each Chief Executive is expected to serve on the Board of Directors of the Chapter of The Health Roundtable to which he/she belongs in order to set the agenda and monitor progress. Members may invite a limited number of guests to participate in activities of The Health Roundtable.

At present, membership is limited to eleven hospital chief executives in each chapter to facilitate discussion. Current organisational memberships are as follows:

<p>FOUNDING CHAPTER</p> <ul style="list-style-type: none"> • Royal Adelaide, SA • South Auckland, NZ • Royal Perth, WA <p>ALL STARS CHAPTER</p> <ul style="list-style-type: none"> • Flinders, SA • Geelong, Vic • Townsville, QLD 	<ul style="list-style-type: none"> • The Alfred, VIC • Royal Melbourne, VIC • Royal North Shore, NSW • Canterbury Health, NZ • Fremantle, WA • The Queen Elizabeth, SA • St George, NSW • Hobart, TAS 	<ul style="list-style-type: none"> • Liverpool, NSW • Princess Alexandra, QLD • Royal Brisbane, QLD • John Hunter, NSW • Sir Charles Gairdner, WA • Austin, VIC • Westmead, NSW • Capital Coast, NZ
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Since its inception in 1995, The Health Roundtable has focused on operational improvement by identifying best practice within the membership, and then sharing insights amongst the members to improve practices. Data provided to The Health Roundtable are freely shared amongst members in each Chapter, but not disclosed to other organisations, in order to maintain frank and open discussion. In keeping with the focus on self-improvement, members are governed by an “honour code” which requires that no member shall criticise the performance of other member hospitals, or use any of the information to the detriment of a fellow member. No external distribution of data or conclusions based on Health Roundtable workshops or data is made without the unanimous consent of the Board of Directors.

The Roundtable Process

The Health Roundtable process is based on two major approaches: Workshopping Key Issues and Analysing Casemix Performance.

The workshopping process uses face-to-face discussion of key operational issues and innovations involving the Chief Executives, key clinicians, and management staff of each member hospital. Workshops have concentrated on ways of improving the management of clinical processes. The issues addressed since 1995 have included:

- How to Get Patients Into and Out of High Occupancy Hospitals While Maintaining High Quality Patient Care
- How to Get Patients Into and Out of Hospital on the Same Day
- How to Get Patients Into Hospital on the Day of Surgery
- How to Improve Use of Health System Resources for Medical Patients
- How to Improve Acute Care of Hip Surgery Patients
- How to Improve Interventional Cardiology Services
- How to Improve Operating Suite Management
- How to Improve Management of Complex Medical Patients
- How to Improve Management of End Stage Renal Failure.

In addition, workshops with clinical information and casemix data managers from each hospital have been convened to review the techniques of data analysis and the differences in data practices between hospitals.

Prior to each workshop, casemix data from each hospital are analysed, and detailed surveys are prepared to collect information on current practices both within the membership and from collaborating overseas institutions. These are collated into Briefing Packages and circulated to workshop participants prior to the meeting. The workshop itself consists of several highly-structured sessions designed to identify problems with current practices, and to uncover solutions already in existence at one or more hospitals in the group. Summary Guidebooks are prepared from each workshop to assist the members in improving clinical and operational practice.

In addition, The Health Roundtable also provides in-depth comparative analyses of casemix performance to all member hospitals every six months. Beginning in 1997, this analysis also includes comparative analysis of clinical costing information, based on a consensus approach developed by financial managers from each hospital, in recognition of the major differences in accounting practices amongst the hospitals. The 22 hospitals within The Health Roundtable account for over 20% of all public hospital admissions in Australia and New Zealand, with well over 1 million inpatient episodes per year.

The members attribute the success of The Health Roundtable to several key factors:

KEY SUCCESS FACTORS

- ✓ Voluntary participation by hospital chief executives
- ✓ Emphasis on practical operational issues with solutions that can be implemented now
- ✓ Direct control of the agenda and priorities by the members themselves
- ✓ Focus on face-to-face discussion of real data with peers from other hospitals
- ✓ Active involvement of hospital managers and clinicians from several disciplines
- ✓ Recognition that all member hospitals have innovative practices to contribute
- ✓ Confidence that the information shared within the group will not be revealed to others and will not be used to the detriment of any member
- ✓ Independent, professional analytical support by the benchmarking organisation.

Roundtable Topics

The Health Roundtable's agenda is set by the Board of Directors of each chapter, and modified during the year as new issues emerge. It is expected that the agenda will continue to include comparisons of practices in specific clinical specialties, analysis of key functional areas, such as nursing, and increased workshopping of clinical cost comparisons.

Support to Other Consortia

The Health Roundtable also supports the establishment of new groups of collaborating hospitals for similar purposes, and licenses its techniques of data analysis and review to such groups. At present, Health Roundtable methodologies are licensed to the following collaborative groups:

	Hospital Members	
The South Eastern Australasian Hospital Benchmarking Consortium Contact: John Rasa, Box Hill Hospital, Victoria	<input checked="" type="checkbox"/> Canberra <input checked="" type="checkbox"/> Nepean <input checked="" type="checkbox"/> Box Hill <input checked="" type="checkbox"/> Sunshine Coast <input checked="" type="checkbox"/> Royal Melbourne	<input checked="" type="checkbox"/> Gold Coast <input checked="" type="checkbox"/> Auckland <input checked="" type="checkbox"/> Prince of Wales <input checked="" type="checkbox"/> John Hunter <input checked="" type="checkbox"/> Frankston
The Regional Health Improvement Network Contact: Gloria Wallace, Toowoomba Hospital, QLD	<input checked="" type="checkbox"/> Toowoomba <input checked="" type="checkbox"/> Ispwich <input checked="" type="checkbox"/> Logan <input checked="" type="checkbox"/> Albury <input checked="" type="checkbox"/> Wagga Wagga	<input checked="" type="checkbox"/> Orange <input checked="" type="checkbox"/> NW Regional (Tas) <input checked="" type="checkbox"/> Goulburn Valley <input checked="" type="checkbox"/> Wangaratta
The International Roundtable Contact: Dr Denise Robinson, St Vincents Hospital, Sydney	<input checked="" type="checkbox"/> St Vincents (Sydney) <input checked="" type="checkbox"/> King Faisal (Saudi) <input checked="" type="checkbox"/> Singapore General <input checked="" type="checkbox"/> Royal Prince Alfred <input checked="" type="checkbox"/> Concord	<input checked="" type="checkbox"/> Mater (Brisbane) <input checked="" type="checkbox"/> Repatriation General <input checked="" type="checkbox"/> Otago <input checked="" type="checkbox"/> Waikato

For Further Information

Dr Michael Walsh (Alfred Hospital) is the current President of The Health Roundtable Limited. Dr David Dean serves as the General Manager. For further information about The Health Roundtable or licensing its methodologies, please contact:

General Manager
 The Health Roundtable Limited
 PO Box 438
 Turramurra, NSW 2074
 tel: (02) 9440-2016
 Email: david.dean@hrt.org.au.

4.6 Benchmarking in Women's & Children's Hospital

Women's Hospitals Australia and the Children's Hospitals Australasia have a number of initiatives in hand to assist member hospitals in enhancing the health and well being of women, children and neonates. Their benchmarking initiatives are focussed on providing information to support clinical improvement. The features of the Associations' program are that it is clinician driven, comprehensively supported by all levels of management and is thus not 'top down' or 'paper driven'. The following elements comprise the national benchmarking activities of the two associations:

Information dissemination

Member hospitals provide their clinical costing and activity data on a regular basis to the national office. The data has been submitted through a national database which is available in each member hospitals as well as the national office. The database, known as CARma, enables hospitals to compare their data without having to accommodate differences across jurisdictions. Thus, it is important to note that the database complies with the Commonwealth's national costing standards. The Associations include a number of member hospitals in New Zealand, and comparisons are valid across States, Territories and New Zealand. As well as providing benchmarks electronically for all DRGs across member hospitals, the Associations also publish regular reports for member hospitals on the top ten DRGs for each Association. The latest publication for 1997/98 data enables hospitals to ascertain their own performance against those of their peers. The existence of the database within their own hospital enables them to drill down to component costs, identify where the differences are, and to liaise with their colleagues in other States, Territories or New Zealand about how different outcomes are achieved.

Clinical Forum Program

The clinical forum program is focused on clinical improvement. Clinicians identify the topic that they wish to examine, identify the data sources, and then meet to discuss how to improve their clinical practice. Each clinical forum includes a champion clinician who prods and probes colleagues about best practice. A working group of clinicians ensures that the program remains focused. Data from the CARma database is supplemented with epidemiological information as well as other information such as clinical pathways.

Key Performance Indicator Development

Member hospitals are currently identifying a number of key performance indicators that are useful to clinicians in enhancing their clinical practice. In women's health, clinicians have identified three key areas, namely blood transfusion for hysterectomy, rate of vaginal delivery following primary caesarean section and caesarean sections for 'standardised patient' (defined by members). In children's health some twelve indicators are being developed including waiting times (emergency department and also appointment for outpatient clinics), readmission rates for top DRGs, medication incidents, and consumer complaints. The indicators will be included in the CARma database.

Table 4.6.1: Top Ten DRGs, Australian Women's Hospital, 1997-98, (Preliminary Data)

DRG	Average length of stay (days)	Average cost per episode
727, Neonate, admission WT > 2499g w/o signif OR proc, w/o problem	2.98	\$776
674, Vaginal delivery w/o complicating diagnosis	2.92	\$1,202
686, Other antenatal admission with moderate or no complicating diagnosis	2.01	\$775
683, Abortion with D&C, aspiration curettage or hysterotomy	1.08	\$886
659, Conisation, vagina, cervix & vulva procedures	1.25	\$1,029
685, Other antenatal admission with severe complicating diagnosis	3.13	\$1,145
676, Vaginal delivery with severe complicating diagnosis	4.44	\$1,771
670, Caesarean delivery w/o complicating diagnosis	5.14	\$2,450
675, Vaginal delivery with moderate complicating diagnosis	3.83	\$1,688
660, Endoscopic procedures	1.10	\$1,162

Table 4.6.2: Top Ten DRGs, Children's Hospitals Australasia, 1997-98 (Preliminary Analysis).

DRG	Average length of stay (days)	Average cost per episode
727 , Neonate, admission WT > 2499g w/o signif OR proc, w/o problem	2.98	\$776
187 , Bronchitis & Asthma age <5 w/o complications	2.00	\$946
780 , Chemotherapy	1.00	\$706
122 , Tonsillectomy &/or adenoidectomy	1.48	\$1,093
350 , Gastroenteritis age <10	1.93	\$1,093
124 , Myringotomy with tube insertion	1.03	\$649
188 , Whooping cough & acute bronchiolitis	3.62	\$2,917
128 , Dental extractions & restorations	1.27	\$1,210
473 , Fracture, sprain, strain & dislocation, of fracture arm, hand, foot age <5, w/o complications	1.07	\$980
135 , Otitis media & uri age < 10	2.11	\$1,063
172 , Respiratory infections/ inflammation age <5 w/o cc	2.98	\$1,481

Clinical Pathway Development

Within the clinical forum program, hospitals exchange their pathways and analyse whether compliance is satisfactory. The Associations support hospitals in identifying gaps in their pathways through the clinical forum program. Thus, there is no prescription about the elements that are included in pathways, rather information is provided to support hospitals in encouraging compliance with pathways.

It should be noted that the Associations comprise the leading women's and children's hospitals, as well as major women's and children's units in general hospitals throughout Australia and New Zealand. Further details about the benchmarking program are available from Anne Cahill, National Director of WHA/CHA, PO Box 42, Deakin West, ACT, 2600, telephone (02) 6285 4747, Fax (02) 6285 4748, email: acahill@wha.asn.au

Anne Cahill, National Director, Women's Hospitals Australia & the Children's Hospitals Australasia

CHAPTER 5

FUTURE DIRECTIONS

The National Health Performance Committee will work to foster the use of benchmarking based on national performance and indicators to improve the quality of care of health services. The Committee has eight terms of reference with one of its priorities to develop and maintain a national performance framework for the health system.

The Report on Government Services 2000 discusses a framework for measuring the performance of the health system. In order to develop performance indicators, it is important to establish the objectives of the program, strategy or system so that the indicators are meaningful and relevant. From The Report on Government Services 2000, government involvement in health services is predicated on the desire to improve the health of all Australians using a variety of services in a variety of settings to fulfil this objective.

Overall objectives of the health system

Government involvement in the health system aims to efficiently and effectively protect and restore the health of the community by:

- health promotion
- determining causes of ill health and reducing community exposure to negative lifestyle and environmental risks
- preventing or detecting illness through the provision of services which can achieve improved health outcomes at relatively low cost
- caring for ill people through the use of appropriate intervention services
- providing appropriate health care services which recognise the cultural differences between people
- providing equitable access to these services

Primary prevention strategies aim to reduce an individual's or population's risk of exposure to disease or illness by increasing protective factors and reducing hazards.

Source: Report on Government Services 2000 and CDHAC

Measuring the success of a system is a complex task. Success requires offering the appropriate mix of services (such as prevention and intervention services) by the appropriate mix of service providers (such as hospital based and community based providers), at the appropriate times and ensuring that all service delivery is efficient and effective. It is difficult to develop a set of indicators that capture all these aspects of performance. There are some broad outcomes of health service delivery (such as life expectancy, mortality rates and cause of death). But income levels of a population, the level of education and the standard of housing can also influence these outcomes.

The NHPC has developed a discussion paper on models of frameworks suitable for the Australian situation. Considerable work has been undertaken in early 2000 to review existing state, national and international frameworks to evaluate their strengths and weaknesses, and the suitability of the frameworks to measure Australian health system performance. A workshop was convened by the National Public Health Partnership to explore the development of performance framework for population health. Key questions addressed included:

1. "What do we want a national performance framework to do for the whole health system?"
2. "What do want a national performance framework to do for population health?"
3. "What might the framework look like?"
4. "What criteria should be used to select indicators for the performance framework?"

The outcomes from this workshop have been reported to inform the process of developing a Population Health performance framework, as well as the work of the NHPC. The Discussion Paper on a National Health Performance Framework will be distributed widely and feedback sought on its structure and capacity. It is anticipated that the next report on Health Sector Performance Indicators will use the new framework and expand to sectors other than acute hospitals.

APPENDICES

Appendix A: Membership of the National Health Performance Committee as at April 2000.

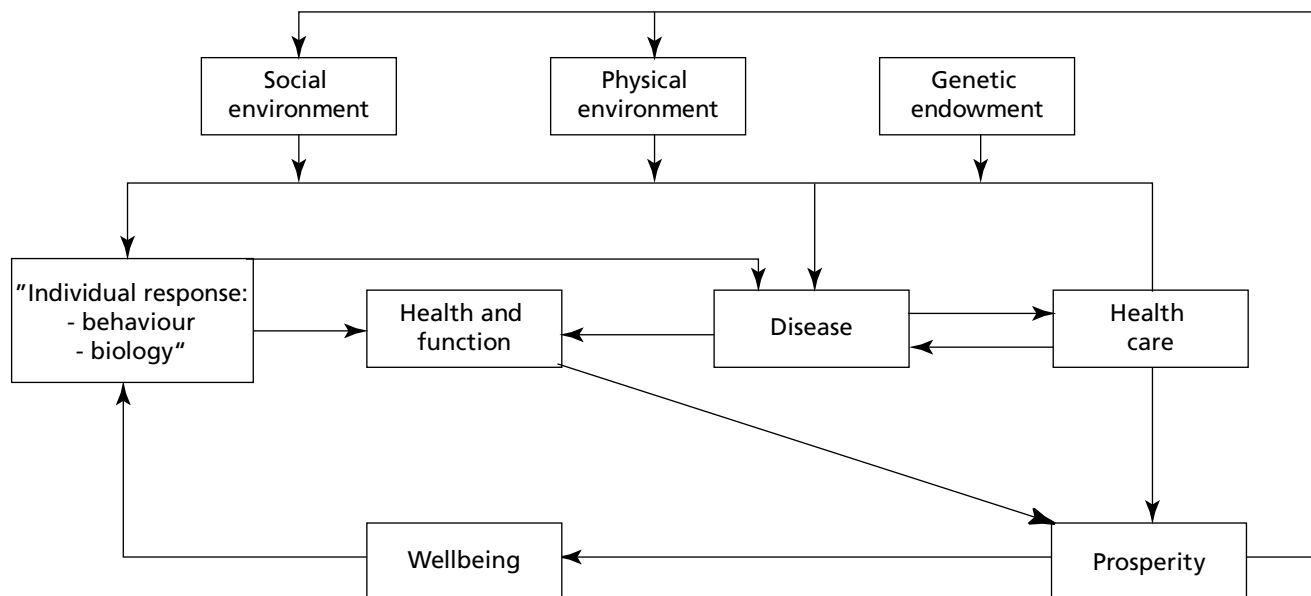
Member	Organisation
Commonwealth	
Mr Peter Broadhead	Commonwealth Department of Health and Aged Care
Dr Vin McLoughlin	Commonwealth Department of Health and Aged Care
Mr Brendan Gibson	Commonwealth Department of Health and Aged Care
AIHW	
Mr Geoff Sims	Australian Institute of Health and Welfare, Chair National Health Data Committee
States/Territories	
Mr Jim Pearse	NSW Health
Mrs Christine O'Farrell	Health Department of Western Australia
Dr Len Notaras	NT Health Ms Joyce Bowden (alternate) NT Health
Dr Heather Buchan	Department of Human Services, Victoria and representative for the Australian Council for Safety and Quality in Health Care.
Mr Ric Marshall	Department of Human Services, Victoria; National Health Information Management Group
Dr David Filby (Chair)	Queensland Health
Dr Penny Gregory	ACT Health
Mrs Vicki Rundle	Department of Health and Human Services, Tasmania
Mr Jim Davidson	SA Department of Human Services
Organisations	
Mr Ian Chalmers	Australian Private Hospitals Association
Mr Russell Schneider	Australian Health Insurance Association

Appendix B: Health Status and Determinants of Health

What determines health?

The focus of health care services is the health of individuals and populations, defined by the World Health Organisation (WHO) as ‘a state of complete physical, mental and social well being and not merely the absence of disease’ (WHO 1946). Although health is more often studied from the negative illness perspective, it is the interplay of a variety of determinants that will influence the health of the population. Figure B.1 presents a diagrammatic relationship of these determinants with health care as just one of the determinants of the health and function of individuals and population.

Figure B.1: Determinants of health



Demography and health in Australia

At the system level, the demographic characteristics of the population as a whole exert considerable influence over health status and health service needs. Important demographic concepts include the population size, geographical distribution, age and sex distribution, and fertility and family structures.

Table B.1 gives an overview of the population of Australia's States and Territories and some summary health indicators. There are a variety of factors that affect health service needs. For example the younger population profiles of Western Australia and the two Territories would require a greater proportion of child health and maternity services. The geographical distribution of populations in Tasmania, Northern Territory and Queensland into large regional centres and dispersed and remote areas, affect service delivery and access to specialist services.

Table B.1: Selected demographic features, Australia 1997

Demographic Variable	NSW	VIC	QLD	WA	SA	TAS	ACT	NT	AUST
Estimated resident population ('000) (a)									
Capital City									
Males	1,977	1,661	779	667	533	95	153	46	5,911
Females	2,009	1,710	796	675	555	100	155	41	6,041
Persons	3,987	3,371	1,575	1,342	1,088	195	308	87	11,953
Other metropolitan centre									
Males	399	76	230	-	-	-	-	-	705
Females	405	78	232	-	-	-	-	-	716
Persons	805	154	462	-	-	-	-	-	1,421
Total capital city/metropolitan									
Males	2,376	1,737	1,009	667	533	95	153	46	6,616
Females	2,415	1,788	1,028	675	555	100	155	41	6,758
Persons	4,791	3,525	2,037	1,342	1,088	195	308	87	13,374
Rural/remote									
Males	774	567	722	255	202	138	0	55	2,712
Females	776	569	698	235	197	139	0	49	2,662
Persons	1,550	1,135	1,419	489	399	277	0	103	5,374
Total population									
Males	3,150	2,304	1,731	922	735	233	154	100	9,328
Females	3,191	2,357	1,726	910	752	239	155	90	9,420
Persons	6,342	4,661	3,456	1,831	1,487	472	308	190	18,748
Percent population distribution	%	%	%	%	%	%	%	%	%
Persons									
Capital city/metro	76	76	59	73	73	41	100	46	71
Rural/remote	24	24	41	27	27	59	0	54	29
Per cent population aged >70 yrs and over									
Males	7	7	7	6	9	8	4	2	7
Females	10	10	9	8	12	11	6	2	10
Persons	9	9	8	7	10	9	5	2	9
Standardised mortality rate (b)									
Males	8.0	7.9	7.8	7.6	7.8	8.6	7.1	11.3	7.9
Females	4.9	4.9	4.8	4.7	4.8	5.5	5.1	8.4	4.9
Persons	6.3	6.2	6.2	6.0	6.1	6.8	6.0	9.8	6.2
Fertility rate (c)	1.8	1.7	1.8	1.8	1.7	1.8	1.6	2.2	1.8
Life Expectancy (d)									
Males									
At birth	75.8	76.3	75.6	76.1	76.0	75.1	77.5	70.6	75.9
At age 65	16.3	16.4	16.5	16.6	16.3	15.7	17.1	15.0	16.3
Females									
At birth	81.6	81.7	81.5	81.9	81.6	80.4	81.6	75.0	81.5
At age 65	20.0	20.0	20.2	20.3	20.0	19.3	20.0	16.9	20.0
Indigenous life expectancy (e)									
Males									
At birth	na	na	na	na	na	na	na	na	56.9
At age 65	na	na	na	na	na	na	na	na	10.3
Females									
At birth	na	na	na	na	na	na	na	na	66.5
At age 65	na	na	na	na	na	na	na	na	13.3

- (a) Figures at 30 June 1997, based on 'Rural, Remote and Metropolitan Areas Classification, 1991 Census Edition', DPIE/HSB November 1994 (RRMA):
 Capital City = RRMA category of 'capital city' [the capital city of Statistical Division in each State/Territory]
 Metropolitan = RRMA category of 'Other Metropolitan Centre' [Quenbeyan (C), and the statistical subdivisions of Tweed Heads, Newcastle, Wollongong, Geelong, Gold Coast City Pt B, Townsville City Pt A and Thuringowa City Pt A]
 Rural/Remote = RRMA categories of 'Large Rural Centre', 'Small Rural Centre', 'Other Rural Area', 'Remote Centre' and 'Other Remote Area'
- (b) Deaths per 1,000 population in 1997, standardised to the Australian Population in 1991. The SMR is the overall death rate that would have prevailed in a standard population if it had experienced at each age the death rates observed, ie if the age structure was the same as 1991. The SMR in effect adjusts the crude death rate for changes due to a changing age profile.
- (c) The sum of age specific fertility rates during 1997-98. Represents the number of births a woman would have if she experienced current age specific birth patterns. (Replacement rate approximately 2).
- (d) The average number of additional years a person of a given age and sex might expect to live if the age specific death rates of the given period (1995-1997) continued throughout his or her lifetime.
- (e) Estimated life expectancy for Aboriginal and Torres Strait Islander people (1991-1996).
- Sources: ABS, Cat. Nos. 3101.0, 3301.0, 3302.0
 Rural, Remote and Metropolitan Areas Classification, 1991 Census Edition, HSB/DPIE, November 1994.

Health and health service indicators

When describing the health of populations, the use of multiple indicators is essential. No single measure is able even to approach coverage of all aspects of health. Consequently 'sets' of indicators are most often used in order to build a picture of the particular aspect of health or health care that is of interest.

In conjunction with health status indicators and indicators relating to health determinants and risk factors, we may also consider indicators of 'health resources' such as health labour force and health expenditure; and 'health service use', for example, number of consultations with medical practitioners and hospital admissions (Abraham et al. 1995). To date these two broad classes of indicators have formed the bulk of benchmarking health sector performance in Australia. However, there have been other significant instances of benchmarking in relation to health outcomes, particularly in relation to public health interventions. These include outcomes of health promotion, disease prevention activities and illness screening.

Examples are:

- measurement of smoking rates by population subgroups to assess the outcomes of health promotion efforts to reduce rates of smoking
- measurement of immunisation rates and associated disease prevalence to indicate the effectiveness of immunisation in controlling preventable disease
- measurement of survival rates for breast cancer as a measure of the outcomes associated with the breast cancer screening program.

In order to make comparisons internationally, many indicators need to be 'standardised' and expressed as rates per head of population. This makes it important that population sizes are reliably measured. Thus the frequency of population census and accuracy of resultant figures and inter census estimates conducted in peer countries becomes important.

International Comparisons

Health Status Indicators

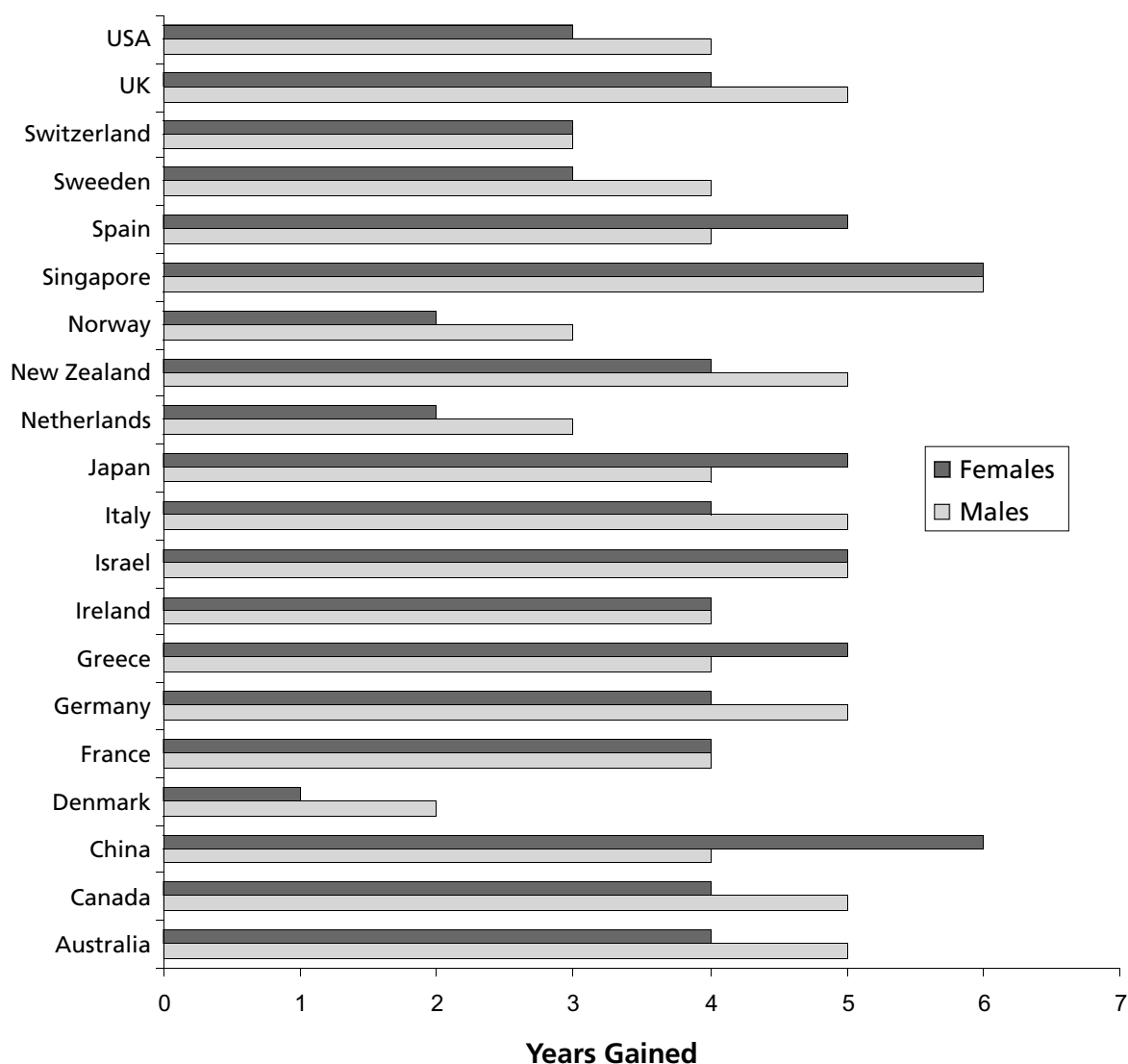
The most commonly used indicator of a population's health is life expectancy at birth. Table B.2 shows the changes in life expectancy at birth from 1978 to 1998, the latest time period for which complete data is provided by WHO (WHO 1998). As a measure of broad population health status, this indicator is useful, as it is simple to measure and well accepted internationally. However, simplicity also means it is somewhat 'coarse' and does not reflect more detailed issues of the quality of life associated with a given country's life expectancy.

Table B.2: Life expectancy at birth, 1978 and 1998

Country	Male						Females					
	1978		1998		Change		1978		1998		Change	
	Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank
Australia	70	11	75	6	5	5	77	8	81	6	4	2
Canada	71	7	76	2	5	5	78	2	82	2	4	4
China	64	20	68	20	4	0	66	20	72	20	6	0
Denmark	71	7	73	18	2	-11	77	8	78	19	1	-11
France	70	11	74	14	4	-3	78	2	82	2	4	0
Germany	69	16	74	14	5	2	76	13	80	12	4	1
Greece	72	2	76	2	4	0	76	13	81	6	5	7
Ireland	70	11	74	14	4	-3	75	17	79	17	4	0
Israel	71	7	76	2	5	5	75	17	80	12	5	5
Italy	70	11	75	6	5	5	77	8	81	6	4	2
Japan	73	1	77	1	4	0	78	2	83	1	5	1
Netherlands	72	2	75	6	3	-4	79	1	81	6	2	-5
New Zealand	69	16	74	14	5	2	76	13	80	12	4	1
Norway	72	2	75	6	3	-4	73	19	79	17	6	2
Singapore	69	16	75	6	6	10	73	19	79	17	6	2
Spain	71	7	75	6	4	1	77	8	82	2	5	6
Sweden	72	2	76	2	4	0	78	2	81	6	3	-4
Switzerland	72	2	75	6	3	-4	79	2	82	2	3	0
UK	70	11	75	6	5	5	76	13	80	12	4	1
USA	69	16	73	18	4	-2	77	8	80	12	3	-4

Source: United Nations 1993, WHO 1994, 1995 1996, 1998

Figure B.2: Gains in life expectancy at birth, 1978 to 1998



Source: United Nations 1993, WHO 1994, 1995, 1996, 1998.

Table B.2 clearly shows the disparity of life expectancies at birth for males and females and that this is a consistent pattern across all of the countries. Similar analyses may be undertaken which provide international comparisons by specific causes of death. This again may be used as an indicator of health status or to identify populations that may provide an insight into the health services and programs required to reduce mortality and morbidity attributable to a specific cause.

Health service indicators

Benchmarking at the international level may also utilise health service indicators as a measure of specific aspects of service. These indicators, however, are frequently more problematic, due to differing definitions of the scope and types of health services, differences in the way that health services are organised, and differences in the quality of the data provided.

Health resource indicators

Health expenditure as a percentage of gross domestic product (GDP) is the most commonly used health resource indicator for international comparisons. As such it incorporates notions of the level of adequacy of health care provision (for which a higher proportion of health expenditure might be seen as most desirable) and of the level of service efficiency (for which a lower proportion might be seen as most desirable). As a proportion of GDP, Australia's health expenditure has remained stable in recent years although the components that make up the total have changed.

Table B.3: Health expenditure as a percentage of Gross Domestic Product (GDP)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	10yr av ^(d)
Australia	7.4	7.5	7.9	8.1	8.2	8.2	8.2	8.2	8.3	8.2	8.0
Canada	8.5	8.7	9.2	9.9	10.2	10.1	9.8	9.4	9.3	9.2	9.4
France	8.6	8.7	8.9	9.1	9.4	9.8	9.7	9.8	9.8	9.6	9.3
Japan	6.4	6.2	6.1	6.1	6.3	6.6	6.9	7.2	7.1	7.2	6.6
NZ	6.5	6.6	7.0	7.5	7.6	7.2	7.3	7.3	7.3	7.6	7.2
UK	5.8	5.8	6.0	6.5	6.9	6.9	6.9	6.9	6.9	6.8	6.6
USA	11.5	11.9	12.6	13.4	13.9	14.2	14.1	14.1	14.1	13.9	13.4
7 country mean(a)	9.4	9.5	9.8	10.4	10.7	11.0	11.0	11.1	11.1	11.0	10.5
6 country mean(a,b)	7.5	7.3	7.4	7.7	8.1	8.2	8.3	8.5	8.5	8.4	8.0
5 country mean(a,b,c)	8.0	7.9	8.1	8.6	9.0	9.1	9.0	9.2	9.3	9.1	8.7

(a) Means are weighted by GDP.

(b) Excludes the United States.

(c) Excludes the United States and Japan.

(d) Unweighted means.

Sources: AIHW 1999c; other countries – OECD unpublished data.

Health expenditure in Australia

Expenditure on health services is used to examine various aspects of the performance of a health system, including access and productivity. This section presents tables on the overall cost of health services in Australia and how governments, non-government organisations and households meet these costs. Also, it considers the efficiency of service delivery.

Total expenditure on health care services in Australia was about \$47.2 billion in 1997-98. This was equivalent to 8.4 per cent of GDP (AIHW 1999). The health sector as a whole has grown faster than the economy as a whole over the past two decades.

Table B.4: Total health services expenditure, current and constant prices(a) and annual growth rates 1984-85 to 1997-98

Year	Amount \$m		Growth rate over previous year %	
	Current	Constant	Current	Constant
1984-85	16,546	19,397	-	-
1985-86	18,546	21,789	12.3	12.3
1986-87	21,115	24,754	13.6	13.6
1987-88	23,333	27,354	10.5	10.5
1988-89	26,127	30,630	12.0	12.0
1989-90	28,800	33,751	10.2	10.2
1990-91	31,270	34,524	8.6	2.3
1991-92	33,087	35,513	5.8	2.9
1992-93	34,993	37,077	5.8	4.4
1993-94	36,787	38,593	5.1	4.1
1994-95	38,967	40,278	5.9	4.4
1995-96	41,783	42,421	7.2	5.3
1996-97	44,279	44,279	6.0	4.4
1997-98(b)	47,267	46,544	6.7	5.1
Average annual growth rates				
1984-85 to 1989-90			11.7	11.7
1989-90 to 1992-93			6.7	3.2
1992-93 to 1997-98			6.2	3.2
1984-85 to 1997-98			8.4	7.0

(a) Constant price health services expenditure is expressed in chain volume measures, referenced to 1996-97.

(b) Based on preliminary AIHW and ABS estimates.

Source: AIHW 1999c

Table B.5: Government and non-government sectors' expenditures (current prices) as a percentage of total health services expenditure, 1984-85 to 1997-98

	Government Sector			Non-gov sector	
	Cmwlth(a)	State and local	Total		Total all sectors
1984-85	46.1	25.8	71.9	28.1	100
1985-86	46.0	25.9	71.9	28.1	100
1896-87	44.3	26.4	70.8	29.3	100
1987-88	44.0	26.0	70.1	29.0	100
1988-89	42.6	26.0	68.6	31.4	100
1989-90	42.2	26.1	68.3	31.7	100
1990-91	42.2	25.5	67.7	32.3	100
1991-92	42.8	24.6	67.4	32.6	100
1992-93	43.7	23.4	67.1	32.9	100
1993-94	45.3	21.4	66.7	33.3	100
1994-95	45.0	21.7	66.7	33.3	100
1995-96	45.6	22.2	67.7	32.2	100
1996-97	44.8	22.5	67.2	32.8	100
1997-98(b)	45.5	23.6	69.1	30.9	100

(a) Expenditure by the Commonwealth Government and the non-government sector has been adjusted for tax expenditures.

(b) Based on preliminary AIHW and ABS estimates.

Source: AIHW 1999c

Figure B.3: Government and non-government sector expenditure (current prices) as a percentage of total health services expenditure, 1984-85 to 1997-98. Source: AIHW 1999c

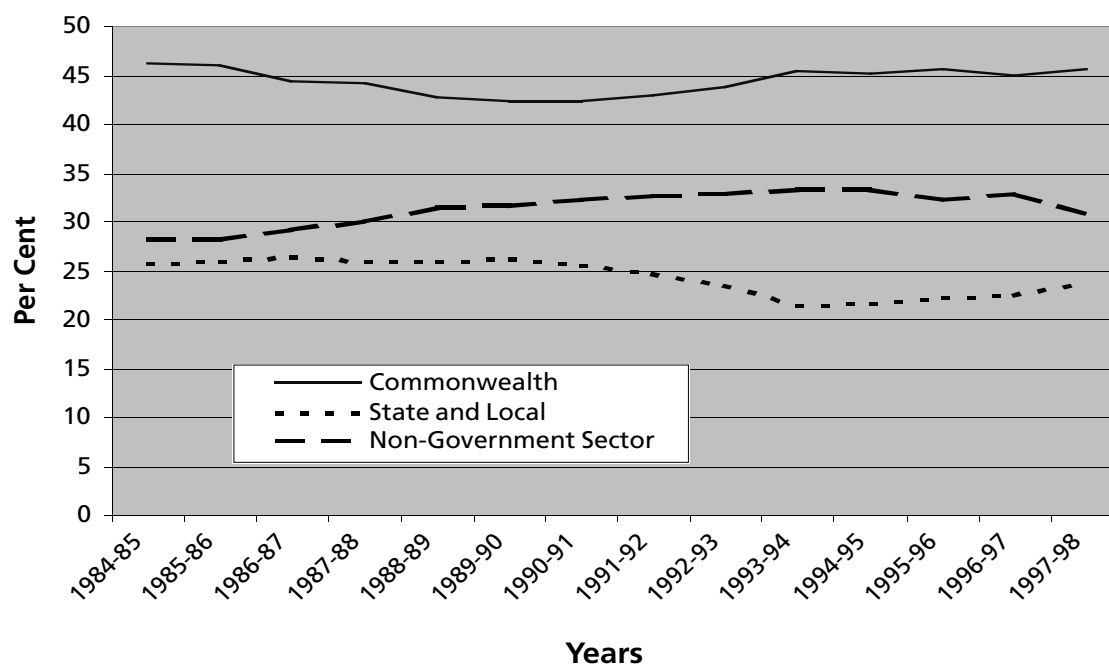
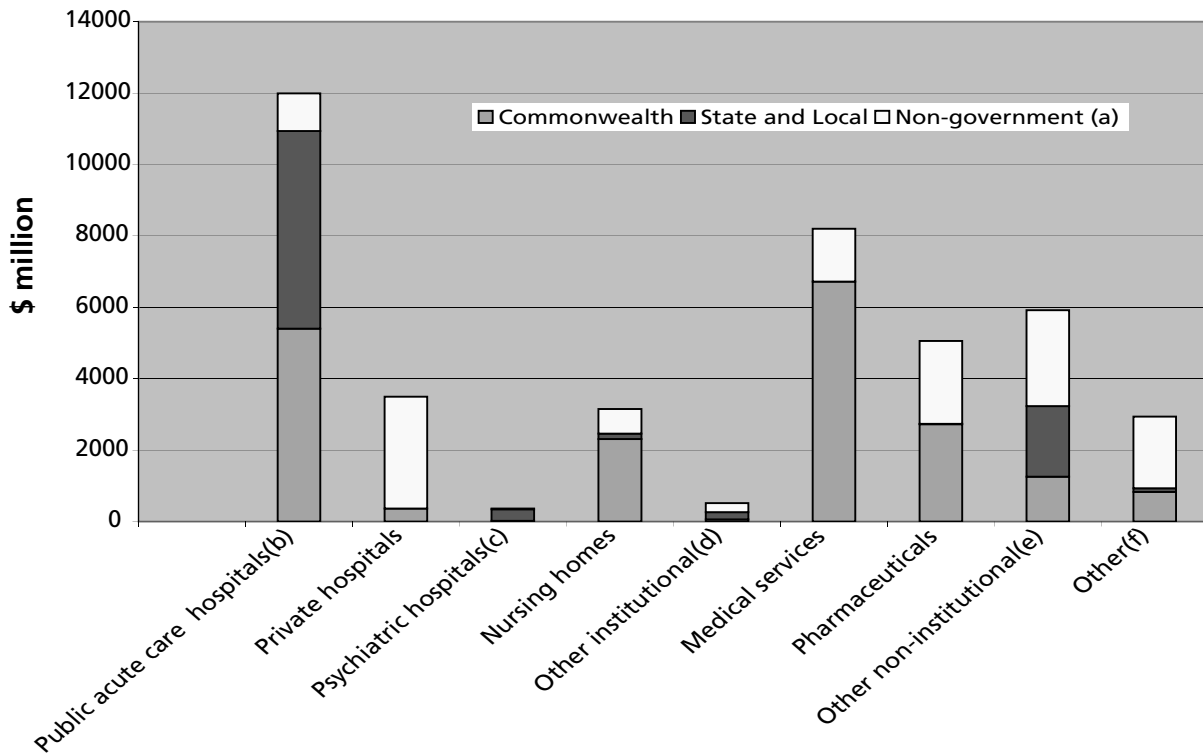


Table B.6: Percentage of recurrent health services expenditure (current prices), by area of expenditure, 1989-90 to 1996-97

Area of Expenditure %	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
Total hospitals	40.6	40.1	39.7	38.6	37.7	37.6	37.4	38.1
Public acute care hospitals	32.2	31.3	30.7	38.6	37.7	37.6	37.4	38.1
Recognised public hosp	30.6	29.6	29.1	28.2	27.8	27.8	28.2	28.8
Repatriation hospitals	1.7	1.7	1.7	1.5	1.0	0.6	0.0	0.0
Private hospitals	6.3	6.9	7.2	7.3	7.5	7.8	8.1	8.4
Public psychiatric hospitals	2.0	1.9	1.8	1.6	1.4	1.3	1.1	0.8
Nursing homes	8.3	8.6	8.4	8.1	7.8	7.5	7.5	7.6
Ambulance	1.5	1.4	1.4	1.4	1.4	1.2	1.3	1.2
Other institutional	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.0
Total institutional	50.5	50.3	49.8	48.3	47.2	46.6	46.5	46.8
Medical services	18.4	18.7	19.0	19.6	20.0	20.2	19.9	19.7
Other professional services	3.7	3.9	3.7	3.7	3.6	3.6	3.4	3.4
Total pharmaceuticals	9.3	9.5	9.9	10.4	11.0	11.6	11.8	12.2
Benefit paid pharmaceut	5.4	5.0	5.2	6.0	6.6	7.0	7.6	7.9
All other pharmaceut	3.9	4.5	4.7	4.5	4.4	4.6	4.2	4.3
Aids and appliances	2.1	2.2	2.2	2.2	2.2	2.1	2.0	2.0
Other institutional services	14.4	13.8	13.8	14.4	14.4	14.3	14.7	14.2
Community and public health	5.6	4.7	4.4	4.9	5.2	4.7	5.4	5.0
Dental services	5.1	5.3	5.3	5.9	6.0	5.9	6.0	6.1
Administration	3.7	3.8	4.1	3.6	3.2	3.6	3.3	3.1
Research	1.5	1.5	1.5	1.5	1.6	1.6	1.6	1.6
Total non-institutional	49.5	49.7	50.2	51.7	52.8	53.4	53.5	53.2
Total recurrent expenditures	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

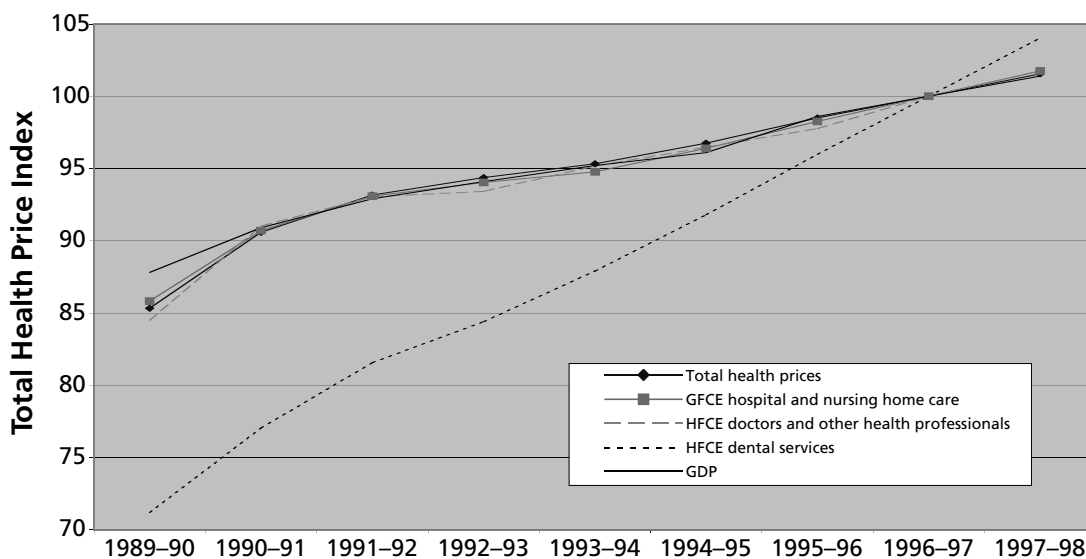
Source: AIHW 1999a

Figure B.4: Recurrent health services expenditure, by area of expenditure, 1996-97



- (a) Includes expenditure by health insurers, private individuals, compensation funds and other sources.
 - (b) Includes Repatriation general hospitals.
 - (c) Excludes private psychiatric hospitals, which are included in 'Private Hospitals'.
 - (d) Includes ambulance services and non institutional services not elsewhere classified.
 - (e) Includes community health, public health and dental services as well as administrative expenditure.
 - (f) Includes research, services provided by other health professionals and aids and appliances.
- Source: AIHW 1999a

Figure B.5: Total health price index and selected industry wide indexes (base year 1989-90 = 100), 1989-90 to 1997-98. Source: AIHW 1999a



Non institutional health care

As discussed in the previous reports, data are more readily available for the institutional sector than the non-institutional sector.

The nature of services in the non-institutional sector limits effective information gathering on a wide and consistent scale. Services are generally widely dispersed, local in nature, and often delivered through the private sector and by small organisations, groups or individuals. These factors restrict the range of statistical information available for a meaningful national analysis of service performance.

Currently the most useful source of consistent and complete data in this area is the repository of information held by the Health Insurance Commission (HIC). This information is collected and held under the auspices of the MBS and PBS arrangements. This source is rich in respect of broad service usage and financial data but lacks detail in relation to other areas of interest, such as reasons for service provision. Table B.7 presents 1997-98 data for Medicare and Pharmaceutical Benefits Scheme. Table B.8 presents data from a report General Practice Activity 1998-98 (Britt et al, 1999) and presents reasons for presentation to a general practitioner.

Table B.7: Non institutional health services, key statistics, 1997-98

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Aust
MEDICARE DATA: 1998/99									
Note: Population figures used are for 1997/98									
Medical Workforce (per '000 Population)									
Metropolitan									
Recognised GPs	1.27	1.04	1.36	1.16	1.01	1.42	1.03	1.11	1.17
Other primary care practitioners	0.29	0.35	0.33	0.29	0.29	0.33	0.55	0.21	0.31
Other practitioners	1.55	1.55	1.74	1.70	1.30	2.31	1.41	1.16	1.57
Total practitioners	2.69	2.71	2.70	3.05	2.49	3.09	2.67	2.48	2.71
Non-metropolitan									
Recognised GPs	0.86	0.85	0.80	0.95	0.82	0.89	0.88	12.12	0.85
Other primary care practitioners	0.15	0.19	0.44	0.18	0.36	0.24	0.30	0.00	0.26
Other practitioners	0.66	0.60	0.58	0.27	0.34	0.68	0.27	3.03	0.56
Total practitioners	1.67	1.63	1.82	1.39	1.51	1.81	1.45 ^(a)	15.15	1.67
Australia									
Recognised GPs	1.01	0.96	0.95	1.10	0.96	1.11	0.95	1.13	0.99
Other primary care practitioners	0.26	0.31	0.37	0.26	0.31	0.28	0.42	0.21	0.30
Other practitioners	1.17	1.18	1.02	1.24	0.96	0.96	0.64	1.15	1.12
Total practitioners	2.44	2.45	2.34	2.60	2.23	2.34	2.01	2.49	2.41
Medicare Data: 1997/98									
In Hospital									
Number Of Services (per '000 pop)									
GP attendances	26	39	56	61	28	33	11	3	37
Specialist attendances	124	192	183	186	93	161	57	91	153
Diagnostic imaging	45	48	42	45	38	44	13	23	44
Pathology	230	259	235	250	188	230	80	96	232
Other services	216	252	245	257	85	187	105	169	228
Total services	640	789	762	799	531	655	267	383	694
Benefits Paid (per '000 pop)									
GP attendances	710	1,106	1,597	1,756	790	930	294	84	1,053
Specialist attendances	4,589	7,246	7,036	7,071	3,575	6,064	2,093	3,359	5,790
Diagnostic imaging	3,974	4,708	3,976	4,698	3,397	4,002	1,200	2,037	4,099
Pathology	4,803	5,328	5,187	4,891	4,054	4,679	1,948	2,309	4,865
Other services	28,442	31,683	31,659	32,646	5,133	26,619	13,443	22,103	29,549
Total services	42,517	50,070	49,455	51,063	36,948	42,294	18,978	29,981	45,356
Out Of Hospital									
Number Of Services (per '000 pop)									
GP attendances	5,850	5,462	5,344	5,517	4,848	4,915	2,886	4,704	5,464
Specialist attendances	942	880	617	923	638	670	313	694	818
Diagnostic imaging	631	540	517	478	547	481	273	454	557
Pathology	2,834	2,467	2,719	1,824	2,402	2,344	1,666	2,197	2,564
Other services	753	659	706	652	611	608	398	576	689
Total services	11,011	10,007	9,903	9,394	9,046	9,019	5,537	8,625	10,092

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Aust
Benefits Paid (per '000 pop)									
GP attendances	134,483	125,325	121,702	127,792	109,524	112,918	66,246	109,915	125,242
Specialist attendances	48,788	46,755	32,545	47,876	31,621	33,857	15,173	34,635	42,859
Diagnostic imaging	56,638	46,614	41,570	39,352	43,070	40,559	21,262	40,825	47,648
Pathology	48,712	41,684	49,598	31,130	42,097	37,269	30,034	37,935	44,432
Other services	35,735	30,369	34,315	30,719	28,616	29,049	18,056	27,046	32,555
Total services	324,356	290,747	279,729	276,869	254,927	253,652	150,772	250,356	292,467
Total services [per person]									
Medicare services	11.65	10.80	10.66	10.19	9.58	9.67	5.80	9.01	10.79
Medicare benefits	366.97	340.82	329.18	327.93	291.88	295.95	169.75	280.25	337.82
PHARMACEUTICAL BENEFITS SCHEME (PBS) 1997-98 data									
Approved Pharmacy Outlets									
Metropolitan									
Retail pharmacies	1,303	906	586	340	286	67	52	17	3,557
Non Metropolitan									
Retail pharmacies	421	269	381	129	109	82	-	10	1,392
Approved doctors ^(f)	20	2	14	16	9	6	-	1	68
Total									
Pharmacies	1,724	1,175	967	460	395	149	52	27	4,049
Approved Doctors	20	2	14	16	9	6	-	27	4,949
PBS Services									
Prescriptions (millions)									
General Beneficiaries ^(g)									
Ordinary ^(h)	5.14	3.37	2.42	1.29	1.04	0.32	0.31	0.09	13.98
Safety net ⁽ⁱ⁾	1.60	0.92	0.67	0.28	0.26	0.08	0.08	0.01	3.91
Entitled (free) ^(j)	0.00	0.00	-	-	-	-	-	-	0.00
Total	6.74	4.29	3.09	1.57	1.30	0.40	0.40	0.10	17.89
Concessional Beneficiaries ^(k)									
Ordinary	30.38	21.58	15.42	7.29	7.73	2.55	0.78	0.30	86.03
Entitled (free)	7.89	4.68	3.51	1.45	1.68	0.60	0.13	0.04	19.97
Other Doctors Bag Order Form	0.24	0.15	0.12	0.04	0.05	0.01	0.01	0.00	0.63
Total	38.50	26.41	19.05	8.78	9.47	3.16	0.92	0.34	106.63
Non-PBS-RPBS									
RPBS	2.66	1.54	1.51	0.47	0.50	0.29	0.07	0.01	7.06
Free safety net	1.18	0.57	0.59	0.17	0.19	0.12	0.02	0.00	2.85
Total RPBS	3.85	2.11	2.09	0.64	0.70	0.41	0.09	0.01	9.91
Total prescriptions	49.9	32.81	24.23	10.98	11.47	3.98	1.41	0.46	134.42
Prescriptions per person	7.79	7.08	7.08	6.06	7.74	8.41	4.59	2.42	7.22
PBS Benefits (\$m)									
General beneficiaries									
Ordinary	148.90	103.73	69.63	38.30	30.57	8.91	9.38	2.43	411.86
Safety net	40.28	22.73	17.62	6.97	6.40	2.05	2.26	0.31	98.61
Entitled (free)	0.00	0.00	-	-	-	-	-	-	-
Total	189.18	126.47	87.25	45.26	36.96	10.96	11.64	2.74	510.47

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Aust
Concessional beneficiaries ^(k)									
Ordinary	531.12	366.92	252.42	132.32	121.89	42.25	13.94	4.60	1,465.66
Entitled free	163.11	95.20	68.34	32.86	27.68	11.23	2.77	0.63	401.81
Other DBOF	5.84	4.21	2.98	1.22	0.94	0.33	0.16	0.09	15.77
Total	700.07	466.33	3233.74	166.40	150.50	54.01	16.86	5.33	1,883.24
Non PBS-PRBS									
RPBS	48.08	26.15	25.62	8.54	7.89	4.82	1.45	0.20	122.76
Free safety net	24.77	11.41	11.56	3.61	3.27	2.42	0.42	0.04	57.49
Total RPBS	72.85	37.57	37.18	12.15	11.16	7.24	1.87	0.24	180.25
Total Benefits	946.33	619.61	439.27	211.93	292.50	71.39	29.45	8.10	2,528.57
Benefits per person \$	150.20	133.90	128.25	116.99	136.60	151.04	95.87	43.03	135.81
December 1997 Population ('000)	6,300	4,627	3,425	1,812	1,482	473	307	188	18,618
Home and Community Care (HACC) services									
Number of hours per 1,000 target population (l,m)									
Home help	356	766	396	628	264	569	307	1,840	478
Home nursing	193	278	292	141	158	372	263	71	221
Home respite care	325	194	231	226	315	87	383	670	269
Personal care	262	166	58	259	144	197	218	1,868	187
Home maintenance	53	103	56	73	55	47	57	361	69
Paramedical	26	84	30	19	48	9	12	55	38
Other Food	30	-	7	14	3	-	4	7	38
Total hours (excluding CDC)	1,245	1,591	1,070	1,360	987	1,281	1,244	4,872	1,275
Centre day care (CDC) person hours	560	926	875	1,136	429	326	129	481	721
Total hours (including CDC)	1,805	2,517	1,945	2,496	1,416	1,607	1,373	5,353	1,996
Other services	38	753	128	68	354	58	140	-	261
Persons receiving transport (hours per 1000 target population)	103	(n)	154	71	52	105	56	90	79
Community Options Hours per target population									
Case Management	12	-	7	4	2	11	10	11	95
Non-HACC Purchase/COP Delivered	161	-	50	37	44	49	92	166	73
Community Options	173	279	57	40	46	60	101	177	168
Number of meals per 1,000 target population									
Home meals	984	909	950	893	998	913	428	1,842	947
Centre meals	133	190	131	276	113	49	17	734	156
Total meals	1,117	1,100	1,081	1,169	1,112	962	445	2,576	1,103

- (a) Excludes optometrists and those dentists who can render services under Medicare. Also excludes medical practitioners who did not practise on a 'fee for service' basis under Medicare in the year in question, eg salaried doctors in public hospitals. Since some providers have more than one provider number will be slightly overstated.
- (b) Vocationally registered general practitioners, trainees and fellows of the Royal Australian College of General Practitioners.
- (c) Non vocationally registered medical practitioners excluding specialists providing general practice Medicare services.
- (d) Includes specialist medical practitioners and others practitioners providing specialist services. See also footnote (a).
- (e) Services provided to private patients in public and private hospitals.
- (f) Doctors in remote areas approved for PBS benefits.
- (g) Beneficiaries not eligible for concessional benefits.
- (h) Prescriptions covered by the PBS with a fee greater than the threshold
- (i) Prescriptions covered by the PBS where the beneficiary has exceeded safety net threshold.
- (j) Discontinued 1/1/94 – Prescriptions covered by PBS where beneficiary has exceeded second level safety net threshold.
- (k) Beneficiaries entitled to concession by way of health care card, aged pension etc.
- (l) Target population is ABS estimate of persons with a moderate or severe or profound disability, based on 1998 survey of disabled ageing and carers.
- (m) November 1997 except WA which is for May 1998.
- (n) Transport data not collected in Victoria.
- Na – not available
- not applicable

In the report 'General Practice Activity in Australia' (1999) reasons for encounter with a general practitioner from the survey group are presented. The sample includes 141,766 encounters and the reasons for presentation are listed below in Table B.8.

Table B.8: Reasons for encounter for sample of general practitioners

Patient reasons for encounter	Number	% total RFE's	Rate per 100 encounters
General and Unspecified	25,739	18.2	26.6
Respiratory	24,027	16.9	24.8
Musculoskeletal	16,236	11.5	16.7
Skin	14,584	10.3	15.1
Circulatory	11,085	7.8	11.4
Digestive	10,265	7.2	10.6
Psychological	7,374	5.2	7.6
Endocrine and Metabolic	5,429	3.8	5.6
Female Genital System	5,171	3.6	5.3
Neurological	5,136	3.6	1.9
Ear	4,379	3.1	4.5
Pregnancy and Family Planning	3,576	2.5	3.7
Eye	2,741	1.9	2.8
Urology	2,375	1.7	2.5
Blood	1,739	1.2	1.8
Male genital system	1,031	0.7	1.1
Social problems	877	0.6	0.9

Source: General Practice Activity in Australia 1998-99, Britt et al, AIHW Oct 1999

The hospital sector in Australia

Institutional health care includes all hospital care provided through public acute care hospitals, private acute care hospitals, public psychiatric hospitals, nursing homes and hostels. By far the largest component of the institutional health care sector, in terms of health expenditure, is the acute care hospital sector. Data relating to nursing homes and hostels are not included in this section.

Table B.9 provides data for the number of public acute care, public psychiatric, free standing day hospital facilities and private acute hospitals, available beds and beds per 1,000 population.

Table B.9: Public and private hospitals and average available beds and beds per 1,000 population, Australian States and Territories, 1997-98.

Public and Private Hospitals	NSW	VIC	QLD	WA	SA	Tas	ACT	NT	Aust
All public hospitals									
Hospitals ^(a)	221	147	190	96	80	22	3	5	764
Beds	19,705	12,337	10,809	5,263	5,198	1,078	768	577	55,735
Beds per 1000 population	3.13	2.67	3.16	2.90	3.51	2.28	2.50	3.07	2.99
Australian Private Hospitals									
Hospitals	89	97	51	26	40	11	2	1	317
Free standing day hospitals	84	30	26	12	14	3	6	0	175
Total private hospitals	173	127	77	38	54	14	8	1	492
Hospital beds private	6,476	6,133	5,008	2,409	2,269	796	Np	0	23,091
Free standing hospital beds	682	208	252	103	80	23	Np	0	1,348
Total private beds	7,158	6,341	5,260	2,512	2,349	819	Np	0	24,439
Beds per 1000 population	1.02	1.32	1.53	1.39	1.58	1.73	-	-	1.31
Total									
Hospitals	394	274	267	134	134	33	11	6	1,256
Beds	26,863	18,678	16,069	7,775	7,547	1,897	768	577	80,174
Beds per 1000 population	4.24	4.03	4.68	4.19	5.15	3.98	2.50	3.07	4.28

(a) Public hospitals include public acute hospitals and public psychiatric hospitals

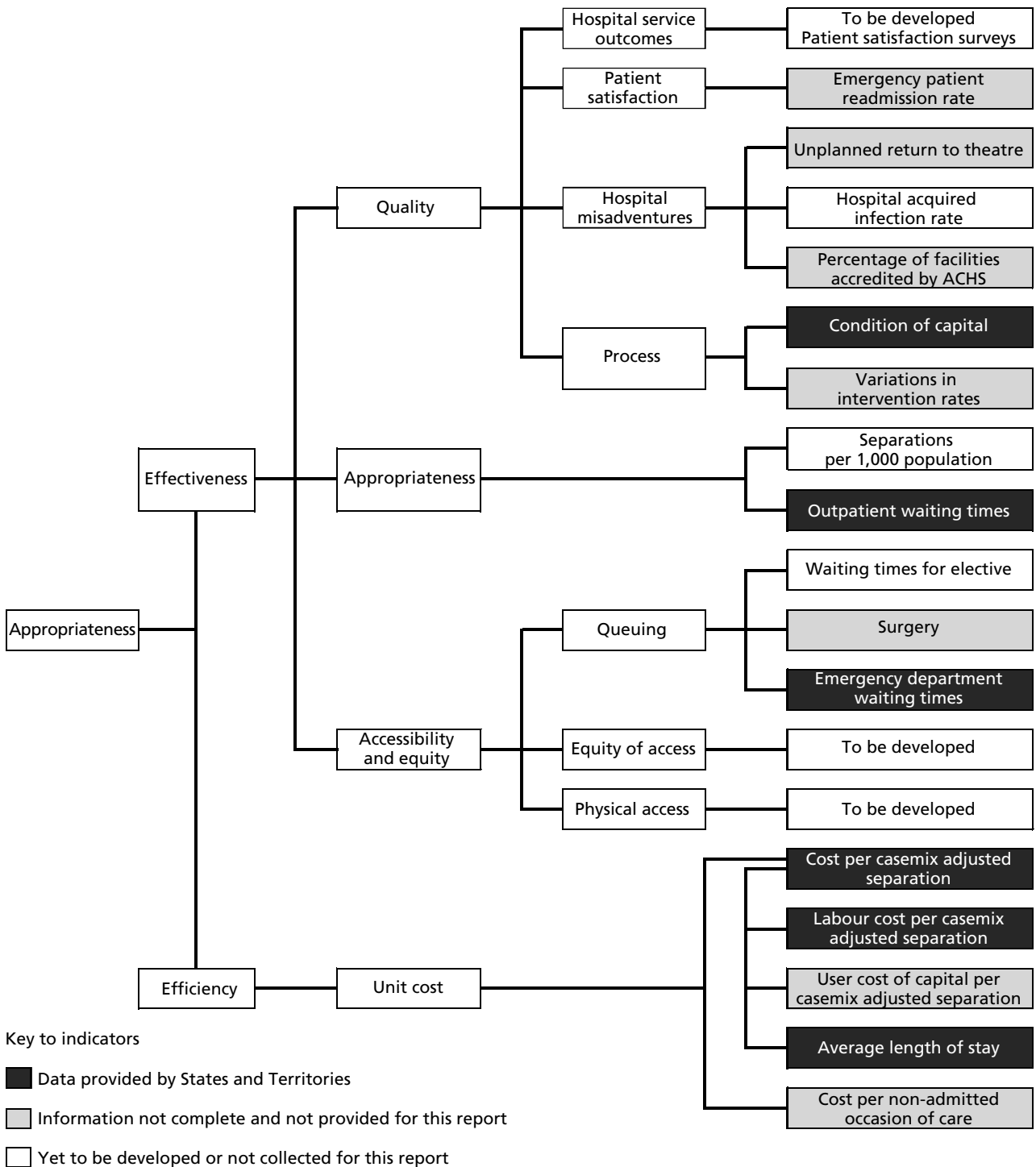
Np not published

Source: Australian Institute of Health and Welfare

Appendix C: Hospital Performance Indicators

The following Figure C.1 is the Performance Framework developed and reported in The Third National Report on Health Sector Performance Indicators, which is based on the shared government objectives for public acute care hospitals.

Figure C.1: Framework of Indicators for public acute care hospitals



Objectives for public acute care hospitals

The common government objectives for public acute care hospitals is to provide cost effective acute and specialist services that are:

- safe and of high quality
- responsive to individual needs
- accessible and equitable
- efficiently delivered
- free of charge to eligible persons who so choose.

Source: Report on Government Services 2000.

The dimensions of quality, appropriateness, access and equity, and efficiency from the Framework have indicators that are reportable. These are listed in Table C.1

Table C.1: Summary of hospital performance indicators

Performance Element	Dimension	Indicator
Effectiveness	Quality	<ul style="list-style-type: none"> • Proportion of facilities that were accredited by the Australian Council on Healthcare Standards • Proportion of facilities beds that were accredited by the Australian Council on Healthcare Standards
	Appropriateness	<ul style="list-style-type: none"> • Separations per 1,000 population for States and Territories • Separations per 1,000 population for sentinel procedures
	Access and Equity	<ul style="list-style-type: none"> • Proportion of patients admitted with extended waits • Proportion of patients on the waiting list for elective surgery with extended waits
Efficiency	Efficiency	<ul style="list-style-type: none"> • Cost per casemix adjusted separation • Full time equivalent staff per 1,000 casemix adjusted separations • Average salary for individual staff categories • Average length of stay for 10 AN-DRGs with the highest number of separations.

Source: Report on Government Services 2000

The National Health Performance Committee is currently further developing the performance measurement framework that has been used for public acute care hospitals. A discussion paper will address issues such as:

- why we need a national health performance framework
- the international context
- developments to date in Australia
- system level performance
- components of a framework
- priorities, management and level of indicators.

The discussion paper will be published and reported further in the December 2000 report.

Hospital Groupings

The previous reports used peer grouping for acute care hospitals and examined key performance measures with respect to those groupings. The grouping process incorporated dimensions of size and case complexity and has been repeated for this report. The AIHW and National Health Performance Committee are reviewing peer grouping for hospital classification and considering factors such as the teaching status and size of the hospital, multi-purpose services, remote hospitals, minimum volume hospitals and the identification of women's and children's hospitals.

Table C.2: Number of benchmarking public hospitals and available beds, 1995-96, 1996-97 and 1997-98

Number of Benchmarking Hospitals and Available Beds	NSW	VIC ^(a)	QLD	WA	SA	Tas	ACT	NT	Aust
1997-98									
Hospitals	110	125	114	85	51	3	2	5	499
Available Beds	15,186	11,509	9,131	4,808	3,829	918	758	577	46,716
1996-97									
Hospitals	116	110	145	86	76	14	2	5	554
Available	15,923	9,834	9,870	4,826	4,620	1,214	773	773	47,637
1995-96									
Hospitals	173	115	144	87	75	15	2	5	616
Available Beds	18,161	12,197	9,968	4,870	4,751	1,235	769	570	52,521

(a) Number of hospitals figure for Victoria has been updated since Australian Hospitals Statistics 1997-98.

The scope of the selected hospitals has varied over the years. The selected public hospitals provide at least minimal medical, surgical or obstetric care. They exclude Veteran's Affairs hospitals in all years, psychiatric hospitals in all States, mothers and babies facilities, hospices and dental hospitals in Victoria, multi purpose facilities, and alcohol and drug treatment facilities in WA and NSW. Community non acute hospitals were excluded by NSW in 1996-97 and all jurisdictions (where applicable) in 1997-98. Networking in Tasmania in 1997-98 meant that only the three major hospitals were able to be included. Where average available beds for the year were not available, bed numbers at 30 June were used.

Source: Australian Institute of Health and Welfare 1999b

Data sources

The principal sources of data for this report are the National Public Hospital Establishments Database (NPHEd) and the National Hospital Morbidity Database (NHMD). Additional data are derived from the Commonwealth Department of Health and Aged Care (CDHAC), the Australian Bureau of Statistics (ABS) and from the Australian Council on Healthcare Standards (ACHS).

Most of these collections are secondary data collections. As such they are dependent upon primary data collections, such as hospital morbidity databases, that usually are maintained by State and Territory health authorities. The existence of common data definitions and standards therefore is highly relevant. In most cases the primary data collections are aligned to the National Health Data Dictionary (NHDD).

Effectiveness

Performance measures are available in the three dimensions of effectiveness:

- hospital service quality
- access and equity
- appropriateness.

Hospital Service Quality

In the framework of indicators for acute care hospitals, service quality is broken down into four categories of process, hospital misadventures, patient satisfaction and hospital service outcome. The indicator used to measure quality in the Second Report was the percentage of beds that have been accredited by the ACHS. That report also discussed initiatives to improve the standards of data quality for other potential indicators and to increase the capacity of jurisdictions to collect and report against them.

Use of the percentage of facilities accredited by the ACHS does not recognise other quality improvement processes that many health services utilise to assess and evaluate the quality of their services. These may include accreditation under other systems, or combination of systems, or the use of benchmarking to improve service quality. Consideration is being given to expanding this indicator to include other options as an alternative to ACHS accreditation.

Proportion of facilities accredited by ACHS

Table C.3 shows the numbers and proportions of accredited facilities and beds for the benchmarking hospitals as at 1 September 1998. Comparisons of accreditation status across States and Territories should be made with caution, as the accreditation process is voluntary and accreditation at a point in time does not imply ongoing accreditation. In particular larger hospitals are more likely to pursue accreditation and so can substantially increase the proportion of beds that are accredited in a jurisdiction.

Another factor to consider is that the public hospital sector includes many small, rural hospitals for which accreditation has not been as relevant. This would contribute to the disparity between private and public hospital accreditation rates, since most private hospitals are located in metropolitan areas.

There is reason to believe that private hospitals are more likely to participate in the ACHS accreditation program, reflecting the imperative of accreditation placed on these establishments by health insurance funds. This may also contribute to the higher accreditation rates for hospitals and beds (71% and 86% respectively) in the private sector relative to the public sector (55% and 79%), shown in Tables C.3 and C.4.

Table C.3: Number of hospitals and available beds by accreditation status, benchmarking public hospitals, 1997-98

Hospital Accreditation	NSW ^(a)	VIC ^(a)	QLD ^(c)	WA	SA	Tas	ACT	NT	Aust
Accredited hospitals ^(b)	84	100	37	29	29	3	2	1	285
Non accredited hospitals	26	49	77	56	22	-	-	4	234
Total	110	149	114	85	51	3	2	5	519
% accredited	76	67	32	34	57	100	100	20	55
Accredited beds ^(b)	12,054	10,014	6,587	3,296	3,195	918	758	297	37,119
Non accredited beds	3,132	1,495	2,544	1,512	634	-	-	280	9,597
Total	15,186	11,509	9,131	4,808	3,828	918	758	577	46,715
% accredited	79	87	72	69	83	100	100	51	79

(a) Figures updated since publication of Australian Hospitals Statistics for NSW and Victoria.

(b) Australian Council of Healthcare Standards (ACHS) accreditation status at 30 June 1998. The selected public hospitals provide at least minimal medical, surgical or obstetric care. They exclude one Veterans' Affairs hospital, psychiatric hospitals, multi purpose facilities and community non acute hospitals in all States, mothers and babies facilities, hospices and dental hospitals, alcohol and drug treatment facilities in NSW and WA.

(c) Some QLD hospitals are pursuing other forms of accreditation and certification. Where average available beds for the year were not available, bed numbers at 30 June 1998 were used.

Source: Australian Institute of Health and Welfare 1999b and Australian Council of Healthcare Standards

Table C.4: Number of private hospitals and available beds by accreditation status, 1997-98.

Private Hospital Accreditation	NSW & ACT	VIC	QLD	WA	SA & NT	Tas	Aust
Accredited hospitals ^(a)	84	76	36	17	25	9	247
Non accredited hospitals	7	21	15	9	16	2	70
Total	91	97	51	26	41	11	317
% accredited	92	78	71	65	61	82	78
Accredited beds ^(b)	6,304	5,616	4,405	n.p	1,928	n.p	20,862
Non accredited beds	172	517	603	n.p	341	n.p	2,229
Total	6,476	6,133	5,008	2,409	2,269	796	23,091
% accredited	97	92	88	n.p	85	n.p	90

(a) Australian Council on Healthcare Standards (ACHS) accreditation status at 30 June 1998. Excludes private free standing day hospital facilities.

(b) Beds available for admitted patients. Average for the year.
n.p not published for confidentiality reasons.

Source: Australian Bureau of Statistics

Other components of quality include:

- patient satisfaction
- hospital misadventures

Patient Satisfaction

There have been various research projects to identify positive approaches to obtain, measure and utilise consumer feedback. The report by Draper and Hill (1996) suggests that it is not feasible or necessary to have national reporting of patient satisfaction or the development of a national benchmark for this indicator. Information gained from patient satisfaction or consumer feedback needs to be considered within the local context where the patient/client responses to specific aspects of care can be actioned. However, while the processes in relation to the measurement of client satisfaction/feedback is still under deliberation, its relevance to policy making remains “measurement of client satisfaction is an essential component of quality improvement” (CDHFS 1998c).

The National Resource Centre for Consumer Participation in Health is a clearing house for information on consumer feedback and participation methodologies for health care providers and consumers.

All States and Territories are participating in the Consumer Focus Collaboration which is progressing agreed national priorities for consumer work focusing on broader consumer feedback and participation.

Hospital misadventures

General agreement exists that there are many benefits, including potential savings, associated with having appropriate systems in place to monitor and manage adverse events.

The Commonwealth Department of Health and Aged Care commissioned an assessment of patient safety monitoring systems currently available in Australia to determine their potential for providing national performance data (McNeil 1999). This was combined with a literature review to determine if there were acceptable international systems in place.

The study focused on the measurement of adverse events in the acute hospital sector. It found that there needs to be standardisation in the definition of an adverse event to obtain reliable, reproducible information as none of the reports published in the literature, in Australia or elsewhere, provide a definition for adverse events which is adequate for rigorous epidemiological measurement.

Many systems currently in place in hospitals have been developed with a much broader scope to encompass near misses as well as major events, and are primarily used at a hospital level for clinical improvement. There are additional difficulties of attribution of risk as many medical and surgical procedures have associated risks and an individual patient's disease status and risk factors can compound this. This can result in difficulties in collecting data in a systematic fashion as so many components rely on clinical judgement. The study found that none of the systems in place in Australia provide a methodology for measurement that is suitable for rigorous epidemiological measurement of adverse event occurrence. The study concluded that it was not possible to provide valid national performance measures for patient safety monitoring from existing systems at this time. It is expected that the newly established Australian Council for Safety and Quality in Health Care will develop future directions for national reporting on patient safety monitoring as part of a comprehensive strategy for patient safety.

Appropriateness

There are some significant issues associated with appropriateness as a concept. The difficulties associated with its definition and use are discussed at length in the Second Report. It is easier to focus on attributes that represent appropriateness from a ‘value set’, rather than to develop a direct measure of the concept. Categories reported on in the Third and Fourth reports include variations in intervention rates and separations per 1,000 population.

The Second and Third Reports used hospital separation rates and age-sex standardised separation rates for sentinel procedures to measure appropriateness. The following sections describe each of these indicators in detail for the 1997-98 period.

Separations per 1,000 population

Table C.5 presents the rates of hospital separations per 1,000 population by State and Territory, separation type, patient accommodation status and hospital sector. Note that this table covers all hospitals and is not limited to the benchmarking hospitals.

Table C.5: Separations per 1,000 population by patient accommodation status, public and private acute care hospitals, 1997-98

Hospital sector and accommodation status	NSW	VIC	QLD	WA	SA	Tas ^(a)	ACT ^(b)	NT ^(c)	Aust
Same day separations									
Public hospitals									
Public patients	67.5	81.8	76.6	72.9	89.0	67.4	85.2	135.7	76.0
Private patients	9.8	7.4	8.0	6.7	8.1	5.8	3.4	3.1	8.1
Other ^(d)	3.9	3.7	1.2	2.3	3.7	4.7	2.7	2.2	3.2
Private hospitals	50.7	56.5	59.0	42.7	44.3	42.2	21.8	na	51.2
All same day separations	131.9	149.5	144.9	124.6	145.1	120.1	113.1	140.9	138.4
Overnight Separations									
Public hospitals									
Public patients	98.4	92.3	102.3	95.0	114.8	78.5	82.5	130.4	98.1
Private patients	14.3	9.0	10.6	8.1	10.2	6.1	7.7	2.4	10.9
Other ^(d)	8.1	6.4	1.4	6.1	8.1	7.5	4.6	4.5	6.2
Private hospitals	35.7	48.1	54.3	45.8	55.1	65.7	35.4	na	45.1
All overnight separations	156.5	155.9	168.5	155.1	188.3	157.9	130.2	137.3	160.3
Total Separations									
By hospital sector									
Public hospitals	202.0	200.7	200.1	191.2	233.9	170.1	186.1	278.2	202.5
Private hospitals	86.4	104.6	113.3	88.5	99.4	107.9	57.2	na	96.3
By patient accommodation status									
Public patients	169.5	174.7	179.3	175.3	204.1	153.9	167.7	266.0	176.4
Private patients	93.8	110.0	1114.8	83.2	110.0	85.0	60.0	5.5	100.3
Other ^(d)	25.1	20.7	19.4	21.1	19.3	39.1	15.6	6.7	22.1
All separations	288.4	305.4	313.4	279.7	333.4	278.0	243.3	278.2	298.8

(a) Two private free standing day hospitals facilities are not reported in Tasmania.

(b) Private free standing day hospital facilities are not reported in the ACT.

(c) Private hospital data are not reported by the Northern Territory.

(d) Other patients include Department of Veterans' Affairs patients are not treated in a Commonwealth DVA Hospital, eligible other patients (mainly compensable) patients ineligible for Medicare and unknowns.

As private hospitals provide some services to public patients, totals by patient accommodation status do not equal the sum of the cells.

Source: Australian Institute of Health and Welfare 1999b.

Sentinel procedures

Sentinel procedures have been selected as such because of the frequency with which they are undertaken and because they are often elective and discretionary. Thus, the incidence of hospital separations involving these procedures is used as an indicator of the appropriateness of care delivered within acute care hospitals.

Table C.6 provides information, by State or Territory of usual residence of the patient, on separation rates for sentinel procedures including caesarean section, lens insertion, coronary artery bypass graft and appendicectomy. Separations were included for which the sentinel procedures were reported either as the principal procedure or an additional procedure. Separation rates have been standardised for age and sex to account for the different age and sex profiles of the populations of the States and Territories.

Table C.6: Separation statistics for sentinel procedures by 1000 population, by State or Territory of usual residence, all hospitals, 1997-98

Procedure	Unit	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
Angioplasty										
Separations ^d	no.	6,385	5,274	2,046	1,630	1,483	443	164	68	17,496
Separations within State of residence	%	95	99	99	100	99	99	1	0	
Separation rate ^e		0.93	1.06	0.59	0.92	0.88	0.85	0.64	0.53	0.89
Separation rate for other States ^e		0.87	0.83	0.95	0.89	0.89	0.89	0.89	0.89	
Difference, State/Territory and national rate	%	7.7	27.1	-38.5	3.9	-1.3	-4.7	-28.4	-40.8	
Significance of difference		**	**	**	-	-	-	**	**	
Appendectomy										
Separations ^d	no.	8,298	6,676	5,000	2,852	1,851	625	446	209	25,959
Separations within State of residence	%	98	99	99	99	98	99	96	97	
Separation rate ^e		1.38	1.50	1.48	1.59	1.32	1.38	1.40	1.00	1.44
Separation rate for other States ^e		1.47	1.42	1.43	1.42	1.45	1.44	1.44	1.45	
Difference, State/Territory and national rate	%	-6.1	5.7	3.2	11.8	-9.0	-4.3	-2.9	-31.0	
Significance of difference		**	**	-	**	**	-	-	**	
Athroscopy										
Separations ^d	no.	29,656	25,535	14,250	9,834	12,670	2,219	1,524	588	96,291
Separations within State of residence	%	96	98	99	100	100	98	90	66	
Separation rate ^e		4.62	5.43	4.13	5.39	8.37	4.70	4.93	3.20	5.10
Separation rate for other States ^e		5.34	4.99	5.31	5.07	4.81	5.11	5.10	5.11	
Difference, State/Territory and national rate	%	-13.6	9.0	-22.4	6.3	73.9	-7.9	-3.3	-37.5	
Significance of difference		**	**	**	**	**	**	-	**	
Caesarean section										
Separations ^d	no.	16,262	12,419	10,730	5,398	4,325	1,219	758	561	51,675
Separations within State of residence	%	97	100	99	100	100	100	98	97	
Separation rate ^e		2.72	2.78	3.27	3.06	3.20	2.99	2.38	2.58	2.90
Separation rate for other States ^e		3.00	2.95	2.82	2.89	2.88	2.90	2.91	2.91	
Difference, State/Territory and national rate	%	-9.3	-5.7	16.1	6.0	11.0	3.1	-18.4	-11.2	
Significance of difference		**	**	**	**	**	-	**	**	
Cholecystectomy										
Separations ^d	no.	15,512	10,731	8,030	3,271	3,745	1,008	543	191	43,034
Separations within State of residence	%	97	99	99	100	100	98	97	86	
Separation rate ^e		2.33	2.20	2.30	1.80	2.32	2.05	1.86	1.24	2.22
Separation rate for other States ^e		2.16	2.22	2.20	2.26	2.21	2.22	2.22	2.23	
Difference, State/Territory and national rate	%	8.2	-1.0	4.4	-20.4	4.8	-7.7	-16.5	-44.3	
Significance of difference		**	-	**	**	**	**	**	**	

Procedure	Unit	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
Coronary artery bypass graft										
Separations ^d	no.	6,855	4,625	2,911	1,166	1,268	394	197	70	17,487
Separations within State of residence	%	95	99	99	99	99	96	20	0	
Separation rate ^e		1.00	0.93	0.85	0.68	0.74	0.76	0.82	0.64	0.89
Separation rate for other States ^e		0.84	0.88	0.90	0.91	0.91	0.90	0.90	0.89	
Difference, State/Territory and national rate	%	20.1	4.9	-6.2	-25.8	-18.5	-15.5	-8.4	-27.9	
Significance of difference		**	**	**	**	**	**	-	**	
Endoscopy										
Separations ^d	no.	168,476	126,678	92,493	39,671	34,923	11,288	3,766	1,895	479,222
Separations within State of residence	%	98	99	99	100	100	99	95	91	
Separation rate ^e		24.91	25.59	26.31	21.87	20.92	22.04	13.33	13.67	24.39
Separation rate for other States ^e		24.12	23.99	23.98	24.65	24.71	24.45	24.56	24.47	
Difference, State/Territory and national rate	%	3.3	6.7	9.7	-11.3	-15.3	-9.9	-45.7	-44.1	
Significance of difference		**	**	**	**	**	**	**	**	
Hip Replacement										
Separations ^d	no.	7,094	5,965	3,207	1,841	2,164	767	313	49	21,402
Separations within State of residence	%	95	98	99	100	100	99	92	53	
Separation rate ^e		0.99	1.14	0.91	1.05	1.17	1.41	1.34	0.66	1.05
Separation rate for other States ^e		1.08	1.02	1.08	1.05	1.04	1.04	1.05	1.05	
Difference, State/Territory and national rate	%	-8.4	12.3	-15.7	-0.6	12.4	35.7	27.7	-37.5	
Significance of difference		**	**	**	-	**	**	**	**	
Hysterectomy										
Separations ^d	no.	11,253	8,217	6,557	3,385	3,410	1,050	610	163	34,650
Separations within State of residence	%	96	100	99	100	100	99	91	91	
Separation rate ^e		1.67	1.65	1.83	1.78	2.10	2.10	1.87	0.94	1.75
Separation rate for other States ^e		1.79	1.78	1.73	1.74	1.71	1.74	1.74	1.75	
Difference, State/Territory and national rate	%	-6.7	-7.0	5.6	2.0	22.7	21.1	7.4	-46.3	
Significance of difference		**	**	**	-	**	**	-	**	
Knee replacement										
Separations ^d	no.	6,432	3,595	3,138	1,449	1,750	459	252	19	17,094
Separations within State of residence	%	95	99	99	100	100	98	94	53	
Separation rate ^e		0.92	0.71	0.92	0.85	0.98	0.85	1.12	0.18	0.86
Separation rate for other States ^e		0.83	0.92	0.85	0.87	0.85	0.86	0.86	0.87	
Difference, State/Territory and national rate	%	11.2	-22.8	7.9	-1.6	15.1	-1.1	30.4	-79.1	
Significance of difference		**	**	**	-	**	-	**	**	

Procedure	Unit	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
Lens insertion										
Separations ^d	no.	40,201	27,434	23,858	8,577	7,405	2,054	711	329	110,576
Separations within State of residence	%	98	99	98	100	100	99	93	88	
Separation rate ^e		5.55	5.19	6.78	4.93	3.86	3.63	3.24	4.65	5.38
Separation rate for other States ^e		5.29	5.45	5.09	5.42	5.54	5.43	5.41	5.38	
Difference, State/Territory and national rate	%	4.9	-4.8	33.1	-9.2	-30.3	-33.1	-40.1	-13.6	
Significance of difference		**	**	**	**	**	**	**	**	
Myringotomy										
Separations	no.	10,678	10,807	6,547	3,642	4,962	867	459	201	38,165
Separations within State of residence	%	96	99	99	100	100	99	98	89	
Separation rate ^e		1.76	2.48	1.96	2.07	3.68	1.88	1.54	0.88	2.14
Separation rate for other States ^e		2.33	2.03	2.18	2.15	2.01	2.15	2.15	2.15	
Difference, State/Territory and national rate	%	-24.4	22.5	-10.1	-3.7	83.0	-12.2	-28.3	-59.2	
Significance of difference		**	**	**	*	**	**	**	**	
Prostatectomy										
Separations ^d	no.	8,453	7,296	3,364	1,770	2,159	764	354	43	24,203
Separations within State of residence	%	94	98	99	100	99	100	96	70	
Separation rate ^e		1.21	1.43	0.98	1.04	1.20	1.42	1.57	0.55	1.22
Separation rate for other States ^e		1.22	1.15	1.27	1.24	1.22	1.21	1.21	1.22	
Difference, State/Territory and national rate	%	-0.7	24.6	-22.8	-16.0	-1.4	16.9	28.9	-54.9	
Significance of difference		-	**	**	**	-	**	**	**	
Tonsillectomy										
Separations ^d	no.	10,306	9,245	6,319	2,947	3,665	679	484	119	33,765
Separations within State of residence	%	97	99	99	100	100	99	98	70	
Separation rate ^e		1.74	2.15	1.89	1.67	2.73	1.50	1.56	0.55	1.91
Separation rate for other States ^e		2.00	1.84	1.92	1.94	1.84	1.92	1.92	1.93	
Difference, State/Territory and national rate	%	-12.9	16.8	-1.3	-14.0	48.2	-22.1	-18.5	-71.7	
Significance of difference		**	**	-	**	**	**	**	**	

(a) Procedures are defined using ICD-9-CM codes. Procedures include National Health Minister's Benchmarking Working Group sentinel procedures and additional procedures requested by States and Territories.

(b) Excludes private hospitals in the NT, private free-standing day hospital facilities in the ACT, and some private free-standing day hospital facilities in Tasmania.

(c) Includes Other Territories.

(d) Excludes multiple procedures during the same separation within the same sentinel group

(e) Rate per 1000 population was directly age- and sex-standardised to the Australian population at 30 June 1991.

- Not significant. * Significant at 5 per cent. ** Significant at 1 per cent.

Source: Australian Institute of Health and Welfare 1999b

The variations in rates may be attributed to variations in the prevalence of the conditions being treated, or differences in clinical practice between States and Territories, but does not necessarily mean that the higher rates are inappropriate. Historically, South Australia has consistently exhibited the highest rate of hospital separations per 1,000 population across Australia. Several inquiries have been held but none have found the rates to be inappropriate, although often the data are inconclusive (Renwick 1991). Indeed most health authorities produce regional data that show wide variations in hospital separation and surgical procedure rates within their jurisdictions.

Access and equity

Access and equity has been broken into three categories of queuing, equity of access and physical access. Only emergency departments waiting time are reported on this report.

Emergency department waiting times

This indicator measures the proportion of patients seen from presentation to the emergency department to commencement of service by a treating medical officer or nurse, within the time limits set according to the urgency of treatment required (triage category):

- proportion of triage category 1 patients (those needing resuscitation) seen immediately
- proportion of triage category 2 (emergency) patients seen within 10 minutes
- proportion of triage category 3 (urgent) patients seen within 30 minutes
- proportion of triage category 4 (semi-urgent) patients seen within 60 minutes
- proportion of triage category 5 (non-urgent) patients seen within 120 minutes.

These are nationally agreed definitions, but care should be taken in interpreting these data as there may be discrepancies in when the elapsed time is measured from and the precision in which the time is recorded.

Table C.7: Emergency department waiting time to service delivery, 1997-98 (percentage of patients seen within triage category)^a

Triage category	NSW ^{b,c}	VIC	QLD ^d	WA ^e	SA	Tas	ACT ^f	NT
1 - Resuscitation	96	100	95	89	95	94	100	na
2 - Emergency	76	81	64	70	63	76	83	na
3 - Urgent	63	75	60	68	58	67	71	na
4 - Semi-urgent	68	na	68	69	61	77	63	na
5 - Non-urgent	89	na	88	88	93	96	81	na
Number of hospitals	51	19	20	na	6	3	2	na

a Nationally agreed definitions exist but differences in how data are collected may exist and care should be taken in interpreting these data.

b Excludes non-emergency visits, that is, planned visits, privately referred non-admitted patients, pre-arranged admissions (non-medical), patients in transit and dead on arrival are not classified as triage 1.

c 1998-99 data.

d January to June 1999 data for hospitals with an emergency department role delineation of 4 or greater.

e Derived from teaching hospital emergency department systems. One hospital has a real time reporting system and it reported seeing 100% of triage category 1 patient within the specified time. The other hospitals estimated the time when information was logged after the event.

f The period reported for the Calvary Hospital was July 1997 to June 1998 and, for the Canberra Hospital, the period was January to June 1998.

na not available

Source – Report on Government Services 2000

Efficiency

Unit cost

Indicators of efficiency in hospital service delivery that are available for reporting include the cost per casemix adjusted separation, the identification of labour costs, the extent of staff resources provided by public hospitals and the average length of stay for patients within the high volume diagnosis related groups (DRGs). This report uses version 3.1 of the Australian National Diagnosis Related Group (AN-DRG) classification. As discussed below, reliable data for reporting on the use of capital in hospital service delivery, or the cost of services for non admitted patients, are not available across all jurisdictions.

Cost per casemix adjusted separation

Cost per casemix adjusted separation is well accepted as a primary indicator of the efficiency of an acute care hospital. This measures the average cost of providing care for an admitted patient, whether overnight stay or same day.

The Victorian Department of Human Services has expressed concerns about the comparability of the Australian Hospital Statistics' estimated cost per case mix adjusted separation for Victoria with that of other jurisdictions. It has pointed out that costs, published in Australian Hospital Statistics, only exclude data for those psychiatric hospitals and rehabilitation services that are administered separately from public acute care hospitals. In Victoria, however, most of these services are now administered by metropolitan health care networks or, in rural areas, by public acute hospitals. These services would have been excluded if they had been delivered in the same way as some other jurisdictions. Consequently, Victoria has provided revised data that exclude approximately 47 000 separations (and their associated costs) that were previously included in the data published in Australian Hospital Statistics. Victorian data is shown in two columns (Report on Government Services 2000).

Table C.8: Cost per casemix adjusted separation, selected public acute hospitals^(a), 1997-98

Variable	NSW	Vic	Vic ^(b)	Qld	WA	SA	Tas ^(c)	ACT	NT ^(d)	Aust ^(e)
Separation from included hospitals										
Total separations ('000) ^(e)	1,202	911	864	665	341	331	75	57	52	3,635
Average cost weight ^(f)	1.02	1.02	1.00	0.98	0.96	0.99	0.98	0.97	0.76	1.00
Casemix adjusted separations ('000) ^(g)	1,231	929	868	654	326	329	73	55	40	3,637
Total recurrent expenditure (\$m)	4,211	2,992	1873	1,940	1,268	961	253	254	170	12,050
Inpatient fraction ^(h)	0.74	0.74	na	0.78	0.74	0.82	0.76	0.77	0.78	0.75
Public patient bed day proportion ⁽ⁱ⁾	0.78	0.85	0.84	0.90	0.85	0.85	0.81	0.88	0.95	0.84
Unqualified neonates ('000)	56	37	na	32	16	13	3	3	2	163
Separations from excluded hospitals ('000)^{(a) (e)}										
Number of separations	71	18	na	20	4	16	6	1	0	129
Proportion of all separations	5.9	1.9	na	3	1.3	4.8	7.7	1.2	na	3.5
Expenditure for excluded hospitals \$m	491	101	na	193	53	109	22	2	na	950
Inpatient fraction for excl. hospitals	0.78	0.45	na	0.71	0.76	0.96	1.00	1.00	na	0.75
Unadjusted cost per separation \$	5,430	2,608	na	6,908	9,158	6,541	3,772	2,523	na	5,551
Non medical labour costs per casemix adjusted separation (\$)										
Nursing	698	670	552	674	748	645	720	876	875	691
Diagnostic/allied health	187	229	168	176	223	163	187	293	203	199
Administrative	172	184	158	160	247	183	186	265	216	183
Other staff	226	199	234	218	270	124	233	154	433	215
Superannuation ^(j)	148	102	84	131	143	112	160	268	131	131
Total non-medical labour costs	1,431	1,384	1,196	1,359	1,631	1,237	1,486	1,856	1,858	1,419

Variable	NSW	Vic	Vic ^(b)	Qld	WA	SA	Tas ^(c)	ACT	NT ^(d)	Aust ^(e)
Other recurrent costs per casemix adjusted separation (\$)										
Domestic services	52	62	55	77	84	74	61	100	165	66
Repairs and maintenance	60	61	51	54	72	113	68	94	66	65
Medical supplies	178	177	175	197	213	165	281	298	142	186
Drug supplies	121	115	111	133	127	116	116	166	199	123
Food supplies	35	37	19	23	26	21	30	44	32	31
Administration	111	122	96	121	161	166	75	178	215	126
Other	107	64	94	14	168	94	169	202	205	88
Total other recurrent costs	664	638	603	619	851	749	800	1,082	1,024	685
Total excluding medical labour costs	2,095	2,022	1,799	1,978	2,482	1,986	2,286	2,938	2,882	2,104
Medical labour costs per casemix adjusted separation (\$)										
Public patients										
Salaried sessional staff	262	304	283	279	282	259	273	350	382	280
VMO payments	161	70	76	60	130	140	96	250	74	114
Private patients (estimated) ^(k)	119	66	79	37	72	73	84	85	25	77
Total medical labour costs	542	440	428	376	484	472	453	685	481	471
Total including medical labour costs ^(l)	2,637	2,462	2,227	2,354	2,966	2,458	2,739	3,623	3,363	2,575
National Hospital Cost Data Collection 1997-98										
Cost per casemix adjusted separation ^(m)	\$2,539	\$2,226	-----	\$2,239	\$2,639	\$2,243	\$2,295	\$3,365	\$3,603	\$2,412

- (a) State and Territories have excluded psychiatric hospitals, drug and alcohol services, mothercraft hospitals, dental hospitals, hospices, rehabilitation facilities and multi-purpose services from this table. Hospitals satisfying the New South Wales definition of community non-acute hospitals have also been excluded for all jurisdictions.
- (b) Adjusted data, submitted by the Victorian Department of Human Services, exclude 47,000 psychiatric and sub-acute separations (and their associated costs). These data were included in the data published in Australian Hospital Statistics 1997-98.
- (c) Tasmania is the only jurisdiction with a significant payroll tax burden. As a result, payroll tax has been estimated at 6.7% of salary plus superannuation and removed from the above. Consequently the above data do not balance with Table 3.8 In Australian Hospital Statistics (1999b).
- (d) These figures should be interpreted in conjunction with the consideration of cost disabilities associated with hospital service delivery in the Northern Territory.
- (e) From the National Hospital Morbidity Database, including same day separations and excluding unqualified neonates.
- (f) Average cost weight from the National Hospital Morbidity Database, based on acute and unspecified separations only using the 1997-98 revised AN-DRG version 3.1 cost weights (DHAC, unpublished).
- (g) Casemix adjusted separations is the product of Total separations and average cost weight.
- (h) Inpatient fractions have been estimated using the HASAC method for 15 selected and 3 excluded hospitals in Queensland, 10 excluded hospitals in New South Wales, 1 included and 1 excluded in the ACT, 4 included and 1 excluded hospitals in Western Australia, 8 selected and 3 excluded hospitals in South Australia, 1 network of 19 hospitals in Tasmania.
- (i) Eligible public patient days as a proportion of total patient days, excluding unqualified neonates.
- (j) In the Northern Territory the major superannuation scheme is funded by Treasury – hospitals make no contribution. The superannuation for this jurisdiction was estimated using the average of the other States and Territories.
- (k) Estimated private patient medical costs calculated as the sum of salary/sessional and VMO payments divided by the number of public patient days multiplied by the number of private patients days. This is an estimate of the medical costs for all non-public patients, including private, compensable and ineligible.
- (l) Excludes depreciation
- (m) Includes depreciation. Excludes psychiatric and sub-acute separations and related expenditure reported by acute care hospitals. Excludes teaching and research expenditure.

na not available

Source: Australian Institute of Health & Welfare (1999b), Report on Government Services 2000.

Staffing profiles and levels of salary

Table C.9 shows the number of full time equivalent staff per 1,000 casemix adjusted separations (although no estimate is available for doctors providing services to private patients). Data for average salaries paid to different types of staff are shown in Table C.10.

Table C.9: Full time equivalent staff per 1,000 casemix adjusted separations, benchmarking public acute care hospitals, 1997-98

Staff Category	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
Salaried/Sessional Medical Officers ^(a)	4.21	3.74	4.07	4.16	4.39	4.17	5.12	5.29	4.10
Nursing	19.89	17.48	19.45	21.76	18.64	20.86	23.70	23.80	19.37
Diagnostic and Health Professionals	6.08	6.12	4.87	6.60	4.91	4.95	7.93	3.76	5.79
Administrative	5.35	6.60	6.09	9.00	7.31	7.04	8.36	7.64	6.441
Other	8.63	6.68	8.98	10.94	5.93	10.18	5.73	15.15	8.22
Total	44.16	40.61	43.46	52.47	41.18	47.20	50.85	55.64	43.90

(a) These figures only include staff paid through staffing systems, Visiting Medical Officers (VMOs) who are paid through accounts systems are excluded.

The selected public hospitals provide at least minimal medical, surgical or obstetric care. They exclude one Veterans' Affairs hospital, psychiatric hospitals, multi purpose facilities and community non acute hospitals in all States, mothers and babies facilities, hospices and dental hospitals.

Source: AIHW

Table C.10: Salary per full time equivalent staff, benchmarking public acute care hospitals, 1997-98.

Staff Category	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
Salaried/sessional medical officers ^(a)	84.5	109.4	87.7	91.1	72.2	85.4	88.5	93.0	90.5
Nursing	47.7	51.4	44.4	46.1	41.9	45.1	47.8	47.3	47.2
Diagnostic and health professionals	41.9	50.2	46.4	45.4	40.5	49.5	47.9	69.6	45.5
Administrative	43.8	37.5	33.7	36.8	30.5	34.7	41.1	36.4	37.8
Other staff	35.6	40.0	31.1	33.1	27.3	29.9	34.8	36.8	34.7
Total	47.6	52.4	44.4	45.3	40.9	44.3	49.4	48.8	47.3

(a) These figures only include staff paid through staffing systems. Visiting medical officers (VMOs), who are paid through accounts systems are excluded.

The selected public hospitals provide at least minimal medical, surgical or obstetric care. They exclude one Veterans' hospital, psychiatric hospitals, multi purpose facilities and community non acute hospitals in all States, mothers and babies facilities, hospices and dental hospitals, alcohol and drug treatment facilities in WA and NSW.

Source: AIHW

Average length of stay

Average length of stay, as an indicator of efficiency, is both simple and problematic. It is simple in that it is consistently measured in both public and private sectors and nationally, for which comprehensive data are readily available at all levels of clinical specificity including AN-DRGs. Comparisons of average length of stay are often undertaken at the level of AN-DRG category. However, the use of average length of stay is problematic in that some AN-DRGs do not have simple length of stay distributions. For example, they may be bimodal or highly skewed in such a way that the average is not a robust indicator of the underlying distribution. However, it is widely accepted and well understood and for these reasons is used here as a measure of efficiency.

Table C.11 presents data on the average length of overnight stay for patients in those AN-DRGs that showed the highest number of separations in 1997-98. The table allows for comparisons between public and private hospitals, as well as across States and Territories.

Table C.11: Average length of stay (days) for the 10 AN-DRGs with the highest number of separations, excluding same day separations, by hospital sector, 1997-98

AN-DRG	Hospital Sector	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
674 Vaginal delivery W/O complicating diagnosis	Public	3.29	3.40	2.95	3.45	3.22	4.00	2.97	3.88	3.28
	Private	5.15	5.34	5.20	5.14	4.98	4.29	5.43	na	5.16
	Total	3.62	3.88	3.54	3.94	3.67	4.12	3.60	3.88	3.71
177 Chronic Obstructive Airways Disease	Public	7.96	6.75	7.52	7.82	7.09	8.41	8.94	7.63	7.56
	Private	11.06	9.95	10.45	10.77	9.24	9.74	11.31	na	10.34
	Total	8.27	7.43	8.30	8.50	7.50	8.80	9.41	7.63	8.06
367 Cholecystectomy W/O CDE	Public	3.46	3.31	2.65	3.80	3.07	2.82	3.56	4.72	3.27
	Private	3.11	3.62	3.27	3.68	3.48	3.33	3.35	na	3.35
	Total	3.33	3.42	2.91	3.75	3.22	3.09	3.47	4.72	3.30
252 Heart Failure and Shock	Public	8.01	7.17	7.23	7.46	7.34	9.32	10.06	8.01	7.61
	Private	10.67	9.52	9.95	10.21	9.39	9.06	12.76	na	9.87
	Total	8.30	7.78	7.96	7.93	7.77	9.23	10.41	8.01	8.05
122 Tonsilectomy	Public	1.53	1.26	1.19	1.40	1.40	1.34	1.46	1.34	1.35
	Private	1.21	1.32	1.09	1.20	1.33	1.30	1.19	na	1.23
	Total	1.39	1.28	1.14	1.30	1.37	1.32	1.36	1.34	1.30
187 Bronchitis and Asthma Age <50 W/O CC	Public	2.27	2.08	2.30	2.28	2.36	2.17	2.60	2.86	2.26
	Private	2.62	2.99	3.00	2.15	4.11	2.08	5.67	na	2.91
	Total	2.28	2.15	2.40	2.27	2.49	2.15	2.63	2.86	2.41
320 Inguinal and Femoral Hernia Procedures Age >9	Public	2.66	2.13	1.80	2.44	2.50	2.05	2.32	2.20	2.32
	Private	2.56	2.35	2.02	2.55	2.80	2.32	2.19	na	2.41
	Total	2.61	2.24	1.92	2.50	2.65	2.23	2.24	2.20	2.36
843 Major Affective Disorder	Public	16.94	16.11	13.24	19.89	15.27	13.19	16.85	13.52	15.93
	Private	23.83	19.41	18.04	17.08	18.07	15.98	16.30	na	19.11
	Total	18.12	17.33	14.74	19.09	16.20	13.95	16.77	13.52	16.85
670 Caesarean Delivery W/O Complicating Diagnosis	Public	5.40	5.26	4.66	5.28	5.38	5.57	5.37	6.10	5.22
	Private	7.01	7.17	6.73	7.46	6.67	6.31	7.58	na	6.98
	Total	5.85	5.93	5.54	6.15	5.86	5.97	6.21	6.10	5.84
421 Knee Procedures	Public	2.89	2.38	2.21	2.11	2.17	2.74	2.13	3.88	2.42
	Private	1.82	1.90	1.97	1.93	1.96	1.67	1.49	na	1.89
	Total	2.07	2.03	2.04	1.97	2.02	1.88	1.69	3.88	2.03

(a) Separations for which the type of episode of care was reported as acute, or was not reported.

na not available

Abbreviations: W/O without, CC complications and co-morbidities, CDE common bile duct exploration

Source: AIHW 1999b

Setting a benchmark group

In addition to the construction of peer groups for this report, a low cost benchmark group has been formed in order to make comparisons between peer groups and across jurisdictions against a national performance indicator. The benchmark group represents those hospitals in the lowest quartile of cost per casemix adjusted separations. That is, those hospitals that deliver services at the lowest cost. Figures for the selected low cost services are presented in Table 3.13 and are compared with data on selected hospital characteristics (available beds, separations, average case weight and cost) for each peer group.

Deriving such a benchmark group, introduces a prima facie measure of hospital performance based on efficiency. However, a focus on cost measures is limited; a comprehensive measure of hospital performance requires additional data and, in particular, a consideration of effectiveness indicators that have been developed to measure quality of care, patient satisfaction and access to services. Furthermore, the inclusion of larger non metropolitan hospitals in the major referral peer group may limit the usefulness of the benchmark group comparison, simply because the main differentiator may be hospital location.

Table C.12: Hospital peer group characteristics, benchmarking public acute care hospitals, 1997-98.

Hospital Group and Characteristics	NSW	Vic ^(a)	Qld	WA	SA	Tas ^(a)	ACT	NT ^(a)	Low cost group	All Other hospitals
Principal referral										
Number of establishments ^(b)	13	7	5	3	3	np	-	-	8	24
Average available beds	509	1,009	570	635	481	np	-	-	633	638
Average separations ^(c)	41,758	79,540	40,200	56,646	52,044	np	-	-	54,327	51,159
Average cost weight ^(d)	1.14	1.08	1.22	1.05	1.08	np	-	-	1.16	1.10
Average cost per separation ^(e)	2,725	2,424	2,658	2,932	2,410	np	-	-	2,321	2,711
Major referral										
Number of establishments ^(b)	22	9	13	2	4	np	2	2	14	41
Average available beds	192	308	257	295	231	np	379	234	226	249
Average separations ^(c)	16,161	24,168	20,516	21,708	20,722	np	28,588	22,672	20,388	19,672
Average cost weight ^(d)	0.97	0.96	0.94	1.00	1.00	np	0.97	0.74	0.91	0.97
Average cost per separation ^(e)	2,554	2,722	2,211	3,302	2,578	np	3,624	3,361	1,988	2,837
District										
Number of establishments ^(b)	43	20	19	15	12	np	-	np	28	83
Average available beds	81	63	87	93	62	np	-	np	64	84
Average separations ^(c)	6,039	4,933	7,335	6,141	4,932	np	-	np	5,631	6,079
Average cost weight ^(d)	0.89	0.86	0.82	0.84	0.87	np	-	np	0.83	0.87
Average cost per separation ^(e)	2,553	2,171	2,051	2,632	2,471	np	-	np	1,786	2,596
Community										
Number of establishments ^(b)	32	35	77	63	30	-	-	2	64	84
Average available beds	27	21	17	15	24	-	-	25	13	21
Average separations ^(c)	1,371	1,107	759	658	874	-	-	1,677	711	931
Average cost weight ^(d)	0.81	0.86	0.78	0.80	0.78	-	-	0.84	0.76	0.82
Average cost per separation ^(e)	2,434	2,165	2,124	3,470	2,724	-	-	3,737	1,640	2,791
Total										
Number of establishments ^(b)	110	71	114	83	49	3	2	5	112	325
Average available beds	138	167	80	58	78	306	379	115	96	111
Average separations ^(c)	10,927	12,796	5,838	4,108	6,621	24,888	28,588	10,480	8,230	8,319
Average cost weight ^(d)	1.02	1.02	0.98	0.96	1.00	0.98	0.97	0.76	1.01	1.00
Average cost per separation ^(e)	2,637	2,462	2,354	2,966	2,458	2,739	3,623	3,363	2,129	2,736

(a) In the Northern Territory the major superannuation scheme is funded by Treasury – hospitals make no contributions. The superannuation scheme for this jurisdiction has been estimated using the average of the other states.

- (b) SA includes 2 small rural hospital networks in Community hospitals and Victorian hospitals are all networked, though some consist of only one hospital. All other jurisdictions report hospital level data.
- (c) From the National Hospital Database, including same day separations and excluding unqualified neonates.
- (d) Average cost weight from the National Hospital Morbidity Database, based on acute and unspecified separations only (excluding unqualified neonates) using the 1997-98 revised AN-DRG version 3.1 cost weights (Commonwealth unpublished)
- (e) Adjusted for casemix complexity using the same method at Table C.8.
- (f) These figures should be interpreted in conjunction with consideration of cost disabilities associated with hospital service delivery in the Northern Territory.
- (g) The national low cost group contains those hospitals in the quartile of each peer group with the lowest cost per casemix adjusted separation.
- (i) Tasmania has included payroll tax in their figures. The Tasmanian rate of payroll tax is 6.6% of payroll, including superannuation. The estimate payroll tax burden was subtracted to remove the effect of this administrative difference between the jurisdictions.
- (j) The amalgamation of Melbourne metropolitan hospitals has significantly changed the composition of the peer groups and the Victorian column in the table has been shaded to highlight this.

np Where only one hospital in a State or Territory is allocated to a peer group then data are not presented in this table.

The hospital groups have been determined in line with the methodology in Table C.11, with the exception of three hospitals, one in QLD and Two in SA, that were manually reassigned to different peer groups on the advice of the State health authorities.

States have excluded psychiatric hospitals, drug and alcohol services, mothers' and babies' facilities, community non acute dental hospitals and same day facilities from this table.

Source: AIHW 1999b.

Appendix D: Audit of Performance Indicators

1. National Health Ministers' Benchmarking Group

1. Health Status and Health Determinants

- 1.01 Selected demographic features, Australia 1997
- 1.02 Life Expectancy at Birth, 1960 and 1993
- 1.03 Gains in life expectancy at birth, 1960 to 1993
- 1.04 Health Expenditure as a percentage of Gross Domestic Product (GDP)
- 1.05 Total health services expenditure, current and constant (1989-90) prices and annual growth rates, 1984-85 to 1997-98
- 1.06 Government and non-government expenditures (current prices) as a percentage of total health services expenditure, 1984-85 to 1997-98
- 1.07 Government and non-government expenditures (current prices) as a percentage of total health services expenditure, 1984-85 to 1997-98
- 1.08 Percentage of recurrent health services expenditure (current prices), by area of expenditure, 1989-90 to 1996-97
- 1.09 Recurrent health services expenditure, by area of expenditure
- 1.10 Total health price index and selected industry-wide indexes (base year 1989-90 = 100), 1989-90 to 1997-98
- 1.11 Non-institutional health services, key statistics, 1997-98
- 1.12 Public hospitals, average available beds and beds per 1,000 population, Australian States and Territories

2. Acute Hospital Performance Indicators

- 2.01 Number of benchmarking public hospitals and available beds, 1995-96, 1997-98
- 2.02 Number of hospitals and available beds by accreditation status, benchmarking, public acute care hospitals, 1997-98
- 2.03 Number of private hospitals and available beds by accreditation status, 1997-98
- 2.04 Separations per 1,000 population by patient accommodation status, public and private acute care hospitals, 1997-98
- 2.05 Separation statistics for sentinel procedures by State or Territory of usual residence, all hospitals, 1997-98
- 2.06 Comparison of emergency department performance targets under the 1993-98 Medicare Agreements and actual performance
- 2.07 Cost per casemix weighted separation, benchmarking public acute care hospitals, 1997-98
- 2.08 Full time equivalent staff per 1,000 casemix adjusted separations, benchmarking public acute care hospitals, 1997-98
- 2.09 Salary per full time equivalent staff, benchmarking public acute care hospitals, 1997-98
- 2.10 Average length of stay (days) for the 10 AN-DRGs with the highest number of separations, excluding same day separations by hospital sector
- 2.11 Hospital peer group characteristics, benchmarking public acute care hospitals, 1997-98
- 2.12 Times Series data for sentinel procedures

2. National Health Priority Areas

2.1. Cancer Control

2.1.1. Cervix

- 1.1 Incidence of cancer of the cervix (females aged 20-74)
- 1.2 Death rate for cancer to the cervix (females aged 20-74)
- 1.3 Proportion of females aged 20-69 screened within specified intervals for cancer of the cervix
- 1.4 Five-year survival rate for cancer of the cervix
- 1.5 Patient satisfaction for treatment for cancer of the cervix

2.1.2 Breast

- 2.1 Incidence of breast cancer (females aged 50-74)
- 2.2 Death rate for breast cancer (females aged 50-74)
- 2.3 Proportion of females aged 50-69 screened for breast cancer
- 2.4 Five-year survival rate for breast cancer
- 2.5 Patient satisfaction for treatment for breast cancer

2.1.3. Prostate

- 3.1 Incidence of prostate cancer
- 3.2 Death rate for prostate cancer
- 3.3 Five-year survival rate for prostate cancer
- 3.4 Patient satisfaction for treatment of prostate cancer

- 2.1.4 *Colorectal*
 - 4.1 Incidence of colorectal cancer
 - 4.2 Death rate for colorectal cancer
 - 4.3 Five-year survival rate for colorectal cancer
- 2.1.5. *Skin*
 - 5.1 Incidence of melanoma of the skin
 - 5.2 Death rate for melanoma of the skin
 - 5.3 Incidence of (treated) non-melanocytic skin cancer
 - 5.4 Death rate for non-melanocytic skin cancer
 - 5.5 Five-year survival rate for melanoma of the skin
- 2.1.6. *Lung*
 - 6.1 Incidence of lung cancer
 - 6.2 Death rate for lung cancer
- 2.1.7. *Access*
 - 7.1 Improved access to quality support services for all cancer patients, their families and carers
- 2.1.8. *Other*
 - 8.1 Establishment of hospital-based cancer registries

2.2 Cardiovascular Health

- 2.2.1. *Risk factors for heart, stroke and vascular disease*
 - 1.1 Proportion of adults who smoke regularly, ages 18 or more
 - 1.2 Proportion of secondary school students who smoke, age 15
 - 1.3 Proportion of adults not engaged in regular physical activity, ages 18 or more
 - 1.4 Proportion of adults who are overweight, ages 18 or more
 - 1.5 Proportion of adults with high blood pressure and/or on anti-hypertensive treatment, ages 20–69
 - 1.6 Mean blood pressure level, ages 20–69
 - 1.7 Proportion of adults with high blood cholesterol, ages 20–69
 - 1.8 Contribution of saturated fat as a proportion of total energy intake, ages 25–64
- 2.2.2. *Coronary heart disease*
 - 2.1 Death rate for coronary heart disease, ages 0–79
 - 2.1 Incidence rate for myocardial infarction, ages 30–79
 - 2.1.1 Death rate for coronary heart disease among rural and remote area residents, ages 0–79
 - 2.2 Median delay between the onset of chest pain and presentation for emergency care at hospital, all ages
 - 2.3 Time from presentation at emergency department to clinical and electrocardiogram assessment and administration of appropriate re-perfusion therapy (thrombolysis or angioplasty), all ages
 - 2.4 Hospital separation rate for principal diagnosis of unstable angina, ages 0–79
 - 2.5 Hospital separation rate for principal diagnosis of congestive heart failure, ages 0–79
 - 2.6 Proportion of cardiac patients who enter and complete a rehabilitation program, all ages
 - 2.7 Proportion of patients who die, suffer myocardial infarction or undergo further revascularisation procedure (angioplasty or bypass surgery) within 12 months of angioplasty treatment for coronary heart disease, all ages
 - 2.8 Proportion of patients who die, suffer myocardial infarction or undergo revascularisation at 28 days and 1 year after having undergone surgical treatment for coronary heart disease, all ages
 - 2.9 Proportion of people with mild/moderate/severe disability at six months following diagnosis of initial cardiac event, all ages
- 2.2.3. *Stroke*
 - 3.1 Incidence rate for stroke, all ages
 - 3.2 Median delay between the onset of stroke symptoms and presentation for emergency care at hospital, all ages
 - 3.3 Proportion of patients admitted to hospital with acute stroke who are managed in specialised stroke units (dedicated multi-disciplinary teams), all ages
 - 3.4 Proportion of people whose main/ underlying disabling condition is stroke, ages 25 or more
 - 3.5 Proportion of people with mild/moderate/severe disability at six months following diagnosis of initial stroke event, all ages
 - 3.6 Case fatality rate for stroke within 28 days, all ages
 - 3.7 Death rate for stroke, ages 0–79
 - 3.8 Death rate for stroke among rural and remote area residents, ages 0–79
- 2.2.4. *Peripheral vascular disease and abdominal aortic aneurysm*
 - 4.1 Hospital separation rate for major amputation due to peripheral vascular disease, ages 0–79
 - 4.2 Hospital separation rate for surgery (emergency and elective) for abdominal aortic aneurysm, ages 0–79
 - 4.3 Proportion of people with mild/moderate/severe disability at six months following diagnosis of initial vascular event, all ages

2.3 Diabetes

2.3.1 Disease incidence and prevalence

- 1.1 Prevalence rates for Type 1 and Type 2 diabetes in: (a) general population; (b) Indigenous population; and (c) among people from culturally and linguistically diverse background
- 1.2 Incidence rates for Type 1 and Type 2 diabetes in: (a) general population; (b) Indigenous population; and (c) among people from culturally and linguistically diverse background
- 1.3 Gestational diabetes among women aged 20–44 years, by parity

2.3.2 Risk factors for diabetes and associated complications

- 2.1 Prevalence rates for obesity and being overweight (as measured by BMI) in: (a) general population; and (b) among persons with Type 2 diabetes
- 2.2 Rates for non-participation in regular, sustained, moderate aerobic exercise in: (a) general population; and (b) among persons with Type 2 diabetes
- 2.3 Prevalence rates for high blood pressure among persons with Type 2 diabetes: (a) > 140 mmHg systolic and/or 90 mmHg diastolic and aged <60 years; (b) > 160 mmHg systolic and/or 90 mmHg diastolic and aged > 60 years; and/or (c) those on medication for high blood pressure
- 2.4 Prevalence rates for high levels of lipoproteins among persons with Type 1 and Type 2 diabetes: (a) total cholesterol above 5.5 mmol/L; and (b) high density lipoproteins below 1.0 mmol/L
- 2.5 Prevalence rates for fasting hypertriglyceridaemia among persons with Type 1 and Type 2 diabetes

2.3.3 Diabetes-related complications

- 3.1 Proportion of persons with end-stage renal disease with diabetic nephropathy as a causal factor
- 3.2 Incidence rate for eye disease among clinically diagnosed persons with diabetes
- 3.3 Prevalence rate for foot problems among persons with clinically diagnosed diabetes
- 3.4 Incidence rates for coronary heart disease and stroke in: (a) general population; and (b) among clinically diagnosed persons with diabetes

2.3.4 Hospital separations for diabetes-related complications

- 4.1 Hospital separation rate for end-stage renal disease with diabetes as an additional diagnosis
- 4.2 Hospital separation rate for coronary heart disease or stroke with diabetes as an additional diagnosis
- 4.3 Hospital separation rate for conditions other than end-stage renal disease and coronary heart disease/stroke among: (a) persons for whom diabetes was reported as the principal diagnosis or an additional diagnosis; and (b) persons without diabetes as a reported diagnosis

2.3.5 Mortality

- 5.1 Death rate for diabetes in: (a) general population; (b) Indigenous population; and (c) among people from culturally and linguistically diverse background
- 5.2 Death rate for coronary heart disease and stroke among persons with diabetes in: (a) general population; (b) Indigenous population; and (c) among people from culturally and linguistically diverse background

2.3.6. Health status

- 6.1 Self-assessed health status of persons with and without diabetes

2.3.7. Screening and management

- 7.1 Proportion of persons with diabetes tested for glycosylated haemoglobin level at least every six months
- 7.2 Proportion of pregnant women being tested for gestational diabetes

2.4 Injury Prevention and Control

2.4.1. Overall

- 1.1 Death rate for injury and poisoning in the total population
- 1.2 Hospital separation rate for injury and poisoning in the total population

2.4.2. Health Inequalities

- 2.1 Death rate ratio comparing the injury status of Indigenous and non-Indigenous populations
- 2.2 Death rate ratio comparing the injury status of males and females
- 2.3 Rate ratio comparing the injury status among males aged 25-45 years from low socio-economic groups with males from high socio-economic groups
- 2.4 Death rate ratio comparing the injury status among people living in rural and remote areas and the general population
- 2.5 Hospital separation rate ratio comparing the injury status among Indigenous and non Indigenous populations
- 2.6 Hospital separation rate ratio comparing the injury status among males aged 25-54 years from low socio-economic groups with males from high socio-economic groups.

2.4.3. Road Transport

- 3.1 Death rate for road transport-related injury in the total population
- 3.2 Death rate for road transport-related injury among males aged 15-24 years
- 3.3 Hospital separation rate for road transport-related injury in total population
- 3.4 Hospital separation rate for road transport-related injury among males aged 15-24 years

2.4.4. Work Related

- 4 Work-related injury

2.4.5. Falls

- 5.1 Death Rate for falls among people aged 65 years and over
- 5.2 Hospital separation rate for falls among people aged 65 years and over
- 5.5 Hospital separation rates for falls among children aged 0-4 and 5-9 years

2.4.6. Sport and Recreation

- 6.1 Hospital separation rate for sport and recreation-related injuries
- 6.2 Non-hospital admitted sport and recreation-related injuries
- 7.1 Death rate for homicide among people aged 20-39 years
- 7.2 Death rate for homicide among children aged 0-9 years
- 8.2 Emergency department attendances resulting from product-related injury
- 9.1 Death rate for injury resulting from fire, burns and scalds among people aged 55 years and over
- 9.2 Hospital separation rate for injury resulting from fire, burns and scalds among children aged 0-4 years
- 9.3 The proportion of houses equipped with smoke detectors and earth leakage breakers
- 10.1 Hospital separation rate due to poisoning among children aged 0-4 years
- 11.1 Death rate for drowning in the total population and among children aged 0-4 years
- 11.2 Hospital separation rate for near drowning among children aged 0-4 years
- 11.3 Number of States and Territories requiring separation of domestic pools from houses
- 11.4 The proportion of domestic pools with approved child-resistant fences, gates and barriers
- 11.5 The proportion of children and young people aged 10-16 who have successfully completed a water safety and lifesaving course
- 12.1 Access of injured patients to optimal trauma care
- 13.1 Access of people with trauma injuries to comprehensive rehabilitation programs and appropriate long-term care and community support
- 14. Annual incidence rate of persistent spinal cord injury from traumatic cases
- 15. Brain injury

2.5 Mental Health

2.5.1. Prevalence of anxiety and depression

- 1.1 Prevalence rates for anxiety and depression symptoms in: (a) general population, (b) children and adolescents, and (c) adults
- 1.2 Prevalence rates for depressive disorders in: (a) general population, (b) children and adolescents, and (c) adults
- 1.3 Prevalence rates for anxiety disorders in: (a) general population, (b) children and adolescents, and (c) adults
- 1.4 Prevalence rate for women who have given birth and who experience post-partum depression over the following year

2.5.2. Suicide and self-inflicted injury

- 2.1 Hospital separation rates for suicide and self-inflicted injury among: (a) young adults, aged 15-24 years and (b) older people, aged 65 years and over
- 2.2 Death rates for suicide among: (a) young adults, aged 15-24 years and (b) older people, aged 65 years and over
- 2.3 Death rates for suicide in rural and remote areas among: (a) young adults, aged 15-24 years and (b) older people, aged 65 years and over

2.5.3. Mental Health literacy and awareness

- 3.1 Proportion of persons in the general community who: (a) recognise the symptoms of depressive disorders, and (b) rate treatment of depression as helpful

2.5.4. Best Practice

- 4.1 Proportion of general practitioners who know and apply best practice guidelines for the identification and management of depression
- 4.2 Proportion of perceived medication needs met among persons: (a) with depressive disorders (b) without depressive disorders

3. Australian Health Care Agreements

01. Hospital Activity Levels and Costs

- 01.1 Public Hospital Weighted separations
- 01.2 Average cost per Weighted separation
- 01.3 Public Hospital non admitted patient workload

02. Waiting Times for Access to Services

- 02.1 Waiting time for Elective Surgery - the percentage of Elective Surgery patients who are admitted within the clinically appropriate time after inclusion on a waiting list, broken down into the agreed categories of patients available

- 02.2 Waiting time for Emergency Department - the percentage of Emergency Department patients who are treated within the clinically appropriate time, broken down into the agreed categories of patients available
- 02.3 The waiting time for non-emergency non-admitted patients
- 03. *Aboriginal & Torres Strait Islander (ATSI)*
 - 03.1 ATSI hospitalisation rates relative to non-ATSI hospitalisation rates (ATSI Indicator 2.5) available, subject to quality of ATSI identification in morbidity records.
 - 03.2 Overall per capita annual expenditure by governments on primary, secondary and tertiary health care for ATSI's compared to expenditure for the total population (ATSI Indicator 3.3) available through the Deeble study
- 04. *Integration of Care Processes*
 - 04.1 Percentage distribution of admitted patients over 70 years of age across type of episode of care by discharge status
- 05. *Access to Primary Care*
 - 05.1 Access rates for GP services
 - 05.2 Access rates for Pathology and radiology services ordered by GPs
 - 05.3 Access rates for PBS prescribed by GPs
 - 05.4 Access rates for Medical services provided by community health services
 - 05.5 Access rates for Aboriginal medical services
 - 05.6 Access rates for Accident and Emergency Departments
 - 05.7 Access rates for Other post-acute services
- 06. *Quality of Care*
 - 06.1 Patient satisfaction
 - 06.2 Patient complaints
 - 06.3 Services accreditation
 - 06.4 Patient safety
- 07. *Medical Training*
 - 07.1 Number of trainees relative to the estimated number of training posts required. Specialities could be added as the AMWAC reviews are released.
 - 07.2 Number of post graduate training posts.
- 08. *Medical Research*
 - 08.1 Expenditure on health care research.
- 09. *Mental Health*
 - 09.1 Collection of data for the National Mental Health Data Set
 - 09.2 Implementation of National Standards for Mental Health Services
 - 09.3 Collection of consumer outcome and satisfaction data
 - 09.4 Maintenance and enhancement of consumer and carer involvement at State and local levels
 - 09.5 Government recurrent expenditure on mental health services per capita
 - 09.6 Government expenditure per capita on community services per capita
 - 09.7 Proportion of inpatient beds in stand alone psychiatric hospitals.
- 10. *Palliative Care*
 - 10.1 Palliative Care Performance Indicators

4. Public Health Outcome Funding Agreement 1999 - 2004

4.1 National Drug Strategic Framework

Shared Indicators

- 1.1 Deaths due to tobacco (using aetiological fractions)
- 1.2 Hospital separations from conditions associated with active smoking
- 1.3 Percentage of Australians who are regular tobacco smokers (smoke at least one cigarette a day)
- 1.4 Deaths due to hazardous and harmful alcohol use (using aetiological fractions)
- 1.5 Hospital separations from conditions associated with alcohol use (using aetiological fractions)
- 1.6 Percentage of Australians who currently consume alcohol at hazardous or harmful rates
- 1.7 Deaths due to illicit drug use (using aetiological fractions)
- 1.8 Hospital separations associated with illicit drug use (using aetiological fractions)
- 1.9 Percentage of Australians who have used cannabis, heroin, amphetamines, ecstasy and cocaine in the past 12 months, and by whether any drug was injected.

Annual and Alternate Indicators

- 1.10 Health Departments report annually against the indicators developed under the National Drug Strategy Framework 1998-99 to 2002-03 National Drug Actions Plans as required by the Ministerial Council on the Drug Strategy.
- 1.11 Health Departments take steps to decrease smoking among Aboriginal and Torres Strait Islander people, including collaborations and partnerships with Indigenous communities, so as to make progress towards meeting the agreed targets by all jurisdictions as set out in the AHMAC National Performance Indicators and Targets to Monitor Governments' Efforts to Improve Aboriginal and Torres Strait Islander Health.

- 1.12 Health Departments take steps to decrease hazardous levels of drinking among Departments take steps to decrease smoking among Aboriginal and Torres Strait Islander people, including collaborations and partnerships with Indigenous communities, so as to make progress towards meeting the agreed targets by all jurisdictions as set out in the AHMAC National Performance Indicators and Targets to Monitor Governments' Efforts to Improve Aboriginal and Torres Strait Islander Health.

4.2 National Childhood Immunisation Program

Shared Indicators

- 2.1 Notifications for the 0-4 year age group for: haemophilus influenza type b infections; measles; mumps, rubella; diphtheria; tetanus; pertussis; polio; and hepatitis B.

Annual and Alternate Indicators

- 2.2 Proportion of children who are fully immunised at 12 months and two years
2.3 Proportion of children who are fully immunised at 6 years (reported from 2002-2003)
2.3 Decreased wastage of childhood vaccines
2.4 Improved cold chain maintenance of vaccines prior to delivery to providers
2.5 Participation by public sector immunisation providers in the Australian Childhood Immunisation Register
2.6 Health Departments take steps to improve coverage among Aboriginal and Torres Strait Islander people, including collaborations and partnerships with Indigenous communities, so as to make progress towards meeting the agreed targets by all jurisdictions as set out in the AHMAC National Performance Indicators and Targets to Monitor Governments' Efforts to Improve Aboriginal and Torres Strait Islander Health

4.3 National Older Persons Immunisation Program

Shared Indicator

- 3.1 Hospital separations for conditions associated with influenza for people aged 65 years and older

Annual and Alternate Indicators

- 3.2 Percentage of Australians aged 65 years and over who receive annual vaccinations against influenza
3.3 Decreased wastage of influenza vaccine

4.4 BreastScreen Australia

Shared Indicators

- 4.1 Mortality due to breast cancer per 100,000 estimated resident female population for the target age group (50-69) and all women

Annual and Alternate Indicators

- 4.2 Health departments provide data annually to the Australian Institute of Health and Welfare for reporting against the five national breast cancer screening indicators
4.3 Percentage of women aged 50-69 years participating in breast cancer screening biennially
4.4 Health departments take steps to improve breast cancer screening among Aboriginal and Torres Strait Islander women, including collaborations and partnerships with Indigenous communities
4.5 States and Territories to contribute data to enable the full implementation of the evaluation plan during the next 5 years

4.5 National Cervical Cancer Screening Program

Shared Indicator

- 5.1 Mortality due to cervical cancer per 100,000 resident female population for the target group (20-69) and all women

Annual and Alternate Indicators

- 5.2 Health departments provide data annually to the Australian Institute of Health and Welfare for reporting the seven national cervical cancer screening indicators
5.3 Percentage of women aged 20-69 years who participate in cervical cancer screening biennially
5.4 Health Departments take steps to improve cervical screening among Aboriginal and Torres Strait Islander people, including collaborations and partnerships with Indigenous communities, so as to make progress towards meeting the agreed targets by all jurisdictions as set out in the AHMAC National Performance Indicators and Targets to Monitor Governments' Efforts to Improve Aboriginal and Torres Strait Islander Health
5.5 Health departments commit to developing and reporting against the National triennial performance measures for the cervical cancer screening programs currently being developed

4.6 National HIV/AIDS Strategy

Shared Indicators

- 6.1 Number of diagnosis of newly of newly acquired HIV infection by HIV exposure category and whether person was Indigenous or non-Indigenous
6.2 Number of new diagnoses of AIDS
6.3 Prevalence of unprotected anal intercourse with casual partners in the previous six month interval reported by homosexually active men

- 6.4 Percentage of injecting drug users reporting use of a needle and syringe after someone else in the last month
- 6.5 Percentage of injecting drug users who have ever sought testing for HIV or hepatitis C virus antibody, and percentage with HIV or hepatitis C antibody, by number of history of drug use
- 6.6 Rates of gonorrhoea and anal gonorrhoea
- 6.7 Annual and Alternate Indicators
- 6.8 Health departments develop/revise strategic plans, with performance indicators, which reflect the guiding principles and education, prevention, treatment and care priorities of a 4th National HIV/AIDS Strategy and the National Indigenous Australians' Sexual Health Strategy
- 6.9 Health Departments work with advisory structures, which reflect the membership of the HIV/AIDS partnership and includes Indigenous Australian, to review progress at least annually against the strategic plan
- 6.10 Health departments develop a range of locally appropriate health promotion activities undertaken to combat HIV/AIDS using peer based and community development activities by gay men, Indigenous communities, people living with HIV/AIDS, injecting drug users, sex workers and prisoners
- 6.11 Health departments regularly undertake activities to monitor knowledge, behaviours and blood borne virus prevalence among homosexually active men and injecting drug users.

4.7 National Women's Health Program

Annual Indicators

- 7.1 Health departments maintain community based services for women, based on national health policies, principles and specific strategies in place to target at risk female populations
- 7.2 Health departments foster partnerships/collaborative programs between gender specific health services and mainstream services based on national health policies or principles as they relate to women
- 7.3 Report on steps taken to decrease the proportion of Aboriginal and Torres Strait Islander newborns with birth weight <2500g, per 1000 live births as in the AHMAC National Performance Indicators and Targets to Monitor Governments' Efforts to Improve Aboriginal and Torres Strait Islander Health

4.8 Alternative Birthing

Annual and Alternate Indicators

- 8.1 Health departments encourage midwife based birthing services to be established in the publicly funded health care system and for Indigenous women

4.9 Female Genital Mutilation

Annual and Alternate Indicators

- 9.1 Health departments work with communities to develop and implement information resources and programs to prevent the occurrence of female genital mutilation and to minimise harm to those at risk of or subjected to female genital mutilation

5. Commonwealth Budget Papers 1998-99

Outcome 1: Population Health and Safety

- 1.1 Incidence, prevalence and mortality rates of disease or conditions in the main program areas covered by national strategies (where national data exist).
- 1.2 Increased knowledge and skills, and changes in attitudes and (where possible) behaviours of specified target groups as a consequence of health promotion and disease prevention strategies such as the National Youth Alcohol Campaign, the National Tobacco Campaign, National Illicit Drugs Campaign, Active Australia and the Family Planning Program.
- 1.3 The adoption and effective use of best practice approaches across strategies as well as nationally recommended screening and immunisation policies, agreed guidelines and participation targets. For example, immunisation protocols for general practitioners and breast and cervical cancer screening best practice guidelines.
- 1.4 Proportion of national population health strategies which target specified high need groups (for example injecting drug users, homosexually active men, low socio-economic groups and Aboriginal and Torres Strait Islander peoples).
- 1.5 Proportion of products on the Australian Register of Therapeutic Goods (ARTG) withdrawn from the market, or requiring a change of condition of approval for safety related reasons.
- 1.6 Proportion of products failing to meet a quality or efficacy standard as a result of post market surveillance.
- 1.7 Adoption of Food Safety Standards by State and Territory authorities and high priority industry sectors.
- 1.8 Timely implementation of Government decisions on Blair Review recommendations.
- 1.9 Timely implementation of Government decisions on the review of the Australian New Zealand Treaty.
- 1.10 Timely and completed implementation of food recalls.
- 1.11 Level of radiation exposure.

Outcome 2: Access to Medicare

- 2.1 Client support for Medicare
- 2.2 Aboriginal and Torres Strait Islander access to Medicare in accordance with need.
- 2.3 Percentage of Medicare services that are bulk billed.
- 2.4 MBS outlays per capita in rural and remote compared to other areas.
- 2.5 Number of persons per approved pharmacy in Australia and the number of persons per pharmacy in urban areas compared with those pharmacies in rural and remote areas.
- 2.6 Percentage of cost of PBS prescriptions covered by the Government.
- 2.7 PBS outlays per capita in rural and remote compared to other areas.
- 2.8 Overall growth rates in Medicare outlays, including MBS, PBS and AHCA growth rates.
- 2.9 MBS, PBS and AHCA and total Medicare outlays as a percentage of GDP.
- 2.10 Departmental expenses (Health Insurance Commission and Department) as a percentage of administered expenses for Outcome 2.
- 2.11 Commonwealth expenses per capita on Medicare, both total and by MBS, PBS and AHCA components.

Outcome 3: Enhance Quality of Life for Older Australians

- 3.1 Improvement in the quality of residential accommodation.
- 3.2 Improvement in the privacy of residential accommodation.
- 3.3 Dependency level of people newly admitted to residential care as measured by scores on the Resident Classification Scale.
- 3.4 Resident and Community Aged Care Package places per 1000 persons aged 70 and over nationally (including places in flexible care).
- 3.5 Proportion of people recommended for residential care as compared to Community Aged Care Packages and other Community Aged Care Packages and other community care options.
- 3.6 Level of service provision for older people with dementia, older people from diverse cultural and linguistic backgrounds, older indigenous people and older people in rural and remote areas as compared with levels in the general aged population.
- 3.7 Preparedness to respond to the needs of an ageing population.

Outcome 4: Quality Health Care*Primary Care*

- 4.1 Providers of primary care take up initiatives to enhance primary care services and research projects for enhanced primary care are completed.
- 4.2 Education and training for GPs in Enhanced Primary Care and Mental Health.
- 4.3 Number of full time equivalent providers of GP services.
- 4.4 The number of GP services per patient (adjusted for age and gender)
- 4.5 Expenditure on mental health services delivered in the community as a proportion of Australia's mental health budget.

Acute Care

- 4.6 Availability of Diagnosis Related Groups and cost weights.
- 4.7 Implementation of a range of Blood Sector initiatives including recommendations from the Review of the Australian Blood Banking and Plasma Product Sector commenced by June 21.

Integrated Care

- 4.8 Effectiveness of trials of integrated health service delivery.

Outcome 5: Rural Health Care

- 5.1 Access to health and allied health services living in regional, rural and remote location.
- 5.2 The number of health and allied health professionals practising in regional, rural and remote locations receiving training, education and support.
- 5.3 Positive change in health status for people living in regional, rural and remote locations over the longer term. [Note this indicator is linked to Aboriginal and Torres Strait Islander health status changes.]

Outcome 6: Hearing Services

- 6.1 Usage of Commonwealth funded hearing devices.
- 6.2 Take up of hearing habilitation and rehabilitation services in the community.
- 6.3 Relative participation in education and the community by children with a hearing impairment compared to children who are not hearing impaired.
- 6.4 Contracted hearing service providers eligible clients with quality hearing services, consistent with Clinical Standards and Rules of Contact.
- 6.5 The proportion of clients from special needs groups receiving hearing assistance under the program in relation to the

- total volume of program clients.
- 6.6 Research that contributes to improved habilitation and rehabilitation outcomes for hearing impaired people and to community health is relevant and available.

Outcome 7: *Aboriginal and Torres Strait Islander Health*

- 7.1 Life expectancy at birth by sex (National Performance Indicator 1.1).
- 7.2 Per capita funding for primary health care for Aboriginal and Torres Strait Islander peoples across all government health programs.
- 7.3 Proportion of Commonwealth funded Aboriginal Community Controlled Health Services routinely implementing population health promotion and education programs.
- 7.4 Number of health professionals (doctors, nurses and health workers) in Commonwealth funded Aboriginal Health Services; and the number of health professionals who have graduated from or are currently undertaking training in accredited Indigenous post secondary health courses.
- 7.5 The proportion of OATSIH and NHMRC Indigenous health related research projects undertaken consistent with the NHMRC Aboriginal and Torres Strait Islander Health Research Agenda Working Group's indigenous Health Research Criteria.
- 7.6 Data on the performance of government programs to improve the health status of Aboriginal and Torres Strait Islander peoples available from a comprehensive range of data sets and of sufficient quality to support policy development.

Outcome 8: *Choice Through Private Health*

- 8.1 Affordability of private health care.
- 8.2 Choice for consumers between private and public health care.
- 8.3 Complaints regarding access to appropriate private health care services.

Outcome 9: *Health Investment*

- 9.1 NHMRC-funded health and medical research initiatives have internationally competitive research outputs.
- 9.2 Targeted research that is responsive to health systems needs.
- 9.3 Health advice documents submitted to NHMRC are approved.
- 9.1 Level of compliance in Australian research organisations with NHMRC ethical standards and guidelines for health and medical research.
- 9.4 Adjustment to the distribution of the medical workforce in Australia.
- 9.5 The number of specialist training placements which provide experience in rural medicine.
- 9.6 a) Availability of consumer health information, and
b) The extent to which health service planning, delivery, monitoring and evaluation processes incorporate opportunities for consumer participation.
- 9.7 Approaches to identify how to better use information, ensure competence and the appropriate environments to promote quality.
- 9.8 Developments in collaboration, data collection, monitoring and analysis to identify and support efforts to prevent and ameliorate diseases or conditions in the National Health Priority Areas.
- 9.9 Agreement among key stakeholders in the health sector on a national approach to overall direction and key strategic issues in information management and the use of technologies.
- 9.10 Quality leadership provided by the Department of Health and Aged Care for the health information management agenda.
- 9.11 Publication in a variety of media for a wide audience of authoritative and timely statistics and information on Australians and their health and wellbeing.
- 9.12 Agreement to national information standards developed through national health, community services and housing assistance agreements.
- 9.13 Implementation of the priority strategies identified in the Aboriginal and Torres Strait Islander Health Information Plan and development of similar information plans for Indigenous community services and housing assistance.

6. Maternity Services

- 1.1 Distribution of confinements by size of Maternity Units
- 1.2 Percentage of mothers less than 20 years
- 1.3 Percentage of mothers 35 years and over
- 1.4 Percentage of confinements: 20-27 weeks, 28-31 weeks, 32-36 weeks
- 1.5 Percentage of confinements where labour was: spontaneous, induced, no labour
- 1.6 Percentage of confinements where delivery was: spontaneous vertex, vaginal breach, forceps, vacuum extraction, forceps, caesarean section

- 1.7 Percentage of confinements where delivery was caesarean section by elective/emergency by health insurance status
- 1.8 Mother's average length of stay in hospital
- 1.9 Percentage of low birth-weight infants: <1,000g, 1000-1499g, 1500-1999g, 2000-2499g by Indigenous status
- 1.10 Apgar Scores at 1 and 5 minutes after birth, live births
- 1.11 Percentage of low birth-weight infants by maternal accommodation status
- 1.12 Percentage of births where infant classified as qualified by maternal accommodation status
- 1.13 Infant's average length of stay
- 1.14 Foetal, neonatal and perinatal death rates
- 1.15 Foetal, neonatal and perinatal death rates by indigenous status

7. Interim National Performance Indicators for Aboriginal and Torres Strait Islander Health

Category One: Life expectancy and mortality

- 1.1 Life expectancy at birth
- 1.2a Age-standardised all-causes mortality rates by sex
- 1.2b Age-specific all-causes mortality rates by sex
- 1.3a Age-standardised all-causes mortality rate ratio by sex
- 1.3b All causes age-specific rate by ratio by sex
- 1.4 Chance of dying between 20 and 54 years by sex
- 1.5 Number of stillbirths to Aboriginal and Torres Strait Islander mothers per 1000 total births to Aboriginal and Torres Strait Islander mothers
- 1.6 Death rate of Aboriginal and Torres Strait Islander from birth to one year old
- 1.7a Age-standardised mortality rates for ischaemic heart disease and rheumatic heart disease.
- 1.7b Age-standardised mortality rates of injury and poisoning by sex for Aboriginal and Torres Strait Islanders and non-Aboriginal and Torres Strait Islanders
- 1.7c Age standardised mortality for pneumonia by sex for Aboriginal and Torres Strait Islanders and non-Aboriginal and Torres Strait Islanders
- 1.7d Age-standardised mortality rates from diabetes by sex for Aboriginal and Torres Strait Islanders and non-Aboriginal and Torres Strait Islanders
- 1.7e Age-standardised mortality rates for cancer of the cervix among Aboriginal and Torres Strait Islander women and non-Aboriginal and Torres Strait Islander women

Category Two: Morbidity

- 2.1 Notification rates for selected vaccine preventable diseases: pertussis, measles, hepatitis B
- 2.1b Notification rate for meningococcal infection
- 2.2 Crude notification rates for gonorrhoea and syphilis by sex
- 2.3 Percentage of Aboriginal and Torres Strait Islander children at school entry having >25dB hearing loss averaged over three frequencies
- 2.4 Proportion of Aboriginal and Torres Strait Islander newborns with birth weight <2500g, per 1000 live births
- 2.5 Age-standardised all-causes hospital separation rate ratio by sex
- 2.6a Age-standardised hospitalisation rate and ratio by sex for acute myocardial infarction
- 2.6b Age-standardised hospitalisation rate ratio by sex for injury and poisoning
- 2.6c Age-standardised hospitalisation rate ratio by sex for respiratory diseases
- 2.6d Age-standardised hospitalisation rate ratio by sex for diabetes
- 2.6e Age-standardised hospitalisation rate ratio by sex for tympanoplasty

Category Three: Access

- 3.1 Proportion of Aboriginal and Torres Strait Islander peoples whose ordinary residence is <30mins routine travel time from a full-time permanent primary care service by usual means of transport
- 3.2 Proportion of Aboriginal and Torres Strait Islander peoples whose ordinary residence is < one hour's travel from a hospital that provides acute inpatient care with the continuous availability of medical supervision
- 3.3 Overall per capita annual expenditure by governments on primary, secondary and tertiary health care services for Aboriginal and Torres Strait Islander peoples compared with expenditure for the total population
- 3.4 Case fatality ratio of hospital separations to deaths for sentinel conditions for Aboriginal and Torres Strait Islander peoples compared with non-Aboriginal and Torres Strait Islander people
- 3.5 Proportion of primary care services and the resources allocated to these people
- 3.6 Extent of community participation in health services
- 3.7a What number of local or regional health/hospital boards have Aboriginal and Torres Strait Islander members?
- 3.7b Is this membership mandated by terms of reference?

- 3.8 Proportion of communities with usual populations of <100, within one hour's usual travel time to primary health care services
- 3.9 Per capita recurrent expenditure by government on health care services to communities with populations <100, as compared with expenditure for the general population

Category Four: Health service impacts

- 4.1 Expenditure on, and description of, health promotion programs specifically targeting Aboriginal and Torres Strait Islander peoples
- 4.2 Number of pap smears among Aboriginal and Torres Strait Islanders females aged 18-70 years as a proportion of the female Aboriginal and Torres Strait Islander population in that age group
- 4.3 Proportion of Aboriginal and Torres Strait Islander children aged two years and six years old that are fully immunised as recorded in the Australian Childhood Immunisation Register (ACIR)
- 4.4 Proportion of Aboriginal and Torres Strait Islander peoples aged >50 years who have received pneumococcal vaccine in the last 6 years compared with the Aboriginal and Torres Strait Islander population in that age group
- 4.5 Proportion of children aged two to six years who are fully immunised against Hepatitis B as recorded in the National Childhood Immunisation Register
- 4.6 Extent of support for the development and implementation of protocols and effective detection and management systems for conditions such as asthma, diabetes, cardiovascular disease, chronic renal disease, chronic respiratory conditions and hypertension
- 4.7 Age-standardised Aboriginal and Torres Strait Islander and non-Aboriginal and Torres Strait Islanders accident and emergency activity rates for lacerations, fractures, trauma, respiratory infections, skin infections and nutritional disorders
- 4.8 Proportion of total consultations by condition and care provider

Category Five: Workforce development

- 5.1 Number of Aboriginal and Torres Strait Islander peoples who have:
 - 5.2 graduated in the last year
 - 5.3 training in key health related fields
- 5.4 Number and proportion of Aboriginal Health Workers who graduated in the previous year or are participating in accredited training
- 5.5 Proportion of vacant funded FTE positions for doctors, nurses, and Aboriginal Health Workers in:
 - 5.6 Aboriginal health services
 - 5.7 Other organisations providing primary care for Aboriginal and Torres Strait Islanders peoples on a given date
- 5.8 Number of vacant funded FTE positions for doctors, nurses, and Aboriginal Health workers in hospitals where >25% of separations are Aboriginal and/or Torres Strait Islander peoples on a give date
- 5.9 Number of Aboriginal identified positions in the health sector
- 5.10 Proportion of doctors and nurses who identify as Aboriginal and/or Torres Strait Islander
- 5.11 Proportion of accredited hospitals for which the accreditation process required Aboriginal cross-cultural awareness programs for staff to be in place

Category Six: Risk Factors

- 6.1 Proportion of Aboriginal and Torres Strait Islander people aged >13 years who currently smoke by age and sex
- 6.2 Proportion of Aboriginal and Torres Strait Islander peoples with a Body Mass Index >25, by sex and age
- 6.3 Proportion of Aboriginal and Torres Strait Islander peoples who reported usually consuming >4 drinks on the occasions when they drank alcohol in the last two weeks relative to the total numbers who reported on consumption

Category Seven: Intersectoral issues

- 7.1 Proportion of households where the after-tax income available to the household after paying the mortgage or rent is less than the amount specified by the poverty line
- 7.2 Proportion of dwellings where one or more Aboriginal and Torres Strait Islander adults is the usual resident, and over the last 4 weeks had reliable electricity or gas supplies, reliable water supplies and reliable sewerage or adequate alternatives

Category Eight: Community Involvement

- 8.1 Establishment of a forum representing the Aboriginal health sector, ATSIC and state jurisdiction in each State or Territory
- 8.1 Cooperative community planning with the implementation of the regional planning processes

Category Nine: Quality of service provision

- 9.1 Critical incidence reporting and complaints mechanisms at all levels of health services

8. Palliative Care Draft Indicators (1998)

Integrated care plans and bereavement

Shared Records

- 1.1 The percentage of palliative care services giving access to shared records
- 1.2 The percentage of patients for whom a shared record exists.

Bereavement

- 1.3 The percentage of palliative care services with risk assessment services.
- 1.4 The percentage of carers using risk assessment services.
- 1.5 The percentage of carers identified for follow-up with an additional resource.

System wide integration of services at a regional level

- 1.6 The proportion of areas in which there is a single point of entry/registration in place.
- 1.7 The proportion of referrals from hospitals, community services, GPs, residential care facilities etc.
- 1.8 The length of time between referral and death.
- 1.9 The proportion of patients referred to a service who are contracted/reviewed within 24 hours
- 1.10 The proportion of patients dying from progressive, incurable disease who have received palliative care.

Access

- 1.11 24 access to services
- 1.12 The proportion of palliative care services which provide 24 hour access (directly or indirectly)
- 1.13 The percentage of patients and carers who are aware of their palliative care service's after hours service
- 1.14 The percentage of patients and carers who use the after hours service directly or indirectly
- 1.15 The satisfaction of patients and carers with the level and quality of the after hours service
- 1.16 Choice of site of care
 - 1.16.1 Proportion of time spent by patients within preferred site of palliative care.

Funding models

- 1.17 The dollar amount of palliative care money per cancer death (per area/region)
- 1.18 The proportion of palliative care services with an identifiable bereavement budget
- 1.19 The proportion of services with an identifiable palliative care service budget

Assessment and implementation of care

- 1.20 Percentage of patients satisfied with the level of care provided by the palliative care service.
- 1.21 Percentage of patients for whom there is evidence of an interdisciplinary care planning meeting between the family and care planners
- 1.22 The percentage of patients in whom pain is assessed and documented at the time of first contact

Education and awareness

- 1.23 The proportion of palliative care services demonstrating that debriefing is available on a regular basis and as required to all staff (paid and unpaid)

9. National Cervical Cancer Screening Monitoring Indicators

Participation rate for cervical cancer screening

Per cent of women screened in a 24 month period by 5 year age groups and for the target age group (20-69)

Early rescreening

Proportion of women rescreened by number of rescreens during a 24-month period following a negative smear.

Low-grade abnormality detection

Number of women with a histologically verified low grade intraepithelial abnormality detected in a 12 month period as a ratio of the number of women with a histologically verified high grade intraepithelial abnormality detected in the same period.

High grade abnormality detection

Detection rate for histologically verified high grade intraepithelial abnormalities per 1,000 women screened in a 12 month period by 5 year age groups and for the target age group (20-69 years – age standardised)

Incidence of micro-invasive cervical cancer

Incidence of micro-invasive cervical cancer per 100,000 estimated female population in a 12 month period by 5 year age groups and for the target age group (20-69 years – age standardised)

Incidence of squamous, adenocarcinoma, adeno-squamous and other cervical cancer

Incidence rate of squamous, adenocarcinoma, adeno-squamous and other cervical cancer per 100,000 estimated resident female population in a 12 month period by 5 year age groups and for the target age group (2-69 years – age standardised)

Mortality

Death rate of cervical cancer per 100,000 estimated resident female population in a 12 month period by 5 year age groups and for the target age group (20-69 years – age standardised)

10. National Breast Cancer Screening Monitoring Indicators

Participation rate for breast cancer screening

Per cent of women screened in a 24-month period by 5 year age groups and for the target age group (50-69 years)

Detection rate for small cancers

Rate of women with small diameter (=10mm) invasive breast cancers per 10,000 women screened in a 12-month period by 5 year age groups and for the target age groups.

Sensitivity

This indicator is yet to be finalised. It is pending completion of the National Breast Cancer Centre research project in an interval cancer definition.

Incidence of breast cancer

Incidence rate of breast cancer per 100,000 estimated resident female population in a 12 month period by 5 year age groups and for the target age group (50-69 years age standardised).

Mortality from breast cancer

Death rate of breast cancer per 100,000 estimated resident female population in a 12 month period by 5 year age groups and for the target age group (50-69 years – age standardised).

11. Standards for General Practice (Draft Jan 2000)

The Royal Australian College of General Practitioners (RACGP) in partnership, have developed standards for general practice. These standards are listed below. For each standard, there are criteria and specific indicators developed. Further information is available from the RACGP, 'Entry Standards for General Practices' 2nd Edition, Draft Jan 2000.

Practice Services

- Standard 1.1 All patients are able to obtain timely care and advice appropriate to their needs.
- Standard 1.2 The practice provides the opportunity for patients to communicate their health problems and concerns and to receive sufficient information to enable them to make informed decisions regarding their care.
- Standard 1.3 In order to promote high standards of care the practice reaches broad agreement on approaches to diagnosis, management and outcomes which are consistent with relevant clinical practice guidelines, based on best available evidence.
- Standard 1.4 Patient medical records contain sufficient information to identify the patient and to document assessment, management, progress and outcomes.
- Standard 1.5 The practice works with a range of other health and community services in its area to improve individual patient care.
- Standard 1.6 The practice provides health promotion and disease prevention services. These are based on scientifically validated guidelines.
- Standard 1.7 The practice makes all reasonable provisions for continuity of care.

Rights and Needs of Patients

- Standard 2.1 The practice ensures that the doctor(s) and staff respect the rights and needs of patients.

Quality Assurance and Education

- Standard 3.1 The practice is committed to quality assurance and continuing education.

Practice Administration

- Standard 4.1 Practice staff deal with patients in a helpful and competent way, and can identify emergencies and deal with complaints.
- Standard 4.2 Patient medical records are readily accessible for individual patient care, health promotion, audit and research, with due regard to confidentiality and patient rights.
- Standard 4.3 The practice ensures that all general practitioners in the practice, either individually or collectively, can exercise full autonomy in decisions that affect clinical care.

Physical Factors

- Standard 5.1 The practice has facilities which are appropriate for general practice and which promote the health, safety and comfort of staff and people who use the practice.
- Standard 5.2 Medical equipment and resources are appropriate and adequate to ensure comprehensive primary care and resuscitation.
- Standard 5.3 The practice services are physically accessible.

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GLOSSARY

Acute

Defined as having a short and relatively severe course of illness.

Acute care episode

An episode of care in which the principal clinical intent is to do one or more of the following:

manage labour (obstetric)

cure illness or provide definitive treatment of injury

perform surgery

relieve symptoms of illness or injury (excluding palliative care)

reduce severity of illness or injury

protect against exacerbation and/or complications of an illness and/or injury that could threaten life or normal functions

perform diagnostic or therapeutic procedures.

Acute hospital

A hospital that provides at least minimal medical, surgical or obstetric services for inpatient (admitted patient) treatment and/or care, and provides round the clock comprehensive qualified nursing services as well as other necessary professional services. It must be licensed by the State health authority. Most of the patients have acute conditions or temporary ailments and the average stay per admission is relatively short.

Admission

The process by which an admitted patient commences an episode of care. The number of admissions has traditionally been a measure of hospital activity, although it is more appropriate to use the number of separations as the measure of activity (see Separation).

Admitted patient

A patient who has undergone a hospital's formal admission process. This includes same day patients (that is, patients who are admitted and separated on the same date). Admitted patient is synonymous with inpatient.

AN-DRG

The abbreviation for Australian National Diagnosis Related Group. Each AN-DRG represents a class of patients with similar clinical conditions requiring similar hospital services. The full set of AN-DRGs comprises a casemix classification system for use in Australian hospitals.

Average case weight

A number describing the overall relative costliness of the patients treated by a hospital or group of hospitals compared with another hospital or group, or compared with the unit value (1.00).

Average length of stay (ALOS)

The average of the lengths of stay for a group of admitted patients in a hospital or group of hospitals. The length of stay for a patient is the difference between the date of separation and date of admission, less any leave days. For same day patients, the length of stay is attributed a value of one day.

Benchmarking

The ongoing, systematic process to search for and introduce best practice into an organisation.

Best practice

The cooperative way in which organisations and their employees undertake business activities in all key processes—and the use of benchmarking—that can be expected to lead to sustainable world class, positive outcomes.

Casemix

The number and type of patients treated by a hospital or group of hospitals. In Australia, casemix is described using the AN-DRG classification system.

Casemix adjusted separations

The number of separations for a hospital or group of hospitals multiplied by the average case weight. This product is often termed the units of care.

Case weight

The relative costliness of a particular AN-DRG, determined so that the average case weight for all AN-DRGs is 1.00.

Depreciated replacement value (DRV)

Total replacement value less accumulated depreciation that would have applied from the date of acquisition to the current financial period.

Depreciation

A representation of the service potential of an asset consumed during a financial period.

Effectiveness

Identified in this report as quality, appropriateness, and accessibility and equity of care.

Efficiency

The measure of inputs consumed to produce a unit of output.

Eligible Person

Under Medicare, an eligible person means a person who resides in Australia and whose stay in Australia is not subject to any limitation as to time imposed by law, except where they are covered by reciprocal health care agreements, foreign diplomats, their families and persons visiting Australia are excluded.

Episode of care

A phase of treatment. For most patients, a single episode of care makes up a hospital stay; for other patients, multiple episodes of care occur during the one hospital stay.

Free standing day hospital facility

A hospital treating patients on a same day basis only (usually a private facility).

Health outcome

A change in the health of an individual, or group of people or population, that is attributable to an intervention or series of interventions.

Hostel

A residential establishment for aged or disabled persons who cannot live independently but do not need nursing care.

Inpatient fraction (IFRAC)

The IFRAC is an expression of the ratio of inpatient costs to total hospital costs.

Institutional health care services

Includes all hospital care provided through public acute care hospitals, private acute care hospitals, public psychiatric hospitals, nursing homes and hostels.

Morbidity

Any departure from a state of physiological or psychological wellbeing. Collectively, morbidity refers to the details of conditions and treatments relating to a group of patients.

National Health Data Dictionary

The National Health Data Dictionary (NHDD) provides national standard data definitions and specifies national minimum data sets.

National Health Information Knowledgebase

The National Health Information Knowledgebase is an electronic repository and information management environment for metadata and data standards. The Knowledgebase is an Internet application designed and created by the Australian Institute of Health and Welfare.

National Hospital Morbidity Database (NHMD)

The NHMD is a compilation of electronic summary records collected in admitted patient morbidity systems in public and private hospitals. Almost all hospitals in Australia are included. The exceptions are public hospitals not within the jurisdiction of a State or Territory health authority or the DVA (that is, hospitals operated by corrections authorities, for example, and hospitals located in offshore Territories). In addition, data were not able to be supplied for 1995–96 for the one private hospital in the Northern Territory, the private free standing day hospital facilities in the Australian Capital Territory and the public psychiatric hospitals in Queensland. The database is managed and maintained by the AIHW.

National Public Hospital Establishments Database (NPHEd)

The NPHEd is held by the AIHW and is a collation of data on all public hospitals operated by the State and Territory health authorities and the DVA. The data are provided for acute care hospitals, psychiatric hospitals, drug and alcohol hospitals, and dental hospitals. However, the database does not include information on private hospitals, and excludes some smaller hospitals not within the jurisdiction of the State and Territory health authorities (such as those run by correctional authorities and those in offshore Territories).

Non admitted patient

A patient who receives a hospital service or attends a hospital clinic or unit and does not undergo the hospital's formal admission process. This term is synonymous with non inpatient, but is different from outpatient in that outpatient services are a subset of all non inpatient services.

Non institutional health care services

These primarily comprise medical services under the auspice of the MBS, drugs and medicines subsidised by the PBS, and community health services and assistance such as the Home and Community Care Program (HACC), which provides care and assistance to people at risk of being institutionalised, to enable them to stay in their own residences.

Nursing home

An institution that provides long term, regular, basic nursing care to chronically ill, frail or disabled persons.

Nursing home type patient (NHTP)

Commonly described as an admitted patient of a hospital who has been provided with accommodation and nursing care for a continuous period exceeding 35 days and who is not the recipient of a certificate under section 3B of the Health Insurance Act 1973 certifying a continuing need of acute care.

Opportunity cost

The value of the next best alternative that is sacrificed by retaining an asset or a course of action.

Outcomes

These are measures of the value changes caused by the process of care.

Outpatient waiting time

The interval that elapses between the date when a clinician determines the need for outpatient care and the date on which the outpatient service is received. "Outpatient waiting time" is not defined explicitly in the NHDD and may be measured differently in different jurisdictions.

Performance indicators

In the context of this report, a performance indicator is a measure that quantifies the level of performance for a particular aspect of (health) service provision and allows comparison between service providers, modes of service provision or both. The performance indicator framework used in this report shows the principal aspects of health care service delivery as effectiveness and efficiency.

Performance measurement

Performance measurement is the process of producing a set of one or more performance indicators. As such, it encompasses a range of activities and sub-processes. These include the determination of a framework of performance indicators of interest, the establishment of appropriate information requirements (incorporating scope, standards and definitions) and the collection, collation or both of data according to these requirements. Note that comparison of performance indicators across providers or modalities of provision is not a part of performance measurement per se. Rather this is a step beyond simply measuring performance and leads towards the concept of benchmarks for assessment of measured performance.

Private patient

An eligible person who: elects to be treated as a private patient; and elects to be responsible for paying fees of the type referred to in Clause 57 of the Australian Health Care Agreements. Clause 57 states that “Private patients, compensable patients and ineligible persons may be charged an amount for public hospital services as determined by the State.

Public (hospital) patient

An eligible person who receives or elects to receive public hospital service free of charge.

Recurrent expenditure

Expenditure that recurs continually or frequently. For this report, recurrent expenditure is defined by the NHDD items E8–E18 and E20. The depreciation item (E19) does not include public hospitals in its scope in the Dictionary.

Salaried medical officer

A medical practitioner engaged by a hospital on a full or part time salaried basis.

Same day patient

An admitted patient whose admission date is the same as the separation date.

Sentinel procedures

Procedures that are the most common surgical operations, during a given period of time, provided by acute care hospitals.

Separation

The process by which an admitted patient completes an episode of care. In general, a separation is synonymous with discharge. The number of separations is a measure of hospital activity. Separations are counted instead of admissions because some information that classifies the episode of care can be determined only after the episode has concluded. For acute hospitals, the number of separations should be similar but not necessarily equal to the number of admissions for the same reporting period.

Total replacement value (TRV)

Total of current replacement costs of all assets.

Units of care

The product of the number of separations and the average case weight for a hospital or group of hospitals.

Visiting medical officer (VMO)

A medical practitioner appointed by a hospital board to provide medical services for hospital (public) patients on an honorary, sessional or fee for service basis.

Waiting list

A register that contains essential details about patients who have been assessed as needing elective hospital care.

Waiting time

The difference between the admission date and the date a patient was registered on a waiting list. Waiting time can also be determined at census, and is the difference between the census date and the date a patient was registered on a waiting list.